Civita Institute Creative Retreat Fellowship Report (2023) by Juan Calaf

Introduction

The **Civita Institute** granted me with a creative retreat fellowship opportunity to experience Italian hilltown[i] environments firsthand last summer during the month of July of 2023. This experience gave me the opportunity to gain experience and research some of the best examples of Italian hilltowns while also experiencing these historic places through my own pedestrian-oriented lens.

The historic Italian hilltowns I visited and highlighted in this report (*Civita di Bagnoregio, Orvieto, Siena, Pienza and Perugia*) and the urban areas that I visited (*Bologna, Florence, and Rome*) taught me valuable lessons about people-centered streets that prioritize pedestrians first and support other modes (e.g. cycling, shared micromobility devices and public transit) over cars. Following my experience there, I was able to narrow my observations into four key elements for creating successful pedestrian-oriented environments to consider in the planning process:

1. **Interconnected Walkways**
2. **Unobstructed Safe Pathways**
3. **Enhanced Streetscape Experience**
4. **Connectivity to the Transit Network**

Figure 1 - Sketch from Civita

The following is a description for each of the key elements observed during my creative fellowship for achieving thriving pedestrian-oriented environments:

1. **Interconnected Walkways**

   Pedestrian oriented environments should aim to offer multiple ways for connecting people in the streets with a variety of walkways in the public realm. Italian names for streets reflect the variety of walkable options in the streetscape- walkways that go under *("sottopassaggio")*, walkways to go over *("sopraelevata"),* covered walkways *("porticos"),* and pedestrian bridges *("passerella pedonale")* for example. These street types allow pedestrians to have variety of movement and ways to make walking connections easier to access destinations and/or transit.

2. **Unobstructed Safe Pathways**

   Pedestrians of all ages and abilities (e.g. *elders with required assistance, children, parents with infants*) should be able to walk to their destinations via unobstructed pathways supported by universal access principles for everyone. This means that all pathways should be physically accessible to everyone and not making distinction for only creating specially designated areas for those who are less able but providing an equal experience for everyone[ii].

3. **Enhanced Streetscape Experience**

   Urban walkable environments should include an enhanced streetscape that promotes a visually interesting experience when walking. Italian streets are filled with numerous picturesque elements along the streetscape, including vistas, articulated facades with active ground floor uses, places to take shelter from the elements (e.g. porticos), points of interest (e.g. piazzas, parks, monuments) along the way, which enhance the pedestrian experience. Visual complexity of place can contribute to the overall richness of a place. [iii]

4. **Connectivity to the Transit Network**

   Pedestrian environments should be supported with connections via walking to transit network. Transit stations can become multimodal mobility hubs to support connections across the urban environment. Natural, intuitive, and seamless walking connections to the transit network allows for more dense and vibrant walkable environments.

These elements are essential when planning new pedestrian-oriented communities and should be included as part of the planning toolbox to support pedestrian-oriented environments here at home. Furthermore, pedestrian-oriented planning approaches become a critical piece for supporting station area plans that rely on good station access and mobility components. Station areas should include typically a pedestrian-based approach that focuses connections around the first ½ mile or 10-minute walkshed surrounding transit stations. These walksheds become pedestrian zones with walkable 10-minute urban neighborhoods where transit rich environments can ultimately take shape and complete neighborhoods thrive.

When applied here at home in Seattle, transit rich environments with high-capacity transit stations rely on a good pedestrian street network. When streets are designed to be pedestrian-friendly around the station context and with transit supportive land uses then a '*transit village'* environment can be established. The transit village model includes mixed-use developments and relies on a walkable urban scale without the need to have a car[iv]. Today, the Seattle region has a unique opportunity given the current expansion of the high-capacity transit system, with Sound Transit currently being the largest transit expansion project in the US, and still implementing capital delivery projects and planning efforts. These efforts can incorporate best practices on the pedestrian elements highlighted in this report.

During my visit I had the great opportunity to experience a variety of Italian towns with transit rich environments (*Rome, Bologna, Florence*) and its many pedestrian pathways and networks too. I also experienced how mass transit is accessed and interconnected into the larger regional transit networks around Italy using a variety of transportation modes – *bus, metro, tram, funicular, regional trains, and high-speed rail.*

Figure 2 - Watercolor from Bologna

The places that I visited during the fellowship varied in scale of pedestrian mobility and interconnectivity. Civita di Bagnoregio, where this fellowship was based, is a small hamlet no more than 1,000 ft in length with about a dozen of residents. In contrast the city of Bologna, which accommodates 400,000 residents and it is home to the largest student population in Italy, has a unique network of porticoes providing safe covered pathways to pedestrians extending over 20 miles around the historic center. The former was included in the candidate list for UNESCO World Heritage Sites in 2017 [v] and the latter achieve its UNESCO WHS designation in 2021[vi]. This

report provides a summary below of all the hilltowns and the cities that I visited during my fellowship experience. It is organized by describing the hilltowns first, followed by the larger cities I visited. I decided to highlight the key lessons learned from each of these pedestrian environments while also including visual diagrammatic maps, personal sketches, watercolors, and photos taken during my travels, to illustrate my observations.

Figure 3 - view of Civita from Bagnoregio

1. Personal Observations from the Italian Hilltowns:

i. Civita di Bagnoregio

The fellowship is based in the hilltown of Civita di Bagnoregio which happens to be the smallest hilltown that I visited during my trip. Civita is located just 75 miles north of Rome and sits on the *Calanchi* valley which resembles a version of an Italian badlands style terrain and it's located immediately east of the town or Commune di Bagnoregio (population 3,600) in the region of Lazio (see Fig. 3). Civita is only home to less than a dozen families that live there permanently, yet it receives thousands of visitors every day in the summer as it embodies many quintessential aspects of the Etruscan-era Italian Hilltown built above the 'tufo' stone and carved into the landscape.

The "*City in the Sky*" as it can be referred to, can only be accessed via a 1960's-built pedestrian concrete bridge that hovers over the valley measuring approx. ¼ Km in length. The structure supports the singular pedestrian-only access entry into town. This also requires climbing a steep climb of over 70 feet ascend connecting visitors to the historic gateway entrance into town (see Fig 3 & 4). From atop of this Etruscan historic town, visitors enjoy sweeping views over the valley and can visit the historically rich architecture within which host a variety of shops, the town's museum, and restaurants today.

Figure 5 - View of Civita from pedestrian bridge

The nearest access point to public transportation is in the nearby Comune di Bagnoregio parking and passenger drop-off area where buses stop to drop off locals, visitors, and tourists (see map on Fig 6). Visitors arriving there must travel an additional mile, via foot, a 30-minute walk to connect to the pedestrian bridge access point.

