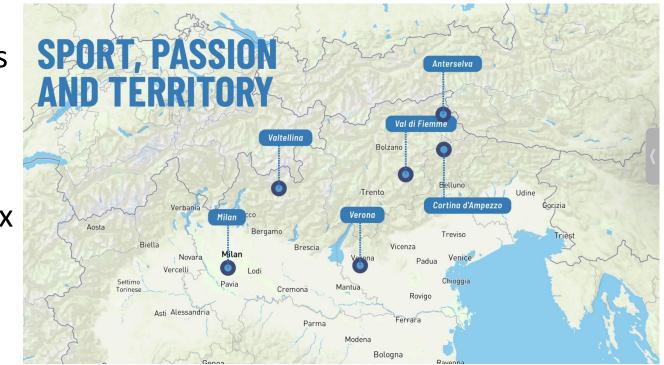
# **2026 Winter Olympics and Paralympics**

Leveraging Milan-Cortina's hosting of the Games to address abandoned houses in nearby mountain villages

Sarah Jeong

# Inspiration

- The 2026 Winter Olympics and Paralympics will be held in venues across northern Italy.
- The Games will shine a spotlight on the region and lead to an influx of people and funding.
- This presents opportunities to help revert population decline in nearby mountain villages.



# Overview

- **Problem** of abandoned villages in the Alpine Valleys
- **Opportunity** of Olympic and Paralympics housing insufficiencies to revitalize abandoned residential buildings
- Case studies: Olympic and Paralympic Games enable host cities to build long-term infrastructure
- **Proposal**: An alternative to building residential units for the Games in Milan
- Process: Case studies, GIS, web scraping
- Implications, reflections and future research

# Problem

- Shrinking villages in the "Alpine Valleys"
  - Known for outdoor activities, but hard to access and aging population.
  - Decline in economic sectors agriculture, construction, commercial
  - There is an abundance of abandoned residential buildings and disused facilities.



Source: Pedrazzini, Luisa. "Multifaceted Fallow Lands: the Case of Lombardy." Journal of Alpine Research | Revue de géographie alpine 107-1 (2019).

# Problem

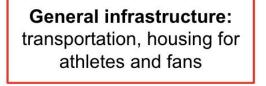
- Focus on abandoned buildings
  - While most of these are second homes, many are abandoned.

	households housing (p households	ercentage	
	2021		
Problems with the accommodation		damp	poor light
Territory			
Italy	11.1	13.7	6.4
Lombardia	9	9.7	5.1
Provincia Autonoma Bolzano / Bozen			
	10.4	9.6	••
Provincia Autonoma Trento	8.7	10.3	7.1
Veneto	9.8	12.7	4.6

# Analysis of depopulation in mountain regions

- Many mountain regions in Europe are at risk of depopulation
- For young people, lack of good jobs, poor transport links, and limited access to education are key reasons for them leaving mountain regions
- But many young people would prefer to keep living in mountain regions if they could
  - and the pandemic has strengthened this feeling
- Remote working has made it easier to keep living in the mountains <u>and</u> have a good job
- Mountain regions need to attract young people to stay by offering good jobs and necessary infrastructure - e.g. transport, co-working spaces, childcare facilities

# **Opportunity of the Games**



Sports infrastructure: competition venues

Operational costs: administration, opening and closing ceremonies, security vs

Short-term: tourism Long-term: Olympic legacy, improvements in infrastructure, increased trade and foreign investment after the Games

Intangible: civic pride

- Olympics need infrastructure especially housing and transportation in the host city
  - Most of Olympic financing goes into infrastructure for roads, venue and housing.
  - Milan and Cortina d'Ampezzo (a ski resort ~5-hour drive away) will jointly host the Olympics, making this the first Olympic Games with two official host cities.
- Olympics put host city in spotlight opportunity to promote as tourist destination

Source: <u>https://www.cfr.org/backgrounder/economics-hosting-olympic-games</u> https://www.architecturalrecord.com/articles/15235-som-unveils-2026-olympic-village-for-milan-cortina

#### Case studies: Benefits of Hosting the Olympics

Cities hosting the Olympics gain temporary jobs due to infrastructure improvements that continue benefiting the cities into the future.

Thousands of sponsors, media, athletes, and spectators typically visit a host city for six months before and six months after the Olympics, which brings in additional revenue.

