Initial PSC Questions and Staff Responses – Better Housing by Design Proposed Draft August 31, 2018

	Diverse Housing Options & Affordability	
	Regulate by scale/FAR	
1	Why regulate development scale by FAR (which can be complex to administer), rather than by building height and site coverage? (Schultz)	 There several advantages to regulating by FAR: FAR allows flexibility for a range of development outcomes with the same building mass. For example, the same FAR can allow for a lower height building covering more of the lot, or a taller building covering less of the lot and providing more ground-level open space. In contrast, relying only on building height and coverage can result in less flexibility and variety in the design of projects. For example, if a building coverage regulatory approach, this could be implemented by a comparable allowance for 2-story building height (25' or 30') and a maximum 50% building coverage, which could result in an abundance of boxy buildings when built to the maximum parameters. Including FAR as an additional regulatory parameter, encourages a variety of building forms within a larger envelope defined by height and building coverage, while providing a base level of development allowance that can be a starting point for development bonuses.
		2. Regulating by FAR in the multi-dwelling zones provides consistency with the commercial/mixed use zones, which regulate development intensity by FAR. This consistency is important because both types of zones allow similar types and scale of multi-family development.
		3. With the shift away from regulating by unit density, FAR provides a more nuanced basis for development bonuses, also something that is consistent with commercial/mixed use zones. If development bonuses (including for inclusionary housing) were to be defined in terms of additional building height or coverage, instead of FAR, a new development bonus system would need to be created.
		4. FAR allows for proportional transfers of development between sites of unequal size , which is essential for the functioning of the proposed development transfers from sites

		preserving historic resources, trees, and existing affordable housing. If instead, transfers were based on obtaining additional building height (allowing for additional floors), transferring building height between a site that is a quarter of an acre in size and another that is 10 acres in size would yield a very unequal amount of transferred development allowance.
2	I'm intrigued by the chart Rick Michaelson submitted that shows the progression of height and FAR across the RM and CM zones. It's not what my high school calculus teacher would have called a "monotonically increasing function." (Smith)	The spectrum of development allowances provided by Rick Michaelson (see Attachment A – Michaelson Table) correctly shows how the proposed multi-dwelling zone FARs fit within the spectrum of other zones that allow residential development. The proposed development scale allowances in most of the multi-dwelling zones fall between those of the single-dwelling zones and those of most of the commercial/mixed use zones. There is not a close correspondence between the FARs of multi-dwelling and commercial/mixed use zones that allow for similar height (such as between RM2 and CM2, which both allow building height of 45'). This is because the multi-dwelling zones have greater limits on building coverage (60% in the RM2 zone, compared to 100% in the CM2 zone). The building coverage limits and greater landscaping required in the multi-dwelling zones provide greater continuity with the characteristics of Portland's residential areas, which typically have a more landscaped character and less building coverage than the hardscape environment of commercial areas, many of which feature a more continuous streetwall of buildings than is typical of most residential areas. However, the proposals include an allowance for greater building coverage (70% instead of 60%) for sites in the RM2 zone located along major corridors (see next item).
3	Would like to better understand generally how BHD 'steps up' on major corridors. (Smith)	In the multi-dwelling zones, greater scale along corridors and in centers is primarily provided by the mapping of the zones. The RM2 zone is commonly mapped along the same corridors where the CM2 zone is mapped (such as N Lombard and along SE Hawthorne), and both zones allow for 45' of building height. Some close-in Civic Corridors, such as NE Martin Luther King, Jr. Blvd, also have the larger scale RM3 or RM4 zoning. The low-scale RM1 zone is more commonly mapped in areas off the major corridors, although this is not consistently the case, as the RM1 zone is also mapped along major corridors, especially in East Portland (see Attachment G). Because the BHD project was not scoped as a rezoning project, other than assigning the closest comparable new zones to the existing multi-dwelling zones, staff's intent is that any rezoning would be left to future projects.

		The BHD proposals do provide a policy structure that supports larger scale zoning along corridors, such as through the proposed Comprehensive Plan land use designation of "Multi-dwelling – Corridor", which corresponds to the RM2 zone. Also, the BHD proposals allow for greater building coverage (70% instead of 60%) for RM2 zoning along corridors, reflecting their intended role as places for compact transit-oriented development (see pages 94-95 of Proposed Draft Volume 2). The BHD proposals also allow for limited amounts of commercial and daycare uses along major corridors (Civic and Neighborhood Corridors).
4	I'd love to have someone explain the EPS analysis to me in small words, particularly around the production of ownership units versus rental units. (Smith)	 Tyler Bump will provide an explanation summarizing the EPS analysis in time for the September 11 PSC session. A couple of preliminary responses are: In the lower-scale RM1 and RM2 zones, stacked rental housing units and townhouse-type development are financially viable, although in some cases townhouses are more profitable (especially in the RM1 zone). While the BHD proposal to move to an FAR-based approach would facilitate a greater variety of housing types and densities, these findings and recent trends suggest that townhouses and other multi-bedroom housing types will continue to be major part of the housing mix in these zones (over 75% percent of development in recent years in the R3 and R2 zones has been townhouses, duplexes, or houses). In the higher-density RM3 and RM4 zones, the analysis indicates that ownership housing (primarily stacked units) is more viable than rental apartments, especially when factoring in the recent weakening of the rental market.
5	What's the rationale for not allowing SROs in RM1? What do we know about production of SROs in Portland generally? (Oswill)	SROs are prohibited in RM1 because they are currently prohibited in the R3 and R2 zones. This project proposes to combine R3 and R2 zones into one new zone—RM1. The housing types allowed today in R3 and R2 are the same housing types that will be allowed in RM1—in other words, no changes regarding allowed housing types have been made. SROs have been prohibited in R3 and R2 since at least 1991. SROs are also prohibited in all single-dwelling zones, and it is possible that because R3 and R2 are multi-dwelling zones that allow development that is compatible with single-dwelling areas, the prohibition on SROs was carried forward into R3 and R2.