There is a separated pedestrian path delineated for easy wayfinding connecting visitors to the bridge entry access point (see Fig. 7). Vehicles with permits can arrive and park under the pedestrian bridge in the surface parking lot.

Figure 4 - View of ped bridge from surface parking

From here visitors and locals can walk across the pedestrian bridge and up into Civita (see Fig 4). Visitors climbing the bridge to enter Civita must pay 5€ to enter.

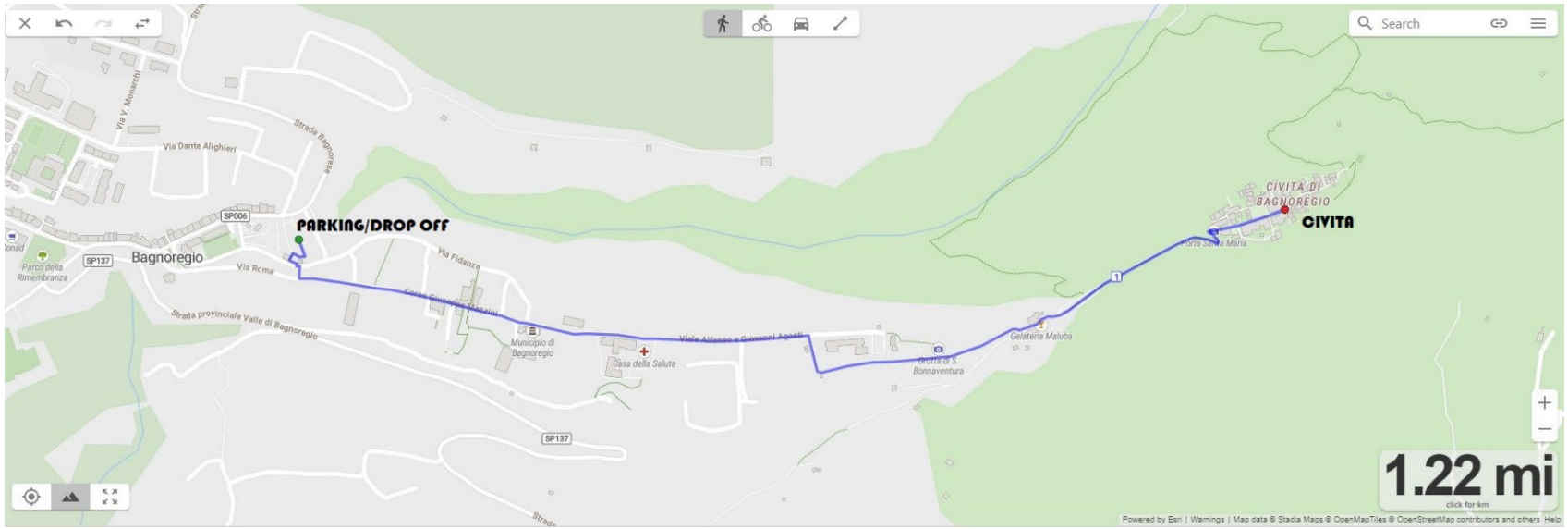

Figure 6 - Map showing pedestrian pathway connection from the Bagnoregio passenger drop-off area to Civita di Bagnoregio

There is also a local shuttle service that runs from the Bagnoregio passenger drop-off area to the bridge entry access point area. In addition, a small for-hire-vehicle provides rides up and down the bridge to Civita for an additional cost per person. This is currently the only alternative mode of access for visitors that are not able to walk up the bridge or take the steep ascend to the hilltown.

Figure 7 - Pedestrian wayfinding to Civita from Bagnoregio

Civita itself is organized around one main road (*Via Madonna della Maesta*) which runs east west and it's approx. 1/3 Km in length. This road leads to the Piazza di San Donato, the town square, and there are a handful of narrow roads that spur off along the central spine. The entire hilltown is a ped-only environment with a few exceptions for some residents who own small vehicles or motorcycles. There are hiking trails that come up from the bottom of the valley and connect into town. One of these trails connects Civita via a 1.65 mi hike to the adjacent nearby hilltown of Lubriano. While in Lubriano I was able to experience the majestic view of Civita rising from the valley (see Fig 8). The view provided a clear sense of scale of the pedestrian bridge and the way that the town blends into the 'tufo' rock formations. The most prominent visual feature from Civita seen in the distance is the church of San Donato's '*campanile*' or belltower which rises above all structures. Civita and the ped bridge itself are well illuminated during the evening and it feels very intuitive and safe to walk around and explore the historic town for ongoing yearly visitors.

Civita today is a common tourist destination in Italy, yet it is still only primarily accessed by walking from the base of the ped bridge. Despite the health benefits of walking as a primary mode of access, in the case of Civita access and mobility is still a concern for the less than a dozen or so families that live there year-round. Given the current conditions for residents- aging in-place and being less able-bodied than the average tourist - access to services via walking becomes a more difficult option for residents to get much-needed services (i.e. medical services) with unreliable vehicular access and relying only on crossing the ped bridge by foot. The nearest hospital is in the town of Orvieto which requires a 30-minute drive north from the town of Bagnoregio. There are not enough modes of access other than walking apart from some personal bicycles, motorcycles and the single small vehicle-for-hire limited service that is allowed to go up into town to provide rides to tourists and the one Red Cross vehicle that is reserved for emergencies (see Fig 9). Today there are still major barriers to access for those who require wheelchair assistance to arrive to Civita.

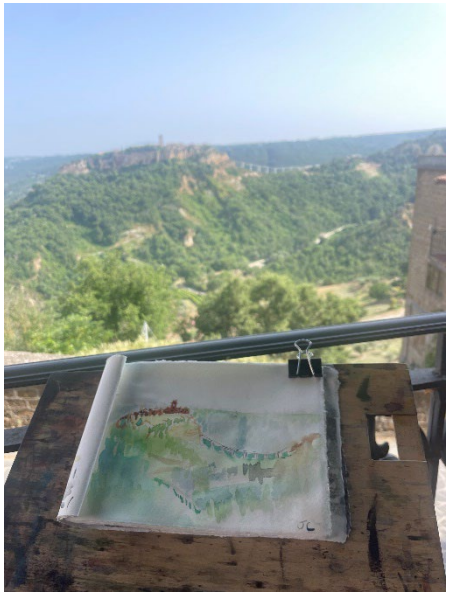

Figure 8 - View of Civita from Lubriano

According to estimates Civita is currently receiving close to three-quarter million visitors a year[vii]. Visitors can experience the city in just about 30 minutes by walking around town but typically choose to spend most of their day enjoying the views through a variety of vista points out into the valley, walking around the stone pathways of this "living post card", shopping and dining in this centuries old environment. The Civita Museum provides context on the history of Civita, it's challenges, restoration efforts and the evolution of the valley.

