



**Mail**  
PO Box 5310  
Stateline, NV 89449-5310

**Location**  
128 Market Street  
Stateline, NV 89449

**Contact**  
Phone: 775-588-4547  
Fax: 775-588-4527  
www.trpa.org

---

STAFF REPORT

Date: October 28, 2021

To: Tahoe Living: Housing and Community Revitalization Working Group

From: TRPA Staff

Subject: Alternatives for intensity, density and dimensional standards

---

Summary and Staff Recommendation:

With the consultation of the Tahoe Living Working Group, this memo presents conceptual alternatives for modifying the Regional Plan’s existing density and height standards to encourage local resident and workforce housing development. These alternatives take into consideration the regulatory and environmental setting unique to Tahoe, as well as best practices from around the country. The conceptual height and density alternatives presented in this memo are not mutually exclusive and components of some alternatives may be combined.

Staff requests feedback on the range of the proposed alternatives. Based on discussion with the working group and public on October 28, 2021, staff will complete a more in-depth analysis (e.g. environmental, economic, and neighborhood compatibility) for one or more alternatives in consultation with subject matter experts.

Background:

The Tahoe Region currently has seven growth control measures that were put into place between 1972 and 1987. These measures include density, height, coverage, development rights, setbacks, parking, and not allowing subdivisions. In January of 2021, the Governing Board approved a framework and timeline of priority housing actions that were the result of consultation with the Tahoe Living Working Group, analysis using the Housing Cost Analysis Tool, and individual meetings with local jurisdiction staff members. Part of the near-term priority actions were to explore alternatives to TRPA’s existing density and height systems to encourage the development of workforce housing.

A key element of examining these regulations is to determine in which cases they are serving to achieve environmental thresholds and Regional Plan sustainability goals, and in which cases they may be inadvertently incentivizing larger home development to the exclusion of affordable homes. As the limited supply of development rights and vacant buildable lots dwindle in the Lake Tahoe region, many of them are being used up primarily for homes in the second home market and not providing the envisioned, needed housing to support local workers. As such, new or modified land use regulations should analyze and focus on incentives for redevelopment and the use of these development rights to meet Regional Plan goals wherever possible.

Planning and Urban Design Standards<sup>1</sup>, published by the American Planning Association, refers to density standards, building height, building setbacks, and building coverage collectively as “intensity, density, and dimensional standards.” One of the key issues staff has heard from the Working Group is that it is not just one standard that is always the main barrier to missing middle housing development, but rather that site characteristics are not uniform across the basin and constraints vary widely from parcel to parcel. These issues are particularly acute outside Town Centers in areas that are zoned multi-family, or as mixed-use “village centers.” Over the past several months, staff have developed alternative options and concepts that could either work in conjunction with, or replace, TRPA’s existing standards. This staff report focuses on alternatives to density and height requirements; TRPA will bring forward alternative ideas for coverage (a.k.a., impervious surface) in the next phase.

#### *Existing TRPA Height and Density Standards*

In order to understand the potential changes to density and height requirements and the impacts they could have, it is helpful to understand the existing standards in place in the Tahoe region. A list of height and density allowances by area for residential and, for comparison, tourist uses are included in Table 1.

Table 1: Existing height and density allowances by area

<b>Location</b>	<b>Use</b>	<b>Density (units/acre)</b>	<b>Height (feet)</b>
High Density Tourist District	Residential	25	197
	TAUs	40*	197
Regional Centers	Residential	25	95
	TAUs	40*	95
Town Centers	Residential	25	56
	TAUs	40*	56
Area Plans (areas outside of centers)	Residential	15	36**
	TAUs	40*	36**
Community Plans	Residential	15	36**
	TAUs	40*	48
Plan Area Statements	Residential	Up to 15 (depending on plan area statement)	36**
	TAUs	40*	38

\*TRPA Code allows up to 40 tourist accommodation units per acre if less than ten percent of the units have kitchens. If more than ten percent of the units have kitchens, the allowable density is 15 units per acre.

\*\*Maximum building heights are dependent on parcel slope and proposed roof pitch. Table 37.4.1-1 in the TRPA Code allows up to 36’ on a zero percent slope with a roof pitch of greater than or equal to 10:12. Buildings may extend to 42’ on a sloped parcel.

