



## **Urbanizing the Alps: Densification Strategies for Mountain Villages. By Fiona Pia**

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## Urbanizing the Alps: Densification Strategies for Mountain Villages. By Fiona Pia

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In *Urbanizing the Alps*, Fiona Pia analyzes the urban sprawl and congested movement systems that challenge the sustainable growth of popular mountain destinations. Such urbanization in mountain landscapes has resulted from the need to support a growing tourism industry since it emerged in the countries of the European Alps in the mid-19th century, and has typically occurred in an ad hoc manner without the planning and development strategies required to achieve sustainable destinations. In 2014, Switzerland introduced the Lex Weber legislation, restricting second-home ownership to a maximum of 20% of the total home ownership in each municipality to reduce the urban sprawl that was consuming alpine landscapes. However, restricting growth has significant negative impacts on tourism—the main industry in mountain destinations.

Through a primarily quantitative inventory and analysis of the urban form and movement systems of Verbier, Zermatt, and Andermatt resorts in Switzerland, Avoriaz in France, and the Resort Municipality of Whistler in Canada, Pia suggests solutions for revitalizing Verbier and offers a densification strategy for conserving rural alpine landscapes in other mountain destinations.

It is unfortunate that the Zermatt case study is given such a cursory analysis, because Zermatt is considered to be one of the most iconic global mountain resort destinations and has served as a precedent to many purpose-built ski resort villages. For example, the urban design principles of Zermatt inspired Peter Seibert's design of Vail Village, Colorado, in the early 1960s, and were later applied in the design of Whistler Village and numerous other successful resort villages worldwide. Zermatt also provides an early example of a successful mountain resort community growth management strategy that identified the appropriate level of densification to maintain a sustainable tourism economy without impacting the quality of the experience—a program that was initiated and administered by the local government and involved residents and stakeholders.

Avoriaz is one of the many winter resorts initiated under Plan Neige, created by the French government to capitalize on the increase in winter tourism following the rise in the popularity of skiing from the late 1950s. These resorts were

purpose built in greenfield settings at elevations above 1800 m, to guarantee snow and an extended winter season. Megastructures up to 19 stories high were designed to be self-contained in order to comfortably accommodate guests during extended periods of inclement weather and to minimize the urban footprint on the alpine landscape. In Avoriaz, an economic downturn due to a decline in occupancy rates during the 1990s required the resort owner to pursue new revenue streams. This included creating a satellite resort offering low-rise apartments and chalets to appeal to a broader market. A mandatory nightly rental covenant was introduced to 9 buildings to create “warm beds” and contribute to the tourism economy, but approximately 65% of the beds remain in private ownership as “cold beds.” Avoriaz is also seeking to expand its operating season from winter only to year-round. Activities, events, and amenities that have made other mountain resorts popular year-round destinations should be considered, and a landscape and urban design program should be implemented to broaden the destination's appeal. This program should also include creating a highly animated pedestrian street that offers a diversity of shopping and dining opportunities. As noted in Schmitz et al (2008), shopping is the most popular year-round activity in mountain resorts and a key contributor to a destination's appeal.

The author's description of the development of Whistler Blackcomb is a significant misrepresentation of this case study. Local entrepreneurs constructed the first ski lift in 1966, in a sparsely populated valley. As the resort's popularity grew, subdivisions of second-home building lots were developed. By 1975, concerns over the further development of subdivisions scattered throughout the valley, environmental degradation, and the recognition of the area's potential as a global resort destination motivated the provincial government to create the Resort Municipality of Whistler through pioneering legislation based on a public-private partnership development program. In 1976, Eldon Beck planned a mixed-use commercial center on the site of the garbage dump, to create the main staging area to Whistler Mountain from the north and a staging area for the future Blackcomb Mountain to the east. In 1987, Beck was again hired to plan a major expansion of Whistler Village. Whistler's success is due to sound planning, its proximity to metropolitan Vancouver with its international airport, and its location within a 5-hour drive of over 5 million inhabitants. With the input of local citizens and stakeholders, in 2004–2005, the Resort Municipality prepared “Whistler 2020,” a strategy that guides the community's sustainability regarding issues like affordable housing, transportation, health care, the environment, and growth. However, affordable employee housing and public transportation continue to challenge Whistler's carrying capacity. There is a free public bus system for tourists within the commercial village center, but no free bus system servicing the subdivisions scattered throughout the valley, nor adequate public transit to the adjacent towns that have

now become major satellite bedroom communities because of the lack of affordable accommodation for employees in Whistler.