Civita was recently on the candidate UNESCO site list (2017) with the hopes of someday becoming a World Heritage Site, following the pathway of other Italian hilltowns (e.g. San Gimignano) which have achieve the prestigious UNESCO designation in the past. The designation would guarantee economic boost to stimulate the already increasing tourism and hospitality industries there today. The designation would also increase potential funding and support efforts for conservation of Civita. There have already been many efforts to help preserve and increase awareness of its history and architectural heritage, including the legacy of the work that the Civita Institute has been doing since its founding. The institute supports the work of restoring its properties and raising awareness to ongoing preservation efforts highlighted through the work of the Civita fellows and partners.

Figure 9 - Red Cross Emergency Vehicle

One the biggest challenges for Civita is that the current access modes are not sufficient to serve travelers and accommodate the recent surges for tourism here. Civita's aging population lacks the proper accessibility infrastructure to be able to make a safe journey to connect to groceries, pharmacies, health clinics and other vital services. Civita's topography, lack of other access points and the narrow roadways, all create significant access challenges for emergency vehicles to respond. First responders currently are faced with multiple challenges when trying to evacuate someone in critical need since it only relies on one red cross vehicle. Therefore, improvements to the accessibility infrastructure and increasing the specialized emergency vehicle fleet could ultimately make Civita a better prospect to support its candidacy to achieving UNESCO World Heritage Site status in the future.

ii. Orvieto

Orvieto is a unique hilltown in the region of Lazio in Umbria with a population of no more than 20,000 residents. Located just 30-plus minutes north of Civita it sits 1,000 feet above the surrounding valley, yet it is only less than one mile long and less than half-mile wide. Similarly, to Civita it was settle by the Etruscans and built over the 'tufo' stones and later built into the palimpsest of what we can see and experience today. I arrived there via the regional train from Rome and then connected from the train station which is located about a 1/3 of a mile from town via the funicular. The regional train station allows passengers to walk across the street to connect to the iconic funicular station (see Fig. 10). The funicular connects passengers via a cable car to the top of the hilltown on a short non-stop ten-minute ride to the top. The ride provides unique vertical access for visitors and facilitates easy travel for passengers of all abilities to arrive safely into town.

Figure 10 - Orvieto's Funicular Station

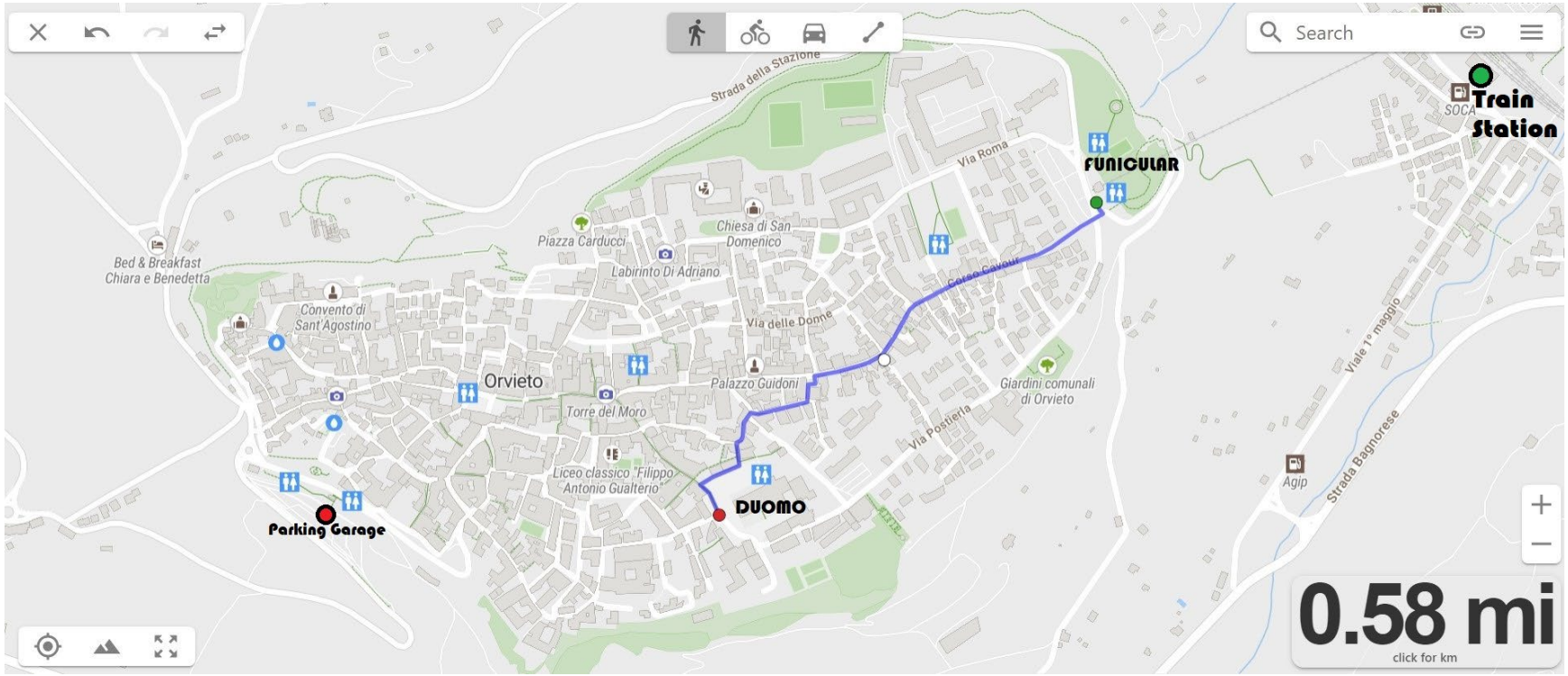

Figure 11 - Map of Orvieto showing walking connection from the Funicular station to the Duomo; map also shows location of the parking garage and train station

From the upper part of the hilltown, passengers can take transport, or a 10-min walk into the main part of town or the Duomo (see map on Fig. 11). I was also able to experience the "*parcheggio*" or park-and-walk style garage, that sits on the western end of town, and it's integrated as a kind of appendage on the hillside (see map on Fig. 11). This garage provides a series of underground interconnected accessible pathways with moving walkways from the garage into the historic center above (see Fig. 13). This system of covered pathways was very intuitive and simple to navigate and included – escalators, ramps, people movers and stairs. The covered walkways double as galleries for local art display for pedestrians to enjoy along the way.