		Project staff propose to defer substantial changes to SRO and group living structure regulations to an upcoming BPS project that will focus on SROs, group living, and other small-unit housing types with shared facilities.
		SROs, which the zoning code defines as residential structures with units that share bath and/or toilet facilities, have rarely been built in recent years. A review of building permit data found only one new SRO building permitted since 1996 (in the EX zone), and none were built in any of the multi-dwelling zones (including those that allow SROs).
		Other housing has been built with small units with shared facilities such as kitchens and sometimes bathrooms, but these have primarily been permitted as group living structures or other residential housing types (up to six separately rented bedrooms can share kitchen and bathroom facilities and be considered a residential unit).
6	How does the proposal address concern about large single-family homes in R1? (Oswill)	New construction will be required to meet minimum density standards, which will prevent large, new single-dwelling houses from being built as the only development on standard- size lots. The proposals would not prevent existing houses from being expanded in size, but expansions creating very large houses have not been a demonstrated problem in the multi-dwelling zones.
	Bonuses and transfers	
7	How will FAR transfers be tracked over time? (Schultz)	FAR transfers are tracked in the City's building permit database (TRACS), which summarizes changes to FAR/density for both the transferring and receiving sites. Also, covenants reflecting the decrease or increase in FAR will be attached to the deeds of the transferring and receiving sites and will be included as attachments in the TRACS records for the properties. The covenants are also recorded with Multnomah County, so will show up in title reports/searches for potential buyers.
8	For FAR transfers from sites preserving existing large trees, how will issues related to tree health and replacement be administered? (St. Martin)	The draft regulations for tree preservation will require that diseased or dangerous trees be removed and replaced within a 12-month period, after the trees' status has been determined by the City Forester (in a non-development situation) or by a certified arborist (if in conjunction with development). Any unauthorized tree removal would require Tree Review to determine appropriate mitigation. The tree preservation transfer requires a

		covenant that states that the City may terminate the occupancy permit and seek legal remedies if the covenant is violated
	Visitability	
9	Why use "visitability" standards, rather than "universal design"? (Smith)	 Two fundamental reasons for why "visitability" standards are proposed rather than "universal design" are: 1. Consistency with RIP. The BHD project is proposing visitability standards that are consistent with the standards in the RIP proposal. This responds to BDS's and other stakeholder's interest in providing consistency between standards in the single- dwelling and multi-dwelling zones that are intended to achieve similar objectives. 2. Rather than being a specific set of regulations, universal design is an <i>approach</i> that
		involves the idea of designing products and environments to be usable or appropriate for all people, including those with physical, cognitive or sensory impairments. Universal design is a wholistic approach that considers design issues at a much finer level (such as details in the design of switches, door handles, appliance controls, lighting approaches, kitchen and bathroom design, etc.) than the more basic regulations for accessibility found in building code accessibility regulations or in visitability standards. Especially because the proposed visitability standards would be in the zoning code, which has typically not regulated specific interior design features, the visitability standards are intended to require a <u>base</u> level of accessibility (such as no step access to entrances, wider hallways and doorways to accommodate wheelchairs, an accessible bathroom and living space), rather than regulate at the level of detail addressed in universal design approaches.
10	What would it take to make all multifamily visitable? (Oswill)	Mandating all multi-family units to be at least visitable would require substantial changes to the way accessibility in multi-family buildings is regulated and would require major changes to the state building code or state approval of local amendments to this code. The building code currently regulates the physical accessibility of units and requires accessible or adaptable units for most commercial code multi-family buildings. However, these building code accessibility requirements do not require accessibility for 100% of units (buildings with elevators providing access to units are required to have all units be at

		least adaptable, but non-elevator buildings with stacked units are only required to have ground-level units be adaptable/accessible).
		Any requirement for 100% of multi-family units to be visitable would necessitate all stacked-unit multi-family buildings to have elevators to access upper levels, which would add considerable cost to the construction of two- and three-story multi-family buildings with stacked units that are currently often built without elevators.
		The building code requirements for accessible or adaptable units do not apply to residential code (1-2 unit) structures, such as houses, duplexes, attached houses, and townhouses. The intent of the proposed BHD visitability requirements is to ensure that higher-density projects with these housing types, which constitute a large portion of development in the multi-dwelling zones, include some visitable units.
11	BDS concerns about visitability in zoning versus building code. Can we get this all into the building code? (Smith)	The City's building regulations (Title 24) regulate by building type and do not differentiate by zone, density, or specific bonus provision. If the visitability standards are intended to be applied to specific zones, densities, or as part of development bonus provisions, they would need to be in Title 33.
12	How will the visitability standards address issues related to providing no-step access on sites that are raised substantially above sidewalk level? Would like information on the interaction between ramping and front setbacks needed to meet accessibility and visitability requirements. (Smith)	See the Attachment B - Visitability Prototypes Study (also Attachment C – Ramp Cost Estimates). This study evaluated issues related to meeting visitability requirements for no- step access to entries on sites raised above sidewalk level. The study indicated that providing an accessible ramp on sites that are flat or are raised no more than 3.5 feet above sidewalk level is not difficult to achieve. However, raised sites higher than this require a ramp switch back and a deeper building setback, when located in the front setback, which can cause the loss of a unit on a small site. For lengthy ramps (a 60' ramp is needed to provide barrier-free access to a site raised 5' above sidewalk level), excavation, shoring, and ramp materials add considerable cost that can difficult to absorb for a small project (cost estimates for a ramp providing access to a lot raised 5' above street level are over \$82,000).
		The draft visitability standards provide no exemption for small projects on raised lots. As written, the proposed regulations would require projects on a 5,000 square foot site with three or more units to have 20% of units be visitable. If costs and practicality of the regulations for development on small raised lots are a concern, a possible remedy would be to exempt small sites (up to 7,500 square feet) from having to meet the visitability