#### *Density*

In residential areas where multi-family housing is allowed<sup>2</sup>, density allowances range from 3 units per acre to 25 units per acre, depending on the location and whether the parcel is eligible for additional

<sup>1</sup> Planning and Urban Design Standards (American Planning Association, 2006)

<sup>2</sup> A map of areas that currently allow multi-family housing in the basin and the associated allowable density can be found [here](#).

incentives. Town Centers allow up to 25 residential units per acre. For reference, existing single-family development on lot sizes of 6,000 square feet (a typical lot size in many older neighborhoods) is equivalent to just over 7 units to the acre at the neighborhood scale. Projects that are building deed-restricted affordable units are eligible for a 25% density bonus if the parcel is located outside of a Town Center, or typically up to 18 residential units per acre. While multi-family developments have taken advantage of this incentive, it is not widely used.

Also shown in Table 1 as a comparison, allowable tourist accommodation unit (TAUs) densities are higher, at up to 40 units per acre in certain areas. While densities vary based on the percentage of units with kitchens, the environmental impacts of TAUs are generally comparable to residential units. In 2018, conversion ratios between TAUs, residential units and commercial floor area were developed based on environmentally neutral trip generation metrics (i.e. how many daily vehicle trips are produced by each type of unit). The conversion ratios that were adopted and listed in Table 51.4.3-1 of the Code are 1:1 for TAUs to single family residential and 1:1.5 between TAUs to multi-family residential. The analysis completed during the development of the conversion ratios showed that a multi-family residential unit produces less trips on average than a TAU<sup>3</sup>.

### *Height*

Existing TRPA height allowances require that multi-family homes be built with heights that do not exceed the limits set forth in Table A in Code section 37.4. These height limits vary depending on the characteristics of the parcel that the structure will be built on and the expected roof pitch of the building. There may be other height incentives depending on the location of the parcel. Outside of area plans, 36 feet (approximately 2.5 stories) is the maximum height allowed on a lot with a zero percent slope. For parcels that are located within an area plan, TRPA allows increased height in Town Centers, Regional Centers, and High-Density Tourist District Overlays, up to the following<sup>4</sup>:

- Town Center Overlay: Up to 4 stories/56 feet maximum
- Regional Center Overlay: Up to 6 stories/95 feet maximum
- High-Density Tourist District Overlay: Up to 197 feet maximum

In addition to the areas noted above, TRPA provides a variety of increased height exceptions or incentives for affordable housing projects in specific locations in the Basin, such as within the mixed-use areas of Kings Beach within the Placer County Tahoe Basin Area Plan or in Special Height Districts. Working Group members have voiced that these incentives should be expanded to include additional areas where multi-family is currently allowed.

### Discussion:

With the understanding that each parcel is unique and site constraints in Tahoe vary, TRPA staff are considering alternative approaches to density and height requirements that could provide the flexibility

---

<sup>3</sup> On average, a multi-family residential unit produces 7.32 daily trips per unit while a hotel produces 10.20 daily trips per room/unit.

<sup>4</sup> Allowable height at specific locations or special districts may vary depending on the area plan, plan area statement, or community plan the parcel is within (i.e. specific parcels within a Town Center may not allow 56').

to make workforce units feasible, while maintaining environmental thresholds. Alternatives listed in this staff report are not mutually exclusive and components of one alternative could be paired with another. Each of the alternatives would work within the context of the existing development rights system and will need to be analyzed within the context of TRPA's thresholds. At this time, TRPA is not proposing any changes to the development rights system and each unit would require either a development right or a bonus unit. At the October Tahoe Living Working Group meeting, staff will request input on the benefits, drawbacks, and feasibility of each alternative and will bring back a more detailed proposal and the associated environmental impacts based on that input at the next Tahoe Living Working Group meeting.

### **Density**

Current density requirements, when paired with existing height and coverage standards, often encourage larger single-family homes and disincentivize missing middle and multi-family housing types from being built. Last winter, a presentation by Opticos Design<sup>5</sup> highlighted the difference between missing middle housing and multi-family development, and the different densities needed for both. Missing middle housing is defined by Opticos as house scale buildings with multiple units in walkable environments that provide housing that is visually appealing to neighbors, affordable for potential residents, and economically feasible for developers to build. This type of housing usually is built in the form of smaller scale multi-family development such as duplexes, triplexes and fourplexes. Due to the smaller nature of this housing, it can be built on smaller lots that visually fit into existing lower density neighborhoods. Missing middle housing is different than conventional multi-family development and needs certain standards to be implemented. For example, because larger multi-family developments are typically constructed on larger lots, the units per acre density can be lower than the units per acre density required to build a duplex, triplex or fourplex. The maximum allowable density requirements found in TRPA and local jurisdiction codes do not, to a large extent, consider or even allow missing middle housing. Existing allowable densities in the basin generally are not high enough to make multi-family or missing middle housing financially feasible without heavy public subsidy, particularly on smaller lots.