Figure 12 - Anello's Wayfinding Map

Figure 13 - Anello della Rupe

During my visit to Orvieto, I also had the opportunity to visit a ped feature unique to Orvieto - the '*Anello della Rupe'* which literally means "ring around the cliff". This five-kilometer multi-use trail path embraces the hilltown and provides four different main access points for tourists and active peds to enter and traverse into the historic center. The 'anello' serves both as a self-guided interpretive path with historic landmarks and descriptive signage with maps along the way and as an active linear park for locals and to tourist enjoy for jogs and active walks (see Fig 12 & 14). One of the sections of the 'anello' leads into the gate of '*Porta Vivaria*' connecting peds to the active '*Via de Popolo'* road thru an elevated pathway which cantilevers out from the side of the 'tufo'. The clever engineering allows the pathway to take flight allowing visitors to absorb sweeping vistas across the valley while linking via the perimeter centuries' old many gateways.

The 'anello' provides for a more quiet and reflective experience instead of the busy commercial streets and plazas inside the walls. The "anello" successfully circumvents the town's geometry allowing pathways for active hikers while serving the funicular stop and the parking facility connections. This ring around the town is unique, dynamic and deviates from other similar active ring pathways in Italian towns such as the one in the town of Lucca in Tuscany, which uses the top of the of the fortified walls in a more rudimentary way.

Access to a variety of transit modes – *funicular, bus, regional train* – is well served in Orvieto. The historic center was very active during the time of my visit especially around the *Piazza Duomo, via di Popolo* and *Corso Cavour* the main active roadway which is mostly a pedestrian-only environment today with some exceptions using the '*Zona di Trafico Limitato'* (ZTL) or a Limited Traffic Zones to regulate vehicular access into the historic center prioritizing residents and with some other exceptions (i.e. hours for vehicle loading and unloading for retailers).

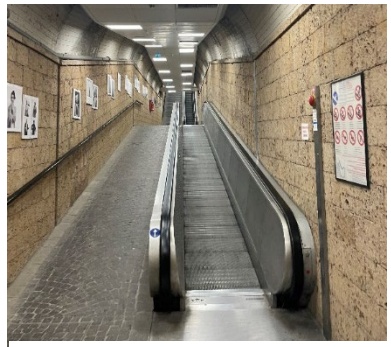

Figure 14 – Underground Moving Walkway connection to Parking

Similarly to Civita, Orvieto was included in the UNESCO tentative list in 2006 to become a candidate for a World Heritage site. Orvieto serves as mid-point location between Florence and Rome for travelers. The town is well poised and accessible to visitors given the multiple connections to transit and the regional train network. Overtourism is also a factor that plays into the future of this hilltown. There are a variety of universities and educational programs that support preservation efforts here. Orvieto has a supportive and accessible ped network environment for visitors and residents alike.

iii. Perugia

Perugia is another historic hilltown and the capital of Umbria with a population of over 150,000 people. The hilltown rises 1,500 feet above the Umbra valley and provides visitors with views out east towards Assisi which is 15 miles away. This quintessential Etruscan hilltown includes a variety of access features that allow pedestrians to navigate its steep elevation within. One of the notable elements along the landscape is the 4km long medieval aqueduct road or 'Via dell' Acquedotto' which doubles as a pedestrian bridge connection for visitors and "Peruginos" alike to traverse town above the aqueduct while enjoying some of the best views in the landscape.

A network of escalators recently completed is another notable mobility feature that facilitates vertical connections on the steep Perugian terrain (See map on Fig.15 &17). The system of escalators and stairways leading up to the top the hilltown is unique in that it provides a safe connection for peds to