Zhangjiakou Olympic Villages is 2.5 hours from Beijing. Hosted four competition venues, offering to become a training base for multiple snow sports. In 2019 after announcement of the Winter Olympics, Zhangjiakou received a 20% increase in tourism from previous years. Yanqing and Zhangjiakou Olympic Villages became hotels, apartments and a business cluster to serve the region's winter sports scene.

Investment in the Olympic Village in Sydney led to improved motorway and rail infrastructure, streetscape improvements, and hotel capacity significantly increased up to 2000 and remained for a decade (though it did not increase after that time).

# Using the Olympics to improve existing infrastructure has long-term effects and reduces cost of the Games

- The London Olympic Stadium was originally planned to be mostly dismantled after the Games, but this would have been a waste of money so the government changed plans and West Ham Football Club moved into the stadium. London transformed the stadium "to a UEFA category 4 football stadium with a capacity of 54,000. This is the highest category of a football stadium in the world and made east London the best place for football fans to enjoy their favourite sport."
- Los Angeles used mostly an existing venue they only built 2 new venues. Barcelona, Sydney and London are often cited as venues that had strong legacy plans - redeveloping a part of town, improving infrastructure.

For the London Olympics, new bridges, highways, rail lines and train cars are still in use.



Olympic Javelin trains carried spectators from central London to the Olympic Park in seven minutes during the Olympic Games. The high-speed rail fleet of Javelins have helped cut commuter travel times by over 50 per cent on some services.

### Link between Olympics and depopulation

"For most aspiring host cities, investment in Olympic infrastructure is often viewed as means to leveraging the games for broader economic growth and urban redevelopment."

- To tackle depopulation, mountain villages need to attract young people to stay
- To attract young people to stay, mountain villages need to provide infrastructure that gives young people access to good jobs and education e.g. fast trains, fast internet, co-working spaces
- The Olympics can be leveraged to provide this infrastructure. Many previous Olympics hosts have combined hosting the Olympics with large infrastructure projects e.g. to improve transport and increase housing within the host city.
- The mayor of London bid for the Olympics to get central government funding to build infrastructure that was needed in a deprived part of the city. "Hosting the Olympics can provide the impetus for getting valuable public <u>infrastructure</u> projects off the ground."

### **Overlapping benefits for towns and Olympic event**

-short-term tourism -long-term visibility and tourism potential -restore long-term housing infrastructure for future visitors -reduce commute and traffic for athletes (5 hours w/o traffic from Milano to Cortina -experience life in local villages

- \$2.04B estimate for Milan-Cortina Games
- 2 million visitors expected
- The 2026 Games will be spread among several cities between Milan and Cortina, which are about 250 miles apart.
- Events will be held in Northern Italy: Milan, Cortina, Verona, Val di Fiemme, Valtellina and Anterselva. Cortina, which hosted the Winter Games in 1956, will welcome Olympians for a second time.



"Rather than ceasing to be of use after the Olympics, the Porta Romana Olympic Village will ultimately become a vibrant, self-sustaining neighbourhood built around the principles of social equity, environmental commitment, wellness, and inclusivity." - SOM Design Partner

Designers

- Master Plan by Diller Scofidio + Renfro (DS+R)
  - Parco Romana proposal to turn Milan's Porta Romana railway yard into a mixed-use district for the Games and future. SOM's athlete housing, for example, will be turned into student and affordable housing.
- Olympic Village by Skidmore, Owings & Merrill (SOM)
  - Six new residential buildings housing for Olympic athletes
  - Two existing industrial structures - repurposed into public spaces and form a gateway to the village on the southwest corner of the site.



# Proposal

Planned funding for Olympic venues could sustain rural alpine residential buildings for future use.