		standards, when they are raised more than 3.5 feet above street level. Providing accessible ramps on larger sites, with more site area and more units, provides less of a challenge than on small sites.
	Allowances for commercial and daycare uses	
13	I'm curious about the 3000 sq ft allowance for Daycare. Might other zones benefit from a similar allowance by right? Where does 3000 sq ft fall in the range of sizes of daycare facilities in Portland? (Smith)	We do not have information on the range of sizes of daycare facilities in Portland. Daycares for up to 16 children are currently allowed in all the residential zones. Daycare facilities with more than 16 children in the single-dwelling and multi-dwelling zones are allowed as conditional uses, subject to a discretionary land use review (these zones also allow larger daycare facilities by right in institutional buildings such as schools and religious institutions). Daycare uses are allowed by right, with no size limit, in all of the commercial/mixed use zones
		The BHD proposal would allow daycares (by right) up to 3,000 square feet in size in any of the multi-dwelling zones on sites that abut a major corridor. Under state regulations, this size would allow for childcare facilities with up to 50 to 70 children (assuming 2,500 square feet of indoor activity area, with 500 square feet set aside for teacher equipment/office space [state rules call for 35 to 50 square feet of indoor activity space per child]). Daycare uses larger than this would be conditional uses. The intent of the proposal is to facilitate daycare facilities in multi-dwelling zones, where they can be close to residents, while limiting their size and location to ensure that residential uses remain the predominant uses in the multi-dwelling zones.
	Outdoor Spaces, Green Elements, Parking	
14	Parking is needed for people with disabilities. How does the proposal accommodate that? (Oswill)	The BHD proposals do not directly address requirements for parking for people with disabilities, although it includes a proposal to exempt small sites from minimum parking requirements (see next item), which would allow projects on small sites to include no off-street spaces for disabled parking when no parking is provided. Parking for persons with disabilities is required when any off-street parking is being provided for most multi-family

		housing built under the commercial building code. When no off-street parking is provided, property owners may request a curbside parking space in front of their property to be designated as a disability parking space, only for use by people with a disability placard.
15	Interested in PCRI's testimony regarding further reductions in parking requirements. (Smith)	PCRI's testimony supports the BHD proposal to exempt all small sites up to 7,500 square feet in size from requirements for off-street parking (for projects with up to 30 units). PCRI further recommends that this exemption threshold be increased to 10,000 square feet. The reasons for the BHD's proposed 7,500 square foot threshold are:
		 This is the parking exemption threshold that was previously adopted for the commercial/mixed use zones, thus providing consistency between the two types of zones.
		2) This threshold reflects the difficulty of fitting parking for multiple units on small residential lots (which are typically 5,000 to 7,500 square feet in size). Larger sites provide more flexibility for locating parking. For sites larger than this threshold, the BHD proposal reduces the minimum parking ratio to 1 space for every 2 units (instead of the current requirement for 1 space for each unit).
		Note that the BHD proposals would continue existing allowances for sites close to frequent transit (within 500 feet), regardless of site size, to have no or low amounts of off-street parking.
	Puilding Decign & Scale	
16	Would like more information on building height step downs. (Schultz/Oswill) Questions include:	
	 A. In what situations are there requirements for building heights to step down in the commercial/mixed use zones when next to multi-dwelling zones, and are height transitions 	A. Chapter 33.130 limits building height in the commercial/mixed use zones to 45' for properties abutting the R3, R2, and R1 zones (new RM1 and RM2) zones. This height stepdown requirement has relatively little impact in the CM2 and CE zones, where building height is generally limited to 45', but has more impact on the CM3 (formerly

	required to the RM3/RM4 multi- dwelling zones?	EX) zone, where 65-foot height buildings are allowed. No height step down is required for mixed use zones that abut the RH (RM3/RM4) zones.
	B. How often are multi-dwellings zones adjacent to single-dwelling zones, and would thus require height step downs?	 B. The percentage of lots in multi-dwelling zones that are adjacent to single-dwelling zones and would be subject to height step-down requirements are: RM2: 30% (2,350 lots) RM3: 3% (50 lots) RM4: 12% (70 lots)
	C. Are small-scale houses common in the higher-density multi-dwelling zones (such as RM3 and RM4), potentially resulting in significant scale contrasts between older and newer development within the multi-dwelling zones?	C. Houses and duplexes are common in the RH (new RM3/RM4) zone, occupying 57% of properties in these zones. It can be expected that new development built to the full scale allowed in the RM3/RM4 zones (typically 65' to 75' of building height) will often be much larger in scale than existing development, particularly in areas where houses remain predominant.
	D. How does the proposal address concerns about rear setback step downs?	D. The previous Discussion Draft of the BHD code amendments had proposed both a building height step down and a deeper setback (10') adjacent to properties with single-dwelling zoning to provide a transition to these lower-density zones. The current proposals respond to concerns about impacts on development by eliminating the 10' setback requirement, and instead requiring only the proposed standard side/rear setback of 5'. A 35' tall building (three stories) would therefore not be constrained by requirements for height or setback transitions adjacent to single-dwelling zones. Retaining a requirement for taller buildings to step down in scale to 35' adjacent to single-dwelling zones is consistent with standards that apply in the commercial/mixed use zones.
17	Would like more clarity regarding setbacks in the CM zones adjacent to the multi- dwelling zones. (Schultz)	The commercial/mixed use zones require a 10' setback adjacent to properties with residential zoning (RF-RH), including the multi-dwelling zones (except for RX), to provide a transition to residential zoning.
18	Setbacks in the RM3/RM4 zones – have we modeled how much the increased setbacks may decrease unit production? (Smith)	Modeling of the proposed development standards, including the increased front setbacks (10' in the RM2 and RM3 zone) indicated that these setbacks, combined with height allowances, would not limit the ability to fully utilize allowed FAR or unit production (see <u>Appendix C, Code Modeling Prototypes</u>).

		Note that the BHD proposals reduce requirements for side and rear setbacks, which facilitates the ability to fully utilize FAR on small sites. For example, current regulations would require a 14' setback for a building wall that is 70' long and 55' high. In contrast, the BHD proposal would require a standardized side/rear setback of 5' for building up to 55' high. The proposals would require 10' side/rear setbacks in the RM3/RM4 zones for buildings greater than 55' in height (however, proposals for buildings greater than this height would be subject to discretionary design review, which would allow for setback requirements to be modified as part of design review).
19	Would like clarification regarding the value of side setbacks, what building code/fire code requires, and what is adjustable, particularly on Civic Corridors. (Smith)	The intent of requiring side setbacks is to respond to characteristics of multi-dwelling zone residential areas, which typically feature residential structures with side setbacks, as well as to facilitate access to light and air. These residential areas have a less continuous street wall of buildings and a more landscaped character than commercial areas, which the setback and lot coverage regulations help continue.
		Staff considered the idea of allowing for development to be built up to the side property lines in the higher-density multi-dwelling zones but rejected this due to the impact this would have on existing development (57% of current development in the existing RH zone consists of houses or duplexes; this percentage is 68% in the R1 zone). The Building Code allows buildings to be built next property lines, with firewall construction and no window openings. Side setback requirements could be eliminated in the multi-dwelling zones, but this would mean that existing housing would be flanked by blank walls when adjacent new development is built up to property lines. This is less of an impact in the commercial zones, where existing housing is less predominant and there is more of an established pattern of commercial buildings built adjacent to each other. The building code allows window openings when buildings are located at least 3' from property lines, although this distance provides compromised access to light and air (in the commercial/mixed use zones, 5' setbacks are required for the walls of dwelling units whose only windows face a side or rear property line).