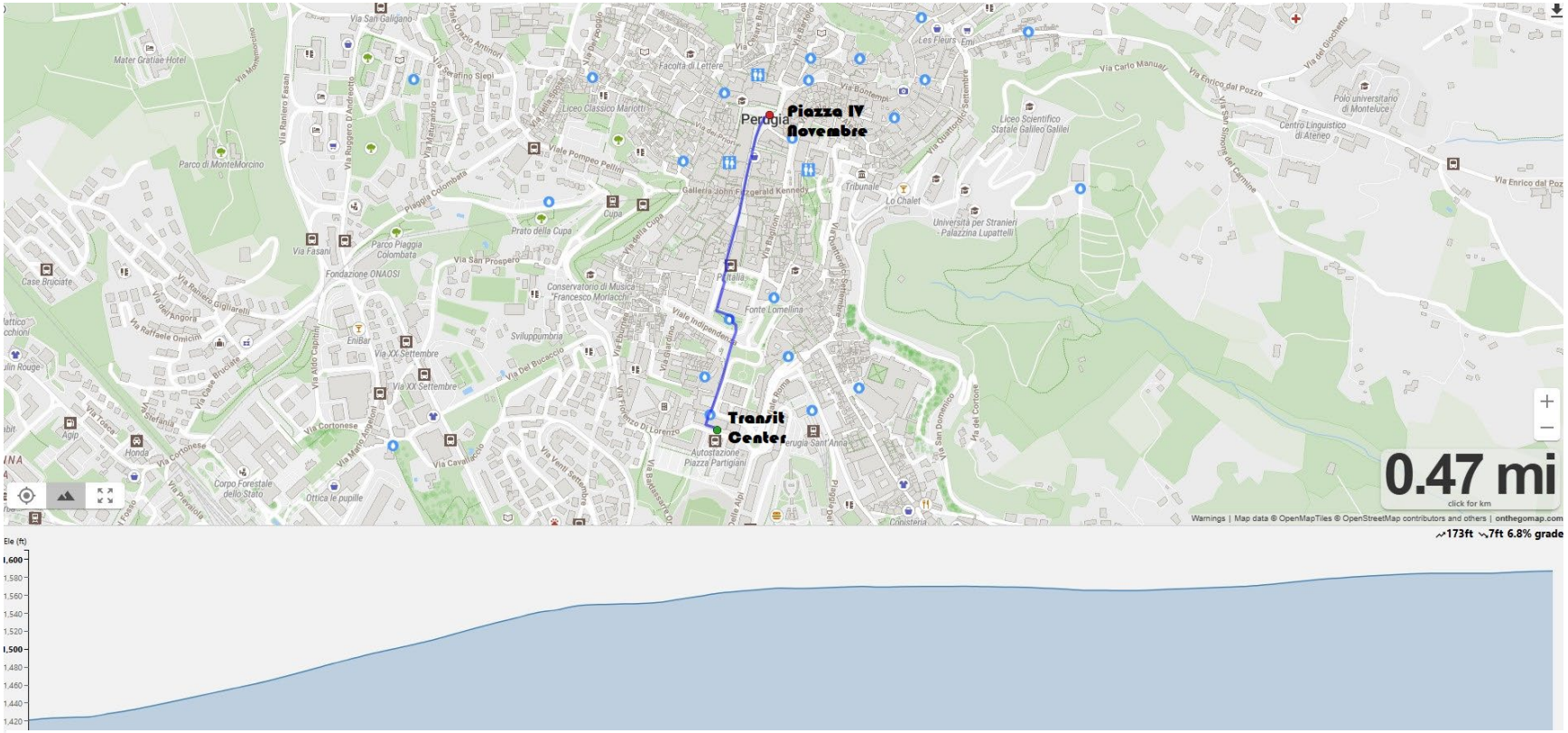

Figure 15 – Map of Perugia showing pedestrian pathway from Piazza Partigiani Transit Center to Piazza IV Novembre and Cathedral

access the main historic areas while provide a journey into the historic walls and buildings, highlighting some of the preservation efforts there. The escalators were recently introduced to replace the old stairways creating easy vertical access to the main upper historic part of town where many events happen, including the world-famous Umbria Jazz festival which attracts over 400,000 visitors every summer (See Fig. 16).

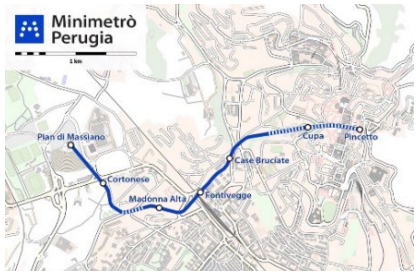

Figure 16 - Map of Minimetro[viii]

Perugia has a people mover system, the Minimetro[viii], that was introduced in the 2000's, provides access into the historic center with two underground stations connecting the top of the hilltown with the lower areas of town (see map on Fig. 17). Minimetro has become an essential part of the city's ped mobility infrastructure for visitors and locals. Perugia is also well served by the regional train network, which is how I arrived in town. Public transit is well established and there is large multimodal transit facility with multiple transit connections in '*Piazza Partigiani*' at the southern end of the historic center linking to the Minimetro and with vertical access points and connections to the historic center above.

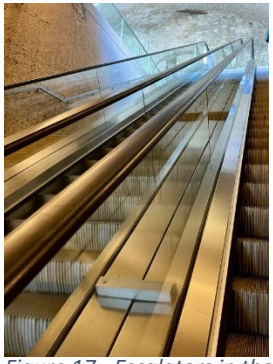

Figure 17 - Escalators in the Historic Center

Perugia has a robust pedestrian network with ped-only streets, for example *Corso Vannucci* became pedestrianized in the 1980's, which allowed for more ped interconnectivity across town taking advantage of the scenic destinations such as *Piazza IV Novembre, Fontana Maggiore*, the cathedral, and the *Porta Sole* (see Fig 18). Eliminating vehicular access or restrictions through the ZTL zones have transform this and other areas of Perugia into an inviting, more walkable, and vibrant destination for visitors arriving from all over the world. The pedestrian experience in Perugia has been prioritized and as result transformed into more inviting and people centric place with plenty of outdoor dining areas, cafes and ample space for promenading residents and tourists alike. There are still some barriers for universal accessibility given the vertical nature of the topography there, especially for people that are less abled bodies, but in general it was a very intuitive experience being a pedestrian in Perugia.

Figure 18 - Pedestrians in Corso Vannucci

Even though Perugia is neither a candidate or a designated UNESCO World Heritage Site, it belongs to a special category of quintessential examples of well-preserved medieval Italian architecture and is a cultural hub in the region. Cultural tourism is a major draw for both locals and international tourist visiting many of the significance art and architecture there. In addition, the yearly music and art festivals held here and the love for the famous "Perugina" chocolates has provided to vibrant diverse economy. Perugia has experienced significant economic growth with the improvement of transit infrastructure in recent years, which has had a positive impact to the local economy while providing better access and mobility for locals and tourists there.

iv. Siena

Siena is a mid-size hilltown, with a population of approximately 50,000 residents, located in the heart of Tuscany. This well-preserved example of Italian medieval city center introduced pedestrianization efforts very early on in the 20th century and gained its UNESCO World Heritage Site status in 1995[ix]. Siena is also well served by public transit and regional rail. Like many Italian hilltowns and historic town centers, Siena uses the ZTL to control vehicular access into town, thus prioritizing pedestrians in the historic center. The roads and pathways leading to the '*Piazza di Campo'* provide a unique network of ideal urban scale and desirable interconnected walkable pathways. Even in the hot summer months pedestrians can find shade in Siena because of the wide shadows casted by its original medieval meandering narrow streets. People in the streets can easily enjoy promenading through town taking advantage of all the pedestrianization and preservation efforts that have happen over the last 30 years.