Source: OLIMPIADI INVERNALI MILANO-CORTINA 2026 OPERE INFRASTRUTTURALI PER L'ACCESSIBILITA', 29 Sept 2020

Intervention	Beneficiary	Cost	Co-financin g	Financing limit
Connection of the north-south shore slopes of the Passo del Tonale	Ponte di Legno municipality	2.500.000	1.500.000	1.000.000
Improvement of the A52 Monza junction St. Alexander	Milano Serravalle	40.000.000		40.000.000
High-capacity electrical infrastructure	ANAS	8.000.000		8.000.000
Connection Tgz.A51 - SS415 - PalaItalia	Milano Serravalle Milano Tangenziali	20.000.000		20.000.000
Acquisition of 39 trains for upgrading director service Milan/Sondrio/Tirano and Milan/Airports	RL	351.000.000		351.000.000
Venues - Olympic venues and facilities in Lombardy	RL e Infrastrutture Milano Cortina 2026	<mark>203.360.000</mark>	<mark>145.830.00</mark> 0	<mark>57.530.000</mark>
Completion of the Bormio ring road	Bormio	5.000.000		5.000.000
Completion of the Valdisotto connection Valdidentro for sky area accessibility	Sondrio Province	7.000.000		7.000.000
Adjustments, connections, structures and interconnections of parking areas and sky area	RL e Infrastrutture Milano Cortina 2026	55.813.611		55.813.611
PL elimination project along the SS38 section of Villa di Tirano	Tirano Municipality	6.000.000	4.500.000	1.500.000
MXPT2 connection - RFI line del Simplon	FERROVIENORD SPA	210.000.000	199.000.00 0	11.000.000
Primaluna interchange	Primaluna Municipality	13.000.000		13.000.000
Bellano - Taceno road network (Olympics)	Bellano and Taceno	4.000.000		4.000.000

# Proposal

Instead of current plan of putting everyone in Village in Milan as planned, renovate existing housing stock across the region.

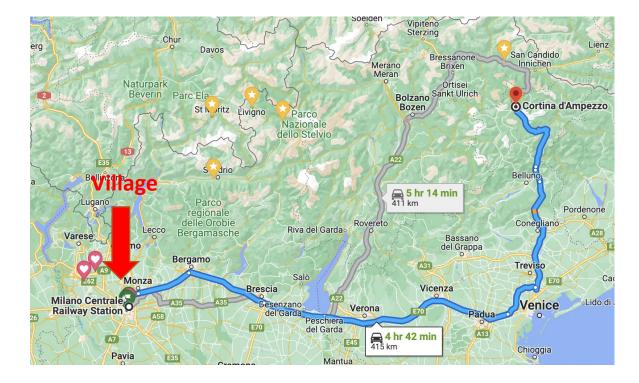


# Proposal

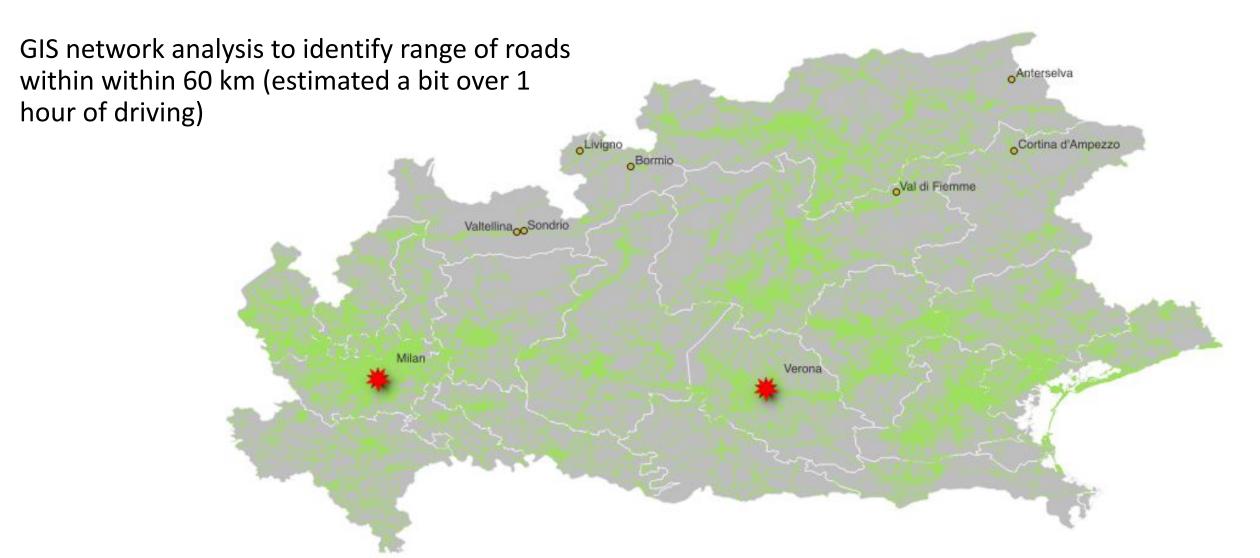
Benefits:

- During the Games: people are closer to venues, reduced road congestion
- Post-Games: revitalized residential stock for tourism in villages





# **Process: Identify existing accommodation capacity within an hour of Olympics venues**



#### Process: Identify existing accommodation capacity within an hour of Olympics venues

Wrote API code to scrape Google Maps to identify number of existing accommodations within identified range.