	East Portland Standards & Street Connections	
20	Would like to have more information on what types of situations will allow for narrower street connections. (Spevak)	Narrower street connections would be available as an option if it is determined that the alignment or site constraints make a full street impractical. The ROW options identified in the draft report (May 2018) should be considered in the order shown in the graph on page 25. Ped-bike pathways are considered as an alternative to allowing development to proceed without creating the required connection.
		Factors used to determine whether the required ROW dedication is feasible include the proportion of the site dedicated as ROW, loss of development capacity, the number of new dwelling units proposed and resulting new trips generated by the development and the relative cost of street improvements.
21	What are the trade-offs of narrow street connections in terms of providing space for stormwater facilities and street trees? If we allow for narrower street connections, how will we ensure that projects that can fit these green elements will provide them? (Baugh/Houck)	The first two options (in order of consideration), i.e. 52' and 38' ROW, would provide space for standard street tree and stormwater management facilities. Where these options are not feasible, the status quo has resulted in missed opportunities on sites that were allowed to develop without dedicating public ROW. Narrower street and path connections increase the opportunities for obtaining ROW when development occurs. New connection options were identified to reduce the ROW footprint by phasing improvements or minimizing dimensions of various elements. Still, all new connection options include space for green elements including trees and stormwater facilities. Staff feel these options are preferable to no ROW dedication and loss of a public connection.
22	What are the possibilities for "woonerf"- type streets, mixing pedestrians and vehicles within a smaller area of traffic- calmed street space? (Smith)	Staff explored a range of alternative street options, including "shared street" scenarios where pedestrians and vehicles occupy the same space on the roadway. Given that Centers are intended to be ped-oriented urban with concentrations of people and activity, places and streets in centers are anticipated to accommodate a higher volume of trips by all modes. There was notable concern from residents about not providing a separate ped zone. Rosewood Initiative staff commented that pedestrians "should be prioritized and not have to share a surface with vehicles" on these streets. In response, PBOT staff rearranged the order of new connection options, so that the very last option for a street connection before allowing development to proceed without dedicating right-of-way (ROW) to meet our street spacing standards would be the 20' ROW (phase 1 of the 40' ROW). In this option, the first phase would dedicate public right-of-way and build an

		 interim dead-end accessway designed to give pedestrians priority and treat motor vehicles as guests. This accessway would be required to meet the conditions of a shared (pedestrian) street, which operates at low speed (15 mph speed limit) and incorporates necessary traffic calming features. The sidewalk must be built on the adjacent site before the barricade is removed and the street is opened to through traffic. On private streets there are options to construct shared-space ("woonerf") -type improvements, specifically shared courts and private alleys.
23	How will administration over time ensure that separately-created street segments are eventually connected? (Smith)	The dedication of ROW and presence of a partial street on an adjacent property is the trigger for the eventual completion of the street when a site is developed. PBOT already permits the construction of a partial street improvement on a site, setting the expectation that the street will be completed when the adjacent property develops.
24	How do the Connected Centers Street Plan proposals relate to street standards in single-dwelling zones? (Spevak)	A number of recent Neighborhood Street Plans (Cully, Division-Midway, Tryon-Stephens) have been developed to address connectivity in single dwelling zones. In addition, City Council adopted (in 2012) alternative standards for residential streets as part of its Street- by-Street Initiative.
		This planning effort aims to identify alternative street concepts for streets in multifamily zones, which are generally anticipated to carry higher traffic volumes. Where appropriate, some of the new street connection options developed as part of the Connected Centers project could potentially also be used in the single-dwelling zones.
	Other Regulations	
25	Regarding Transportation and Parking	The 10-unit threshold for the TDM requirements was established as part of the Mixed Use
	Demand Management: why use a 10-unit threshold and how will this requirement be administered? (Baugh)	Zones Project so that this requirement would apply to larger projects that have greater transportation impacts, and may have building managers or operators who can disseminate information on transportation options to tenants and participate the in annual surveys that are part of the PBOT's pre-approved TDM plans.
		See also the attached memo (Attachment D) from PBOT regarding the implementation framework for the TDM requirements.

26	Would like clarification regarding the discontinuation of Albina Community Plan District code sections. (Smith)	The Albina Community plan district includes pioneering implementation approaches, such as allowances for ground-floor commercial uses in the RH zone along Martin Luther King Jr. Boulevard and allowances for no off-street parking on small sites, that served as models for regulatory approaches now proposed to be applied citywide as part of the BHD proposals. Because the proposed citywide application of these approaches now makes the Albina Community plan district regulations redundant, they are proposed to be discontinued. The Albina Community Plan and its adopted policies, however, will remain as a City policy document. The following are the plan district regulations that would now be largely redundant with the BHD proposals:
		• Allowances for limited amounts of ground-floor commercial in the RH (new RM3/RM4) zone along NE Martin Luther King Jr. Blvd.
		 Exemptions from minimum parking requirements for small sites up to 7,500 square feet.
		Another plan district provision that would be discontinued provides reduced minimum density requirements in the RH zone along Martin Luther King Jr. Blvd, allowing for R2 zone townhouse densities along this corridor (1 unit per 2,000 sq.ft. of site area). Development in the RH zone along this corridor over the past decade has typically been higher-density, multi-story housing that meets the citywide RH zone densities. The corridor has been designated in the Comprehensive Plan Update as a Civic Corridor that is intended to be a focus for higher-density, transit-supportive housing.
		An additional plan district provision, allowing flexibility for attached housing in the R5 zone in excess of usual density limits, is proposed to be discontinued by the Residential Infill Project because of proposed allowances for increased density in the R5 zone citywide.
		See page 96 of BHD Proposed Draft Volume 3 for more information on the proposed discontinuation of the Albina Community plan district.
	Zoning Map	
27	Are we disproportionately burdening East Portland with density? (Oswill)	See attached table (Attachment E) summarizing the amount of multi-dwelling zoning and capacity in East Portland compared to other areas of Portland.