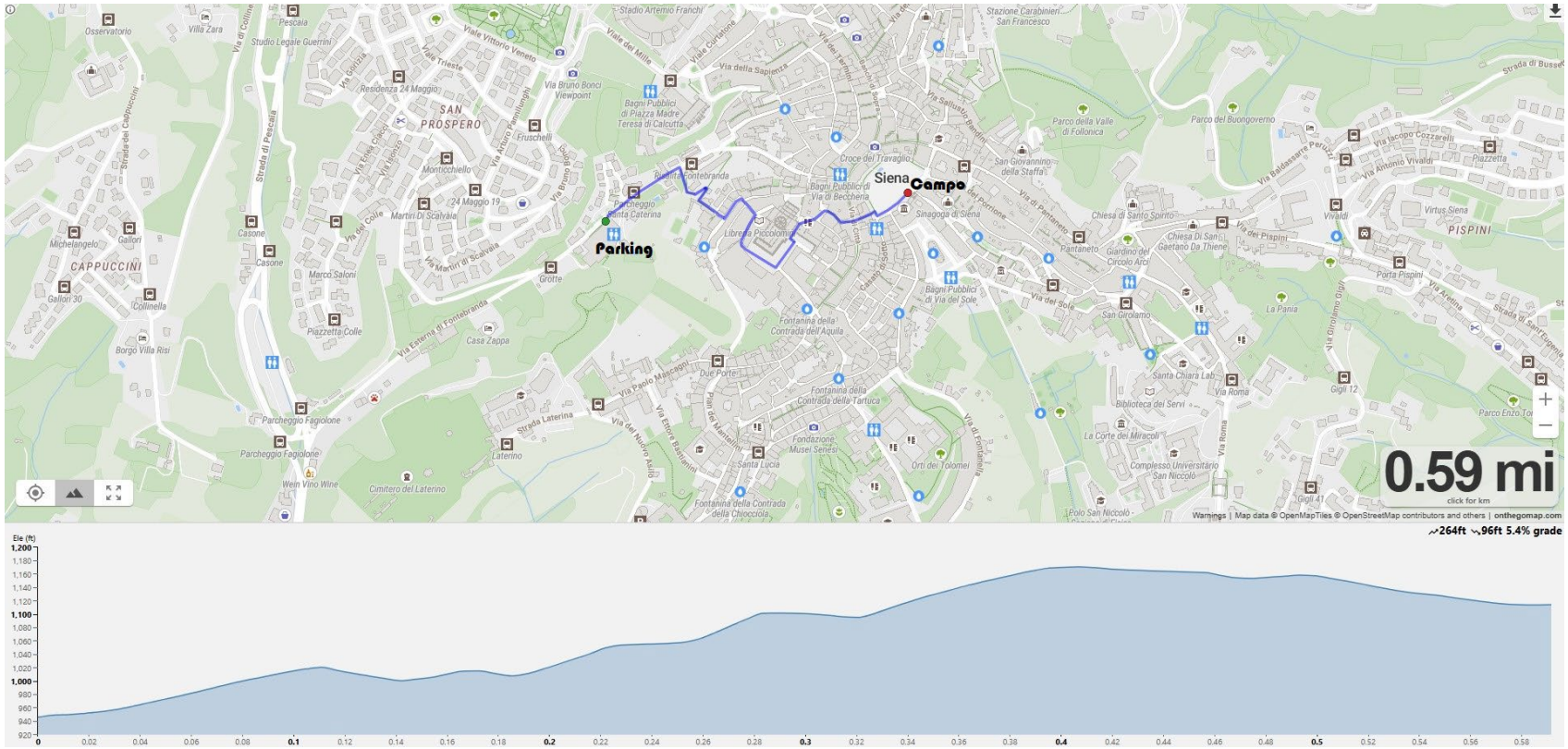

Figure 19 - Map of Siena showing Pedestrian Connection from the Parking Garage to the Campo

Figure 21 – Street Escalators

Siena's historic center has been planned to accommodate pedestrians with vertical accessible connections from the parking structures that sits in the surrounding lower parts of town. Visitors traveling via car use one of the many parking structures, such as the "*Parcheggio Santa Caterina*", to connect tourists and residents via a network of escalators and stairways to the historic center. Similar to Orvieto's park-and-walk environment Siena introduced escalators over the last 15 years which provide a variety of vertical pedestrian mobility and universal access for pedestrians to connect directly with the Duomo and nearby popular Campo surrounding areas. (See map in Fig. 19)

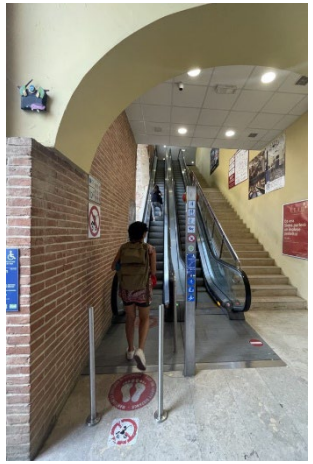

Figure 20 – Internal Escalators

The parking facilities for visitors into Siena are spread around the City's perimeter. There are around a dozen of public and privately managed parking facilities in Siena that provide over 4,000 parking spaces. Some of the parking facilities are managed by the municipality of Siena and cost anywhere from 1.5€ to 2.5€ per hour depending on the time/day. The parking facility that I arrived at, the Santa Caterina parking structure, included the escalator connections to the duomo directly from the parking structures (see Fig. 20 & 21). The municipality also issues access permits for the Limited Traffic Zones (ZTLs) but otherwise the historic center is primarily access by walking with some minor exceptions. There are also shared micromobility devices, such as bike share programs, allowing bikes to serve as last-mile connections across town.

Siena's major attractions are for tourists are the Campo and the Cathedral. The Campo holds a famous horse race twice a year called "*Palio di Siena*" which attracts over 50,000 visitors for each race (See Fig. 22). Therefore, the town's population doubles in size when these races take place and they have been able to adapt the pedestrian infrastructure to meet the accessibility needs and challenges so far. The town attracts over a million tourist yearly, yet it has a diverse economy that doesn't solely rely on tourism.

Siena is an example of great preservation and pedestrianization efforts that have allowed for a boost to its economy over the last three decades and it is due in part to its UNESCO WHS designation. This has resulted in Siena becoming more internationally recognized as an exemplary well preserved medieval historic center. The designation has also attracted additional conservation funding for its buildings and cultural heritage. In addition, Siena receives funding that was allocated to improve the city's accessibility infrastructure by restoring monuments and buildings to meet standards for its visitors. The hospitality and tourism sectors have grown steadily over this period and have contributed to much of the job creation. However, in recent years Siena has experienced issues with overtourism, overcrowding, and rising housing costs which have created barrier to maintaining housing affordability for existing and incoming residents.

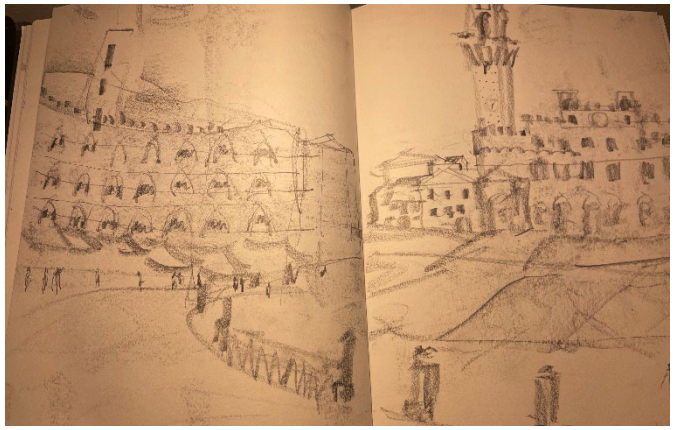

Figure 22 - Sketch of the Campo di Siena

v. Pienza

Pienza is the second smallest hilltown I visited during my travels with a population of approximately 2,000 residents. This small Renaissance village is located in the *Val d'Orcia* valley and in the province of Siena in Tuscany. The town achieved its UNESCO World Heritage designation a year after Siena in 1996[x]. The town itself is difficult to access given its rural location and most visitors arrive there by car or by bus. Tourist and residents can easily traverse this hilltown in a few hours from west to east via de main *Corso il Rossellino* which spans less than a 1/2 mile from end to end (see map on Fig. 24).