### *Case Studies*

Around the country, jurisdictions are attempting to modernize age old zoning and density laws to make it more feasible to build missing middle housing. Different strategies have been applied depending on the desired outcome of the community. In 2020, Portland followed the example of several other US cities to pass new zoning rules that would legalize up to four units on almost any residential parcel, with an additional option of six units if at least half are provided at below-market prices. Portland's new regulations went a step further than other cities by allowing reduced parking and an expanded building footprint for building more than one unit, and as such, they expect to see more missing middle housing units constructed.

Further south on the west coast, in an effort to promote smaller residential units near transit and within easy walking and biking distance to commercial services and activity centers, the City of Santa Barbara implemented an Average Unit Size Density Program in 2013. The program maintains a density allowance

---

<sup>5</sup> Missing middle housing, the subject of the January 6<sup>th</sup>, 2021, workshop hosted by the Local Government Housing Committee and led by Opticos Design.

range for selected areas of the city, but also implements a maximum unit size for each zone. To further encourage developers to take advantage of this program, there are more flexible parking, open space, and setback standards. The program has since gone through multiple revisions and been adopted permanently into their Code.

### *Alternatives to Density*

The following alternatives are presented to the Working Group for discussion and further exploration to either update or replace TRPA's existing density standards. For the alternatives that would remove the units per acre requirement, staff expect that, until other barriers are addressed, many projects would not be able to realize higher densities, just as many projects currently cannot reach even the allowable densities due to height and coverage constraints. Research from other jurisdictions, including Minneapolis and Vancouver, B.C.<sup>6</sup>, also bears this out. However, on certain parcels, relaxed or lifted density standards could help a project's financial feasibility and result in smaller units. In November 2020, TRPA staff estimated that higher density paired with lower parking standards would reduce [overall development costs by about eight percent](#)<sup>7</sup>.

### *Considerations*

Each of the alternatives listed could be applied to deed-restricted units, to any multi-family development, or a hybrid. Some Working Group members have previously indicated that incentives should be applied more broadly to any multi-family development, particularly to encourage affordable-by-design housing and limit reliance on public subsidies.

While all of the alternatives would provide flexibility in the building process and help to reach Working Group goals, the complexity, time to implement, and amount of environmental review would differ between each. The alternatives listed below are not mutually exclusive and components of some alternatives could be combined. A hybrid approach provides the flexibility for changes to be successful Basin-wide and not tailored for one specific neighborhood, district, jurisdiction or state. Longer term, changes to the density system should be compatible with updates to other building standards in the Basin, including height, fees, coverage, and parking.

### **Alternative #1: Increase Allowable Densities**

Alternative 1 would effectively maintain the existing units per acre structure but increase the density allowances in each zone. For example, allowable residential densities could be increased to 40 units per

---

<sup>6</sup> According to [Sightline](#), "In both Vancouver and Minneapolis, city laws in low-density zones cap the size of new buildings no matter how many homes they create. In Minneapolis, for example, the interior square footage of a building can be up to half the square footage of its lot: 2,500 square feet of housing on a hypothetical 5,000 square foot lot. Portland's new rules set that same size limit for one-unit buildings. But Portland's duplexes will be up to three-fifths the square footage of their lot, and triplexes and fourplexes up to 0.7."

<sup>7</sup> The estimated eight percent reduction in costs is based on increasing density from 25 units per acre to 40 units per acre and decreasing parking requirements from 1.5 parking spaces per unit to one space per unit. From Attachment B to the November 2020 Tahoe Living Staff Report, available here: [https://www.trpa.gov/wp-content/uploads/documents/archive/04\\_Attachment-B-Policy-Analyses.pdf](https://www.trpa.gov/wp-content/uploads/documents/archive/04_Attachment-B-Policy-Analyses.pdf).

acre in areas where 25 units per acre are allowed, 25 units per acre in areas that allow 15 units per acre, etc. Specific unit per acre allowances would need to be developed. Existing allowable densities are shown on the webmap [here](#).