28	How would RM2 and CM2 interface after BHBD is implemented? (Oswill)	See attached map (Attachment F). The RM2 and CM2 zones (both allow 45' of building height) will often be located along the same corridors, such as SE Belmont, N Lombard, and along SE 122nd. However, the RM2 zoning sometimes extends beyond the corridors into residential areas (such as in the St. Johns, Northwest, and 60 th Avenue centers).
29	Interested in idea of mapping R2 to RM2 rather than RM1 near Civic Corridors and other transit corridors. (Smith)	Staff do not recommend expanding the scope of Better Housing by Design project beyond its original scope of updating multi-dwelling zoning code regulations. The project was not scoped to have a substantial remapping component, other than assigning the closest comparable new zones to existing zoning. Staff recommend that reconsideration of the existing application of multi-dwelling zoning be undertaken as part of future projects. For reference, Attachment G shows proposed RM1 zoning (current R2 and R3) adjacent to Civic and Neighborhood Corridors (includes 1,822 properties, accounting for 660 net acres).
30	I'm curious about the testimony about 2330 NW Flanders transitioning from CM to RM? I've familiar with this block from the NW Parking Process long ago. (Smith)	There is no change from commercial to multi-dwelling zoning proposed for this property. The western portion of the property (more than 2/3 ^{rds} of the property) is currently zoned RH and is proposed to be zoned to the comparable new RM3 zone. The eastern edge of this property is zoned CM2, which is not changing. The property is occupied by a medical office building. The medical office uses in the RH/RM3 portion of the property are currently non-conforming uses; the change from RH to RM3 zoning is not changing this status.

PICK Midnaelson

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Attachment A

	R5	R2.5	RM1	RM2	RM3	CM2	CM3	RM4	RX
FAR	.5	.7	1	1.5	2	2.5	3	4	4
HEIGHT	30	35	35	45	65	45	65	75	100
BUILDING COVERAGE	50%	50%	50%	60%/70%	85%	100%	100%	85%	100%
LANDSCAPED AREA			30%	20%	15%	15%	15%	15%	0
FRONT SETBACK	15	10	10	10	10	0	0	5	0
SIDE SETBACK	5	5	5	5	5/10	0	0	5/10	0

6/29/18

VISITABILITY PROTOTYPES STUDY

SUMMARY

The purpose of this study is to explore potential impacts of visitability (accessibility) requirements on a 3-5 unit small scale rowhouse building that is elevated above the public sidewalk. Standards for visitability include a no-step entry and ramped walkways sloping no more than 10% and providing access to a single visitable dwelling unit.

The following plans depict a rowhouse building that is level with the sidewalk, as well as scenarios where the rowhouse is 3, 4.5 and 6 feet above the sidewalk. Although the building is considered a multidwelling structure and the units are located on a single tax lot, the townhouse provisions of the Oregon Residential Specialty Code (ORSC) will be utilized. The site is assumed to be zoned RM2 or similar.

A range of options meeting these requirements were developed to illustrate various issues associated with visitability requirements. The comments below address impacts of visitability on project feasibility.

Main Entry & Pedestrian Standards

Meeting the Pedestrian Standards of 33.120.255 likely requires the use of both a ramp and a stair. Since the Main Entrance standards require a street-facing entrance within 8 feet of the longest street facing wall of the building, the westernmost entrance must serve as the main entry in this type of building. The main entry must be served by a pedestrian connection of limited length; using the ramp for this

connection exceeds the standard in most instances. Using the south yard as a "courtyard" main entry is an possibility, but the minimum courtyard width of 15 ft required by 33.120.231.C.2 is a large space compared to the size of the lot.

ORSC Ramp Requirements

Section R311.8 of the ORSC addresses ramps that serve the egress doors of units, and requires them to be maximum 1:12 slope with. If this standard were applied to the ramps proposed in these schemes, they would occupy more space on site than what is shown. While the method for determining whether a ramp "serves" an egress door is not prescribed, consultations with two City plans examiners revealed that both would consider any ramp located within the immediate vicinity of the unit entry door to be "serving" that door. Clarification of when and how this standard applies is critical to ensure the proposed zoning code is coordinated with the ORSC.

Ramp Near Property Lines

A major concern for feasibility will be any excavation required near property lines, such as is required for the "side" ramp configurations. Ramp excavations that have the potential to undermine building footings, walking surfaces, or other features on adjacent properties will require shoring for excavation and become highly infeasible, depending on local soil conditions. Excavation depths of 3-5 feet within a foot or two of a property line are reasonable, since most adjacent properties will not have structures closer than 3-5 feet to the property line. This allows for a 1:1 angle of repose for soil between the excavation an adjacent structure. However, deeper excavations may prove to be problematic.

Site Plan Configuration

Generally, the impact of visitability requirements (beyond the cost of a ramp) on a site 3 feet above the sidewalk are minimal. As the grade change approaches 4.5 ft, the requirements become more challenging, presenting developers with a choice of utilizing a side ramp configuration which may pose excavation challenges, or a front ramp which will reduce the building footprint, increase the front setback and may lose a unit. Although row house widths on the east coast run as narrow as 12 feet, 17-18 feet is more ideal. In general, a ramp that can be accomplished in a single run across the front of the lot, while still accommodating a stair will have minimal impact on project feasibility (30-35 ft long ramp).

Construction Cost Implications

For smaller buildings, the prospective cost of a ramp will constitute a larger proportion of the total project cost than for a larger building. The table below is a comparison of ramp construction costs with building construction costs for the 3 scenarios:

Scenario	Ramp Cost	Building Cost	Ramp Portion
30' ramp	\$30,000 +/-	@ \$160/sf = 953,600	3%
45' ramp	\$50,000 +/-	@ \$160/sf = 950,400	5%
60' ramp	\$82,000 +/-	@ \$160/sf = 950,400	9%

The possibility of shoring requirements may add considerable cost to longer ramps requiring deeper excavation. Therefore, costs for the longer ramps will be more sensitive to context than for shorter ones.