Figure 23 - View & Sketch of the Piazza

The historic center is very well preserved, and it showcases a renaissance-era innovative urban plan by Bernardo Rossellino, which was a mentee of the renaissance architect Alberti. The town's design is centered around the *Piazza Pio II* facing the *Palazzo Piccolomini*, the city hall, and the Cathedral (see Fig. 23). This urban plan was replicated by many renaissance town centers, and it embodies humanist ideals of that era. The 'Corso' is the main road, and it leads into the plaza. This central spine is interconnected to the pathways surrounding the city's gateways and leading out beyond the city wall. The entire town is very accessible and walkable. The town's ideal urban scale allows for pedestrian to explore the town and surrounding areas. There are not many barriers to traversing the smalltown except the lack of transit infrastructure servicing Pienza.

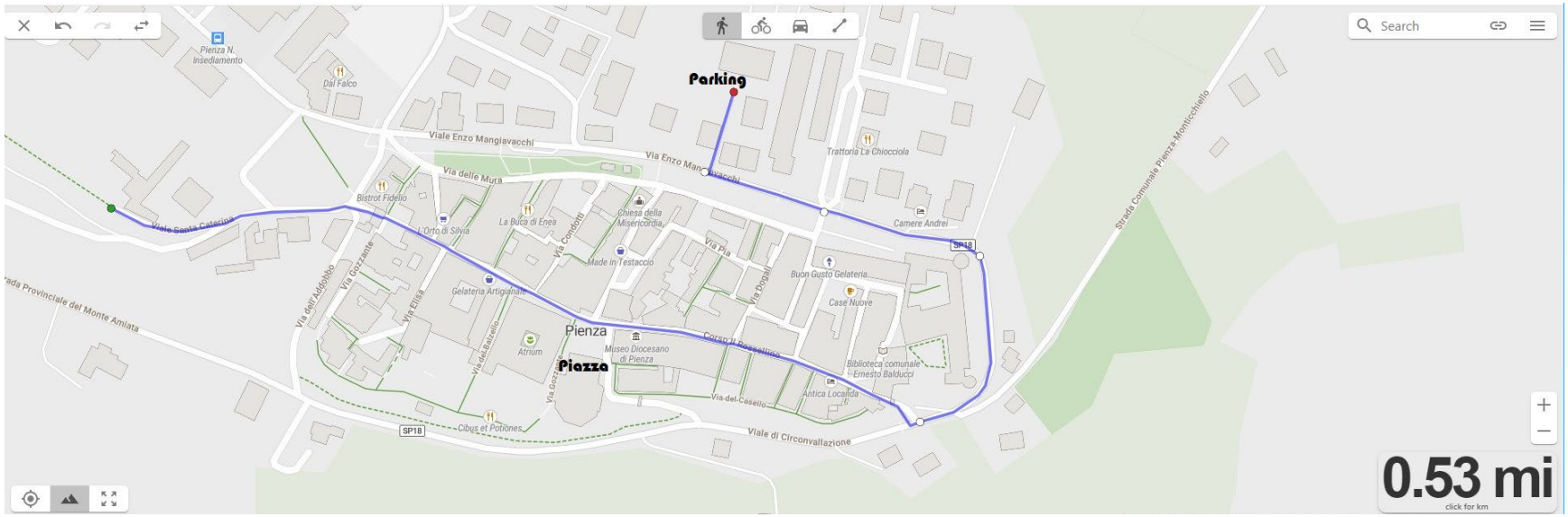

Figure 24 - Map of Pienza's Historic Center showing Pedestrian connection from Parking to Piazza Pio II

There are limited transit connections given its remote location which resembles conditions at Civita. Pienza's economy is heavily tied to its UNESCO World Heritage Site designation and the ability to tap into the regional tourism industry of Tuscany. Nevertheless, it faces significant challenges when it comes to creating a truly sustainable economic development model for the future incoming residents and shifting demographics there today.

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2. Observations from travels to the metropolitan areas in Italy:

vi. Bologna

The city of Bologna located in the Emilia-Romagna region is home to approximately 400,000 residents. A quarter of the population is comprised of the students who attend the largest Italian university, the University of Bologna, which is also the oldest one in the western world. I traveled to Bologna via the high-speed train which arrived directly into the recently renovated Bologna Centrale station located at the northern edge of town (1-mile from the Piazza Maggiore) providing passengers with a variety of daily transit connections; local, high-speed train (e.g. *Frecciarossa*) and regional trains (see map on Fig 27). The city also is currently building out the tram network system which includes four lines, covering 57 Km, and that is anticipated to be completed in and running in 2027[xi].

Figure 25 - View from Portico to Piazza

After arriving at Bologna Centrale stations passengers can walk out into a vast 20-plus mile long network of porticoes covering most of the city's street frontages. These porticoes were recently designated as a UNESCO World Heritage Sites themselves in 2021. For centuries, these covered walkways or porticoes allowed pedestrians to promenade safely across the mostly flat terrain of the city. Some of the porticoes date back to the 12th century during the time of the founding of the first university in the western world. The university relied on scattered university buildings where professors lectured from their homes. The porticoes provided a way to connect the buildings by doubling as corridors for this ambulant university while giving respite from the elements.[xii]

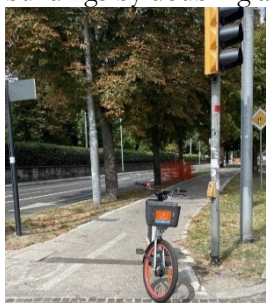

Figure 26 - Bike path and shared e-bike in Bologna

The porticoes also unify a continuum of building façades that front many of the city's streetscapes. These covered walkways were once paid for by its own citizens as part of building the pedestrian-based and student run university system there. This design allowed for ample space for students to walk side by side and have areas to congregate making it easier to discuss the issues of the day. The three-dimensional geometry of the porticoes is created by a square volume supporting the "sail vaults" above the colonnade. These are featured in many of the entryways of buildings and shops along the covered walkways (See Fig. 25).

The city's flat terrain offers an ideal environment for bicycles and micro-mobility devices to co-exist (See Fig. 28). There are a variety of companies that offer shared bikes via a smart phone app for rent and there are many bikeway facilities that have been recently retrofitted on the street networks over the last decade. There are also companies offering electric bikes, such as Lime,

offering dockless electric bikes to move around the 1-mile radius within the city's old walls (see Fig 26). In addition, there are also station-based bike-sharing companies, such as *Bicincitta*, which includes docking stations around the city.