Andermatt is located on the intersection of the Gotthard north-south route through Switzerland and across Europe, and is served by a major expressway and rail network. When the army reduced its presence in this strategic location in 2005, the government sought to replace the economic benefits generated by the military by developing tourism facilities on a site previously occupied by the military. The project was planned and is being developed as a public-private partnership, and is an extension of the adjacent high-density, mixed-use, pedestrian-only town center. Pia correctly acknowledges the infill project as a good solution to densification of a mountain destination to enhance the local economy with no impact on the natural environment. She also correctly observes that the architecture of Andermatt creates an “Alpine Disneyland” because of the dissonant architectural styles, building forms, and construction materials, and suggests that, to achieve a harmonious form and character of development, the design team be limited to 1–5 architects, as it was at Avoriaz. While this approach may be a solution, there is the risk of the form and character of development becoming too homogenous, because of a limited number of architects, or dissonant, because of several firms contributing their personal architectural styles. Restricting the number of architects also reduces the potential for creative input from the broader design community. As is evident in some popular mountain destinations, a successful approach to achieve a “unified diversity” in urban form and character is to prepare design guidelines that specify design criteria, and to have submissions prepared by architects for development approval reviewed by a design review entity—a representative of the government or the project’s master developer—for conformance to the guidelines.

In Verbier, demand for increased density has typically been met by adding low-density development zones with privately owned single-family chalets. As much as 90% of the accommodation base is chalets, of which only 5% are available for nightly rental. This land-consumptive approach has resulted in urban sprawl and traffic congestion, and does not contribute sufficiently to the local tourism economy. Because the Lex Weber legislation precludes further densification with single-family chalets, alternative building types of higher density must be considered. Pia proposes to resolve the traffic congestion and lack of accommodation types that generate tourism revenues by constructing 5 mixed-use megastructure cable car stations on the remaining publicly owned land, linked by a gondola cable car system that loops around the town perimeter, with spurs to transportation nodes to replace dependence on buses. However, unlike the architectonic buildings of Avoriaz that

use natural materials and forms to complement the greenfield setting for which they were designed, the scale and massing of the proposed megastructures will overwhelm the adjacent chalets and residential neighborhoods, and dominate the urban fabric and natural landscape. The scale and materials of these megastructures will cause significant visual blight that will negatively impact Verbier’s “sense of place” as a globally popular mountain resort. A more sympathetic approach to densification would be to maintain the proposed cable car loop system but, instead of the proposed megastructure stations, to construct smaller stations that access satellite mixed-use neighborhoods of higher density buildings harmonized with the scale, style, and materials of other buildings. Each satellite “village” could offer different anchor amenities and activities that would create a diversity and year-round sense of discovery for guests and residents.

The errors in research, the cursory analysis of some of the case studies, and the frequent use of convoluted jargon often make the author’s polemic difficult to comprehend. The site plans, architectural drawings, and graphically presented quantitative data create a beautifully produced document, but much of this material contributes little substance. These factors, and the architecture prescribed for the densification of Verbier that is dissonant with its context, provide little guidance for properly responding to the pressures to increase densities in mountain resort destinations. While densification and movement systems are important determinants in responding to the growth pressures deriving from increasing demand from tourism and amenity migration, other considerations, such as affordability for both guests and residents, operational efficiencies, waste management and energy conservation, and the quality of the built environment, must be considered to optimize a destination’s sustainability.

Prior to responding to the pressures of growth with additional density, a more comprehensive approach is to prepare a destination management program that considers the many factors necessary to determine a destination’s carrying capacity and limits of growth. Destination management plans for mountain communities like Zermatt and Whistler are useful precedents. Such plans should be based in a public-private partnership, reflect the goals and objectives of residents and stakeholders, and be administered by the local government to maintain the democratization of these communities and mountain landscapes.

## REFERENCE

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