As mentioned above, densities for TAUs in many areas throughout the Basin allow up to 40 units per acre. The analysis completed in 2018 for the Development Rights Strategic Initiative exchange rates showed that the number of daily trips generated by tourist and residential uses are comparable and resulted in a 1:1 exchange rate between a single-family residential unit of use and a TAU. By increasing residential densities closer to what is allowed for tourist uses, Alternative 1 could help to level the playing field between the two uses.

### **Alternative #2: Maximum Unit Size**

Alternative 2 could be used by TRPA and local jurisdictions to encourage smaller, more affordable housing units by providing the option to developers to use a maximum unit size instead of density (i.e., number of units per acre) requirements. This would mean that for multi-family housing, instead of allowing a maximum of 15 units per acre, for example, the developer would be required to construct units that are a maximum size of 500 – 1,100 square feet (or a different size that may be determined through Working Group discussion), depending on number of bedrooms. An example of this is shown in Table 2. The size of the unit could be smaller but could not exceed the listed square footage. If this alternative is pursued, the maximum unit size range could be developed using local and national average unit size data and with input from local jurisdictions and developers. Additionally, local jurisdictions could develop their own maximum unit sizes and tailor the program to their needs.

Table 2: Example Maximum Unit Size by Bedroom<sup>8</sup>

# Bedrooms	Example Unit Size in Tahoe (sq. ft.)
0	500
1	650
2	750
3	1,100

The following tables show examples of how this concept could be applied in the basin and result in additional units that are more affordable to the local workforce. The numbers listed in the “Resulting Units” column are a minimum unit count. The count could be higher if the units were smaller in size, allowing additional units to fit in the building. Note that these examples are conceptual and for discussion purposes only.

<sup>8</sup> Example unit size by bedroom is based on the square footage of locally proposed multifamily projects.

Table 3: Example 6,000 sq. ft. Parcel Maximum Unit Size Concept

	Parcel Size (sq. ft.)	Allowable Coverage (sq. ft.)	Density	Height	Max Unit Size (sq. ft.)	Resulting Units
Status Quo	6,000	1,800	15 units/acre	2.5 stories	2,050	2 units*
Alternative 2: Max unit size	6,000	1,800	N/A	2.5 stories	500 (studio)	6 units minimum*
Alternative 2: Max unit size	6,000	1,800	N/A	2.5 stories	750 (2 bedroom)	5 units minimum*

\*This table assumes one 200 square foot parking space per unit.

Table 4: Example 12,000 sq. ft. Parcel Maximum Unit Size Concept

	Parcel Size (sq. ft.)	Allowable Coverage (sq. ft.)	Density	Height	Max Unit Size (sq. ft.)	Resulting Units
Status Quo	12,000	3,600	25 units/acre	2.5 stories	1,300	6 units*
Alternative 2: Max unit size	12,000	3,600	N/A	2.5 stories	650 (1 bedroom)	10 units minimum*
Alternative 2: Max unit size	12,000	3,600	N/A	2.5 stories	1,100 (3 bedroom)	7 units minimum*

\*This table assumes one 200 square foot parking space per unit.

Maximum unit size has the effect of requiring a minimum number of units on a parcel. If a developer must provide smaller units, they will be compelled to provide more units to make the project financially feasible. This is similar to requiring minimum densities, as was included in the Washoe Tahoe Area Plan Town Centers.

### Alternative #3: No Density Cap

Similar to Alternative 2, removing units per acre requirements and relying on other existing growth management standards, like coverage, height, and setbacks, would encourage smaller units and therefore a great number of residential units. Unlike alternative 2, there *would not* be a maximum unit size requirement, leaving more discretion to the developer.

#### Alternative #4: Form-Based Code

Alternative 4 would give local jurisdictions more flexibility to promote the type of housing that fits the characteristics within their locality. This could include local jurisdictions moving away from a units per acre requirement and setting their own standards for the specific type and design of housing they want to see in low, medium, and higher intensity areas. By setting specific design standards, local jurisdictions can control the character and feel of what is built through defining the features and configurations of buildings while maintaining the flexibility in number of units that allows missing middle projects to be more feasible. This alternative would also enable local jurisdictions to pair form-based standards with more flexible standards for parking and setbacks, if applicable.