Ramp Slope

Although a 1:10 (10%) slope ramp is proposed for visitability, a 1:12 (8.3%) slope limitation is a much more common standard carried in the ORSC and the Oregon State Structural Specialty Code (commercial code). The difference in required site area between the two ramp slopes is illustrated in the diagram below.



On small sites where site area is at a premium, the additional space required for a 1:12 ramp instead of a 1:10 will create more challenges in site design. Once the ramp length is long enough to require a switchback ramp, the front setback and building footprint are significantly impacted.

Conclusions

In general, visitability for sites 3-4 feet above grade seems reasonable to achieve. Sites beyond 3.5 ft above grade necessitate a switchback front ramp which starts to impact building area more significantly. Adding provisions to the pedestrian and main entry standards to remove constraints and avoid a redundant stair for these types for sites would make visitability easier to achieve. Reducing the required width for a courtyard entry on a small site to serve as a main entry could help with this. The proposed reduced front setback (from 10' to 5') for elevated lots helps these sites achieve development potential similar to flat sites, except when a front switchback ramp is proposed. Soil type and features on adjacent sites will highly affect the feasibility of any ramping or excavation work needed near property lines.



Site Area:	5,000 sf (50' x 100')
Site Grade Change:	0 ft
Building Coverage:	2,980 sf (60%)
Building Area:	5,960 sf (1.19:1 FAR)
Building Height:	2 stories / 23'-8"
Units:	5 townhouses (1,190 sf ea.)
Req'd Outdoor Area:	48 sf per un x 5 = 240 sf
Landscape Area:	1,550 sf (31%)
Paving Area:	480 sf (10%)

SITE PLAN

OPT 1 Baseline Building



Site Area:	5,000 sf (50' x 100')
Site Grade Change:	0 ft
Building Coverage:	2,980 sf (60%)
Building Area:	5,960 sf (1.19:1 FAR)
Building Height:	2 stories / 23'-8"
Units:	5 townhouses (1,190 sf ea.)
Req'd Outdoor Area:	48 sf per un x 5 = 240 sf
Landscape Area:	1,550 sf (31%)
Paving Area:	480 sf (10%)

MASSING STUDY VIEW FROM SOUTHEAST

OPT 1 Baseline Building



Site Area: Site Grade Change:	5,000 sf (50' x 100') 3 ft
Building Coverage: Building Area: Building Height:	2,970 sf (59%) 5,940 sf (1.19:1 FAR) 2 stories / 23'-8"
Units:	5 townhouses (1,190 sf ea.)
Req'd Outdoor Area: Landscape Area: Paving Area:	48 sf per un x 5 = 240 sf 1,080 sf (22%) 710 sf (14%)

SITE PLAN

OPT 3a Building elevated 3 ft w/ side ramp



MASSING STUDY VIEW FROM SOUTHEAST

OPT 3a Building elevated 3 ft w/ side ramp



BUILDING SUMMARY Site Area: 5,000 sf (50' x 100')

Site Grade Change:	3 ft
Building Coverage:	2,950 sf (59%)
Building Area:	5,900 sf (1.18:1 FAR)
Building Height:	2 stories / 23'-8"
Units:	5 townhouses (1,180 sf ea.)
Req'd Outdoor Area:	48 sf per un x 5 = 240 sf
Landscape Area:	1,070 sf (21%)
Paving Area:	740 sf (15%)

SITE PLAN

OPT 3b Building elevated 3 ft w/ front ramp

0 5'

10'

20'



MASSING STUDY VIEW FROM SOUTHEAST

OPT 3b Building elevated 3 ft w/ front ramp



Site Area: Site Grade Change:	5,000 sf (50' x 100') 4.5 ft
Building Coverage: Building Area: Building Height:	2,970 sf (59%) 5,940 sf (1.19:1 FAR) 2 stories / 23'-8"
Units:	5 townhouses (1,190 sf ea.)
Req'd Outdoor Area: Landscape Area: Paving Area:	48 sf per un x 5 = 240 sf 1,090 sf (22%) 700 sf (15%)

OPT 4.5a Building elevated 4.5 ft w/ side ramp



MASSING STUDY VIEW FROM SOUTHEAST

OPT 4.5a Building elevated 4.5 ft w/ side ramp



Site Area:	5,000 sf (50' x 100')
Site Grade Change:	4.5 ft
Building Coverage:	2,870 sf (57%)
Building Area:	5,740 sf (1.15:1 FAR)
Building Height:	2 stories / 23'-8"
Units:	4 townhouses (1,435 sf ea.)
Req'd Outdoor Area:	48 sf per un x 4 = 192 sf
Landscape Area:	1,038 sf (21%)
Paving Area:	900 sf (18%)

NOTES:

1) Going to 5 units in this configuration will require sub-16 foot widths for rowhouses, which may be less than ideal.



SITE PLAN

OPT 4.5b Building elevated 4.5 ft w/ front ramp



MASSING STUDY VIEW FROM SOUTHEAST

OPT 4.5b Building elevated 4.5 ft w/ front ramp



DUILDING SUMMART			
Site Area:	5,000 sf (50' x 100')		
Site Grade Change:	6 ft		
Building Coverage:	2,970 sf (59%)		
Building Area:	5,940 sf (1.19:1 FAR)		
Building Height:	2 stories / 23'-8"		
Units:	5 townhouses (1,190 sf ea.)		
Req'd Outdoor Area:	48 sf per un x 5 = 240 sf		
Landscape Area:	1,030 sf (21%)		
Paving Area:	760 sf (18%)		

NOTES:

în

PL 50 ft

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N)

Trash

1) Traversing 6ft of grade at 10% requires a 60 ft long ramp. In this scenario, a single run of ramp may be difficult for many wheelchair users to navigate without an intermediate landing.

SITE PLAN

5'-0"

+EL 106.0'

Sidewalk

Street

+EL 100.0'

OPT 6a Building elevated 6 ft w/ side ramp

Ramp (10% slope)

Front setback larger than the minimum due to ramp

Required outdoor areas (48 sf

Townhouse Building

2,870 sf footprint

Porch required to meet main

Stair reg'd to meet ped standards; ramp connection does not comply as it exceeds distance limits

SCALE: 1" = 20'

5'

0

10'

20

entrance standards

PL 100 ft

per unit, min. 4'x6')

BETTER HOUSING BY DESIGN VISITABILITY PROTOTYPES



Site Area:	5,000 sf (50' x 100')
Site Grade Change:	6 ft
Building Coverage:	2,970 sf (59%)
Building Area:	5,940 sf (1.19:1 FAR)
Building Height:	2 stories / 23'-8"
Units:	5 townhouses (1,190 sf ea.)
Req'd Outdoor Area:	48 sf per un x 5 = 240 sf
Landscape Area:	1,030 sf (21%)
Paving Area:	760 sf (18%)

NOTES:

1) Traversing 6ft of grade at 10% requires a 60 ft long ramp. In this scenario, a single run of ramp may be difficult for many wheelchair users to navigate without an intermediate landing.