Findings: 1392 hotels, B&Bs, farmstays, etc

address	categories/0	totalScore website
Via Cà Rossa, 336, 23020 Montagna In Valtellina SO, Italy	Bed & breakfast	5http://www.carossa.eu/
Frazione Ponchiera, 500, 23100 Ponchiera SO, Italy	Farmstay	4.9http://www.agriolmo.it/
Via Parravicini, 5, 23100 Sondrio SO, Italy	Bed & breakfast	4.9 http://lastufarossa.it/
Via Sertoli, 11, 23100 Sondrio SO, Italy	Bed & breakfast	5
Via Bernina, 1, 23100 Sondrio SO, Italy	Hotel	https://www.hotelvittoriait.co 4.3m/
Via Gorizia, 14, 23100 Sondrio SO, Italy	Restaurant	http://www.sondrio-hotel.co 3.8m/
Via Gesù, 7, 23100 Sondrio SO, Italy	Bed & breakfast	4.5http://www.bnb.wine/
Stazione F.S, Piazzale Giovanni Bertacchi, 76, 23100 Sondrio SO, Italy	Extended stay hotel	http://www.residenzailcastell 4.5o.info/
Via Bernina, 7B, 23100 Sondrio SO, Italy	Hotel	4http://www.hotelschenatti.it/
Via Giuseppe Piazzi, 78, 23100 Sondrio SO, Italy	Hotel	4.6http://www.piazzihouse.com/
Via Stelvio, 23, 23100 Sondrio SO, Italy	Hotel	https://affittacamere-stelvio.c 4.2amerainitalia.top/
Lungomallero Luigi Cadorna, 27, 23100 Sondrio SO, Italy	Hotel	https://www.albergoeuropa.c 4.1om/
Piazza Garibaldi Giuseppe, 19, 23100 Sondrio SO, Italy	Wellness hotel	https://www.grandhoteldella posta.eu/?utm_source=gmb& 4.5utm_medium=organic
Via Tommaso Nani, 4, 23100 Sondrio SO, Italy	Bed & breakfast	4.1https://beb.it/cosmea
Via Giuseppe Mazzini, 21, 23100 Sondrio SO, Italy	Bed & breakfast	2.5
Via Bonfadini, 23, 23100 Sondrio SO, Italy	Bed & breakfast	4.7https://www.panemiele.it/
Via Scarpatetti, 45, 23100 Sondrio SO, Italy	Bed & breakfast	http://www.scarpatetti45.co 4.9m/
Contrada Moroni, 138/E, 23100 Pradella SO, Italy	Serviced accommodation	http://www.booking.com/Sha 4.9re-Y7F7Fk
Via Colda, 46, 23100 Sondrio SO, Italy	Bed & breakfast	3.7
via 23100, Via Brennero, 5, 23100 Sondrio SO, Italy	Bed & breakfast	4.7https://beb.it/ilpisolo

# Implications: Identify existing accommodation capacity within an hour of Olympics venues

Random sampling of 40 hotels/BnBs:

Average rooms: 22.3

Median rooms: 19

Conclusion: Much of the existing accommodation is actually quite small.

1.5 people x 22.3 rooms x 1392 hotels =

Capacity for **46,562 visitors** within an hour drive of an Olympic venue. 2 million visitors are expected, meaning **housing needs for 1.5 million visitors**.



Renovating existing housing stock in the Alpine Valleys could provide short-term housing, revitalize towns through infrastructure improvements and exposure.

# **Project reflections**

- Skills that I wanted to learn:
  - Learned new tools like web scraping of google maps
  - More advanced GIS mapping
  - Interactive web design
- Transformative role of technology:
  - Geospatial sources have powerful data to understand a region
- "Creative leaps" and a design lens gave new perspectives on old challenges
  - Infrastructure potential to enable a market

# Improvements and future areas of research

- Agnostic of political and co-financing implications
- Engagement with planners of the 2026 Games
- Long-term responsibilities for managing depreciation and management of buildings
- How can infrastructure be developed to meet today's needs and stay adaptive for changing climate?

# Thank you!