Table 5 shows how each alternative influences the resulting size and number of units that are built. The scenarios in the table use the following assumptions:

- Parcel Size: ¼ acre (11,000 sq. ft.)
- Allowable Coverage: 30% (LCV 7)
- Allowable Height: 2.5 stories
- Parking: 1 space @ 200 sq. ft./unit (resulting units column includes parking calculation)

Table 5: Density Alternative Matrix

Alternative	Allowable Density	Resulting Units
Status Quo	1-15 units/acre (dependent on area)	3
Alternative #1: Increase Allowable Densities	Up to 40 units/acre	Maximum 10 (using example of 40 units per acre)
Alternative #2: Maximum Unit Size	None (900 sq. ft. max unit size)	Minimum 7 units at 900 sq ft.
Alternative #3: No Density Cap	None	Could result in a mix of unit sizes: 11 units at 600 sq ft, 12 units at 500 sq ft, etc. Minimum 7 units at 900 sq. ft.
Alternative #4: Form-Based Code	Dependent on local jurisdiction standards	Dependent on local jurisdiction regulations

#### Height

In addition to the number of units per acre (density), case studies and feedback from developers of would-be affordable housing projects in the Tahoe region have shown that overly restrictive height requirements can prevent developers from building workforce housing types, due to the remaining coverage, setback, and parking requirements on specific parcels, as described above.

#### *Alternative Height Concepts*

The following concepts could be implemented as a replacement to our existing height requirements and are provided in this staff report to solicit working group input. These concepts will be further developed with consultants following the Working Group discussion.

1. Allow height limits to vary relative to the tree canopy. Local jurisdictions could adopt lower height limits. TRPA currently allows exceptions to height in special height districts based on the building height's relationship to tree canopy (37.7.12).
2. Reexamine how height is measured relative to the natural grade and land capability of the site. TRPA currently measures height at the lowest point of natural grade. To further incentivize workforce housing, the Working Group could recommend that TRPA instead measure height elsewhere, such as at the midpoint of natural grade.
3. Work with local jurisdictions to develop transition zones between town centers and single-family neighborhoods with varying height limits (i.e., form-based code concept).
4. Allow height limits to vary relative to the height and distance from adjacent buildings (i.e., adjacency standards).

Table 6 shows how alternative height allowances could produce more smaller units, in combination with increased density allowances. The scenarios in the table use the following assumptions:

- Parcel Size: ¼ acre (11,000 sq. ft.)
- Allowable Coverage: 30% (LCV 7)
- Parking: 1 space @ 200 sq. ft./unit (resulting units column includes parking calculation)

Table 6: Alternative Height Concept Matrix

Alternative	Allowable Height	Required Density	Resulting Units
Status Quo	2.5 stories (dependent on area and slope)	25 units/acre	6 units (1,175 sq. ft./unit average)
<b>Density Alternative #1:</b> Increase Allowable Densities	4 stories*	36 units/acre	9 units (1,175 sq. ft./unit)
<b>Density Alternative #2:</b> Max Unit Size	3.5 stories*	32 units/acre	8 units (1,175 sq. ft./unit)
<b>Alternative #3:</b> Transition Zones (form-based code)	4.5 stories*	40 units/acre	10 units (1,175 sq. ft./unit)
<b>Alternative #4:</b> Adjacency Standards	3 stories*	28 units/acre	7 units (1,175 sq. ft./unit average)

*\*These heights are provided as an example and could be higher or lower depending on Working Group and Consultant feedback.*

#### Survey Results

In August, Working Group members were asked to complete a survey to guide the development and discussion of alternatives to TRPA's existing height and density requirements which were discussed above. TRPA received twelve responses, a summary of which is provided in Attachment B.

Next Steps

Based on discussion by Working Group members and the public, staff will move forward to bring back requested information and further develop a more detailed proposal for one or more alternative(s), or a hybrid. TRPA also has recently contracted with several consulting firms through the Tahoe Basin Housing Initiative RFQ, released on June 1<sup>st</sup>, 2021 to provided additional needed expertise on economic, environmental, and neighborhood compatibility analysis in this phase.

Contact Information:

For questions regarding this agenda item, please contact Alyssa Bettinger, at (775) 589-5301 or [abettinger@trpa.gov](mailto:abettinger@trpa.gov).