OPT 6a Building elevated 6 ft w/ side ramp

MASSING STUDY VIEW FROM SOUTHEAST



Site Area: Site Grade Change:	5,000 sf (50' x 100') 6 ft
Building Coverage: Building Area: Building Height:	2,800 sf (56%) 5,600 sf (1.12:1 FAR) 2 stories / 23'-8"
Units:	4 townhouses (1,485 sf ea.)
Req'd Outdoor Area: Landscape Area: Paving Area:	48 sf per un x 4 = 192 sf 1,108 sf (22%) 900 sf (18%)

SITE PLAN

OPT 6b Building elevated 6 ft w/ front ramp

0 5'

10'

20'



MASSING STUDY VIEW FROM SOUTHEAST

OPT 6b Building elevated 6 ft w/ front ramp

Attachment C

6/28/18

Cost Estimate - 30 ft ramp

Div	Item	QTY	Unit	Cost/Unit	Cost	
03	Concrete					
	concrete	5.1	су	310.00	1,581.00	
	forms	180	sfca	20.00	3,600.00	
	4" slab	152	sf	7.00	1,064.00	
	rebar	630	lb	2.50	1,575.00	
	wall finish	360	sf	4.00	1,440.00	
					subtotal	9,260.00
05	Metals					
	guardrail					
	handrail	60	lf	220.00	13,200.00	
					subtotal	13,200.00
31	Earthwork					
	excavation	16	су	40.00	640.00	
	grade	150	sf	1.00	150.00	
	gravel	1.5	су	60.00	90.00	
	shoring					
					subtotal	880.00
					subtotal	23,340.00
	contingency			10%	2,334.00	
	index to construction start			5%	1,167.00	
	gen conditions / ins / bond			13%	3,034.20	
	OH & Profit			5%	1,167.00	
					subtotal	7,702.20
					total const cost	31,042.20

Cost Estimate - 45 ft ramp

Div	Item	QTY	Unit	Cost/Unit	Cost	
03	Concrete					
	concrete	11	су	310.00	3,410.00	
	forms	450	sfca	20.00	9,000.00	
	4" slab	212	sf	7.00	1,484.00	
	rebar	302	lb	2.50	755.00	
	wall finish	450	sf	4.00	1,800.00	
					subtotal	16,449.00
05	Metals					
	guardrail					
	handrail	90	lf	220.00	19,800.00	
					subtotal	19,800.00
31	Earthwork					
	excavation	40	су	40.00	1,600.00	
	grade	260	sf	1.00	260.00	
	gravel	2	су	60.00	120.00	
	shoring					
					subtotal	1,980.00
					subtotal	38,229.00
	contingency			10%	3,822.90	
	index to construction start			5%	1,911.45	
	gen conditions / ins / bond			13%	4,969.77	
	OH & Profit			5%	1,911.45	
					subtotal	12,615.57
					total const cost	50,844.57

Cost Estimate - 60 ft ramp

Div	Item	QTY	Unit	Cost/Unit	Cost	
03	Concrete					
	concrete	15	су	310.00	4,650.00	
	forms	840	sfca	20.00	16,800.00	
	4" slab	272	sf	7.00	1,904.00	
	rebar	504	lb	2.50	1,260.00	
	wall finish	840	sf	4.00	3,360.00	
					subtotal	27,974.00
05	Metals					
	guardrail					
	handrail	120	lf	220.00	26,400.00	
					subtotal	26,400.00
31	Earthwork					
	excavation	50	су	40.00	2,000.00	
	grade	340	sf	1.00	340.00	
	gravel	3	су	60.00	180.00	
	shoring	1	ea	5000.00	5,000.00	
					subtotal	7,520.00
					subtotal	61,894.00
	contingency			10%	6,189.40	
	index to construction start			5%	3,094.70	
	gen conditions / ins / bond			13%	8,046.22	
	OH & Profit			5%	3,094.70	
					subtotal	20,425.02
					total const cost	82,319.02

Attachment D



1120 SW Fifth Avenue, Suite 800 Portland, OR 97204 503.823.5185 Fax 503.823.7576 TTY 503.823.6868 www.portlandoregon.gov/transportation

Dan Saltzman Commissioner Leah Treat Director

Memorandum

To:	Bill Cunningham, Bureau of Planning and Sustainability
From:	Liz Hormann, PBOT Active Transportation and Safety
RE:	Transportation Demand Management (TDM) Plan Requirement – Implementation and Affordable Housing
Date:	July 6, 2018

This memo outlines the general implementation framework for the Transportation Demand Management (TDM) development requirements and the exemption to the Multimodal Incentive Fee for Affordable Dwelling Units.

Background on the TDM Requirement in Commercial/ Mixed Use Zones

Under 33.266.410, a development in a commercial/ mixed use zone, that is sited outside the Central City Plan District, includes more than 10 new dwelling units, and is located within 1,500 of a transit station or 500 feet of a transit street; is required to have a TDM Plan approved prior to the issuance of a building permit.

There are two options for a developer to meet the TDM Plan requirement:

- Pre-approved TDM Plan (outlined in Title 17.107.035) an administrative option which includes a
 one-time, Multimodal Incentive Fee equivalent in value to an annual TriMet pass per unit, due at
 building permit issuance. The current rate is \$1,100 per market rate dwelling unit and \$0 per
 affordable dwelling unit. Additionally, the applicant is required to allow PBOT to disseminate
 transportation options information and administer an annual transportation options survey for the
 first four years of occupancy.
- 2. Custom TDM Plan (outlined in 33.852.105.H and 17.107.020) a Land Use Review process, approved through a Transportation Impact Review (TIR) process (Type II discretionary Land Use Review). The applicant must develop a TDM Plan and implement approved TDM strategies at occupancy. For approval, the Custom TDM Plan must demonstrate how the TDM strategies will contribute to sufficiently achieving the City's mode share and residential auto ownership targets.

The purpose of the TDM plan requirements is to prevent, reduce, and mitigate the impacts of the new development on the transportation system, neighborhood livability, safety, and the environment, while providing safe and efficient mobility options for tenants in the building.



The Portland Bureau of Transportation fully complies with Title VI of the Civil Rights Act of 1964, the ADA Title II, and related statutes and regulations in all programs and activities. For accommodations, complaints and information, call (503) 823-5185, City TTY (503) 823-6868, or use Oregon Relay Service: 711.

Implementation of TDM Requirement

In December 2016, adopted the code language in both Title 33 and 17 to include the TDM requirements in Commercial/ Mixed Use Zones. At the same time, through Exhibit P, City Council directed PBOT staff to develop the administrative processes to implement the code changes.

From November 2017 to May 2018, PBOT staff led an inter-bureau coordination group to develop and refine a very specific step-by-step implementation process for development and permit review across the Bureau of Development Services (BDS) and PBOT. Much of this focus was on how permit review, sign-off and communication would happen in a timely and efficient manner. The <u>final Administrative</u> <u>Rule</u>, which provides guidance to PBOT, other City Bureaus, applicants and the public on the implementation of the TDM requirements, was adopted by the Director of PBOT on May 21, 2018.

Basic Development Review Process and Requirements:

The following graphic outlines the basic process for each of the two TDM Plan Options, and what is required by the applicant for each stage of development:



At Building Occupancy:

While it will be another 9 to 18 months before a new development subject to the TDM requirement is built and is issued its certificate of occupancy, PBOT staff are working on refining the protocol for the implementation of the Pre-Approved TDM Plan and the Custom TDM Plan.

The following are two general models for providing the transportation options incentives with the Multimodal Incentive Fee. Each of these models starts with a required meeting (or phone conversation) between the property manager and PBOT staff, as outlined in the signed agreement form submitted prior to building permit issuance.

- 1) Property Manager run program at occupancy PBOT will provide the property manager with the Multimodal Incentives (HOP cards, bike share memberships, Streetcar Passes, car share memberships, etc.) for the property manager to pass on to the tenants.
- 2) PBOT run program at occupancy PBOT works with each resident, via an online form, to select the package of incentives and distributes to each resident individually.

For the Custom TDM Plan option, a developer is required to implement their approved TDM Plan, so at building occupancy PBOT's role will vary depending on that plan. The one piece where PBOT will always have a role, is using any multimodal incentive money paid prior to building permit issuance to procure and distribute the transportation options incentives.

Staff are also working on the survey mechanism and information package that will be disseminated for the first four years of occupancy.

Affordable Housing Exemption to the Multimodal Incentive Fee

At the time of adoption, the Code standard was written that the Multimodal Incentive requirement is equal in value to an annual TriMet pass, per unit. There was no distinguishing between market rate units or affordable units. Therefore, out of acknowledgement on the potential impact to affordable housing and the availability of a Low-Income Fare Pass from TriMet, staff proposed to develop two rates for the Multimodal Incentive Fee; one rate for market rate dwelling units and one rate for affordable dwelling units.

The Oregon Office of Economic Analysis estimated that between 2006 and 2015, the Portland housing market was under-built by approximately 23,000 units of housing, which was insufficient just to keep up with population growth. Additionally, given the existing Housing Emergency, and the City's various policy goals to provide and support affordable housing citywide, an exemption for designated affordable housing units was proposed to City Council.

On May 24, 2018 City Council adopted, <u>Ordinance 188956</u>, to amend the Transportation Fee Schedule (TRN-3.450) to incorporate the Multimodal Incentive Fee rates from the Pre-Approved Transportation Demand Management Plan (per Code Chapter 17.107), and to exempt Affordable Dwelling Units from the Multimodal Incentive Fee until June 30, 2020.

City Council also directed the following as part of the Ordinance:

• Where exempt, affordable dwelling units are within a building with market rate dwelling units that were subject to the Multimodal Incentive Fee, the same multimodal incentives will be offered to all

the units in the building, regardless of which units generated the fee and the incentives will be offered to the affordable dwelling units first.

• PBOT is directed to report back to City Council by end of September 2018, with options for how to fund an equivalent level of multimodal incentives for the exempt, affordable units, for the duration of the exemption period. With a focus on how to fund the incentives for buildings where all the units are exempted, affordable units.

PBOT staff are incorporating this direction from Council into the implementation work, to be ready when the first developments subject to the TDM requirement are built and occupied.

Attachment E

Multi-Dwelling Zoning and Multi-Dwelling Units, by District

Liaison District	Multi-Dwelling (MDR) Zone Acres	MDR Zoning - Percent of district land area	Percent of citywide MDR acres within district	Existing MDR Units (2015)	MDR Allocation - Additional Units by 2035	MDR Capacity (2035 Comp Plan) - Total Possible Additional Units	Percent of Citywide MDR Capacity	MDR Capacity (BHD Changes) - Total Possible Additional Units	Percent of Citywide MDR Capacity
CENTRAL CITY	129	5.2%	1.8%	30,349	27,627	25,135	14%	25,194	13%
EAST	2,422	13.0%	33.6%	21,348	16,131	54,605	31%	67,202	34%
NORTH	849	4.9%	11.8%	8,223	9,710	27,838	16%	30,492	15%
NORTHEAST	974	6.8%	13.5%	12,444	9,034	21,520	12%	24,065	12%
SOUTHEAST	1,629	12.6%	22.6%	20,765	11,002	30,410	18%	36,683	18%
WEST (North)	369	3.5%	5.1%	10,039	2,362	4,745	3%	5,059	3%
WEST (South)	828	6.6%	11.5%	9,604	3,745	9,233	5%	11,705	6%
Total	7,200			112,772	79,611	173,485		200,401	



August 23, 2018

City of Portland, Oregon || Bureau of Planning and Sustainability || Geographic Information Systems

Relation of RM2 Zoning to CM2 and CE







The information on this map was derived from City of Portland GIS databases. Care was taken in the creation of this map but it is provided "as is". The City of Portland cannot accept any responsibility for error, omissions or positional accuracy.

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