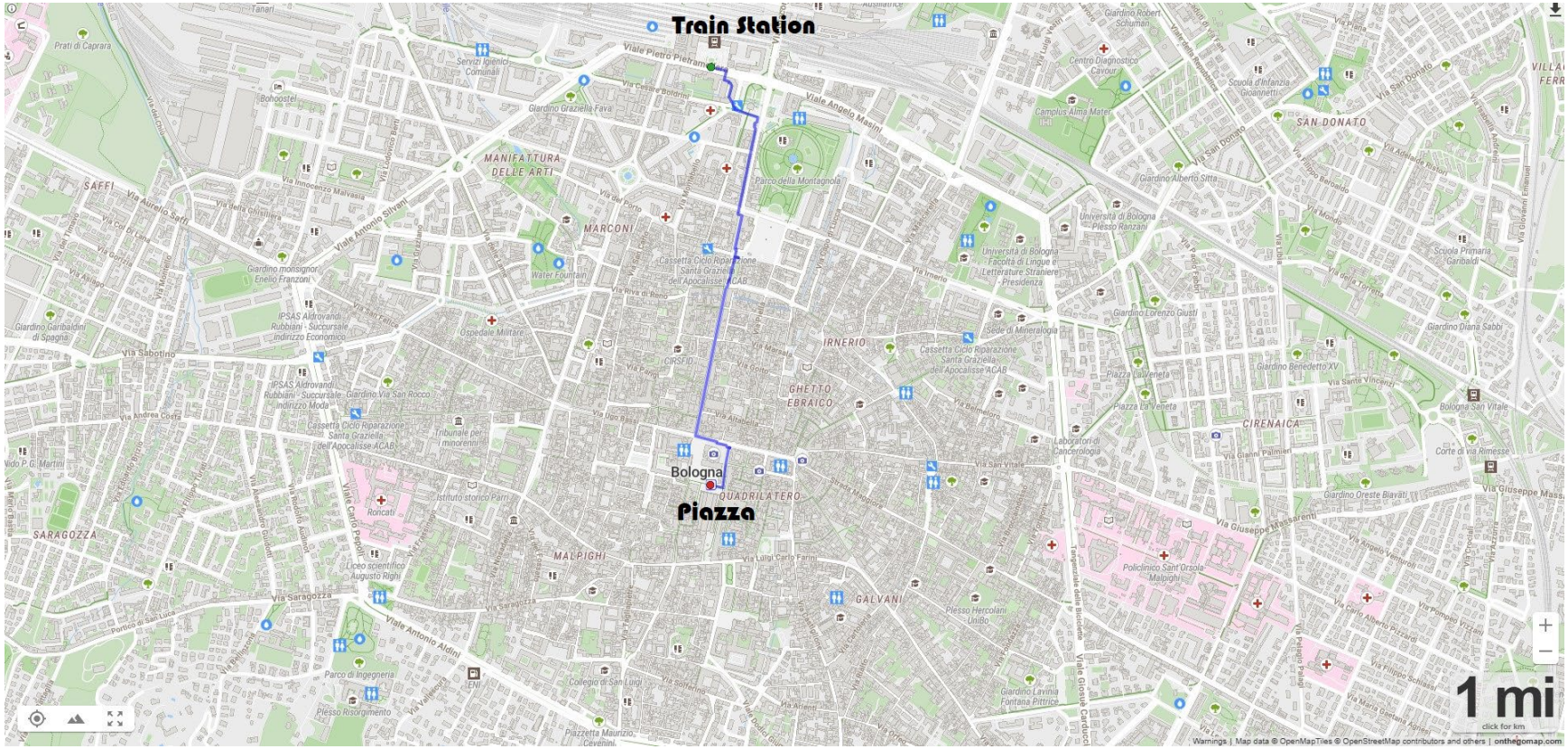

Figure 27 - Map of Bologna's Historic Center showing Pedestrian connection from Bologna Centrale train station to the Piazza Maggiore

Bologna has increased ongoing pedestrianization efforts around its wider urban mobility objectives in recent years. This is in part due to a concerted effort in many Italian metro areas to reduce traffic congestion, lower gas emissions and create a better quality of life for its citizens. The city has a ZTL zone in the historic center restricting vehicular access to residents only, with exceptions for specialized vehicles for service deliveries and other official uses. These TZL zones have specific hours for the allowable vehicular access to reduce traffic and congestion in the city center. The city has also implemented ped-only zones or ped-only streets (e.g. *Via Indipendenza*) which have been designated as car-less to promote walkability around key retail areas. These ped-friendly areas also promote cycling and connections to transit to reduce the reliance on automobiles in Bologna. The pedestrian experience in Bologna is unique in that it has notable plazas, public spaces and parks all connected via safe interconnected pathways. During my

summer visit, Bolognese pedestrians could be seen promenading late into the evening heading to the Piazza Maggiore. The piazza included a temporary 2,000-seat outdoor cinema where Hollywood classics are shown. These activations of public space are all part of the pedestrianization efforts to move away from car reliance. Pedestrianization movements have been part of a wider trend among many cities across Europe to provide more livability and ped-friendly urban environments which ultimately promote public health of its residents and enhance the preservation of the historic center. [xiii]

Figure 28 - Bike racks in Bologna

Bologna is an example of a thriving European city center given its interconnected economy, education system and well-established public transportation system. These factors have helped Bologna achieve both global relevance while also being a culturally well preserve city with its own identity and traditions. The educational sector still plays a major role in the economy sphere followed by tourism, retail, real estate, and culinary sectors. This makes the city well poised to attract future investment both from locals and outside investors. Over the last decade, the historic center has been undergoing widespread urban revitalization and preservation efforts. Given the increasing commercial activity and demand for residential space property values have risen. This recent rise in cost has become a concern around potential displacement of long-term residents due to the rising rents and property values. Another challenge is the over-tourism pressures in the center and balancing its economic benefits while having the proper infrastructure in-place to sustain the summer tourist influx which is calling the municipality to lean on more sustainable tourism practices and approaches in the future.

VIII. **Rome**

Rome was, by far, the most transit rich environment that I visited during my trip. Upon arriving to the airport, it was very intuitive to be able to connect with the local regional train from the airport station to the Roma Termini station, which took me about 45 mins door to door. This station is an important multimodal hub and transfer between rail, metro, tram, and bus. The city offers a variety of modes for riders to choose from this location. The metro system with three different metro lines has limited coverage around the city. The public bus includes over 300 routes connecting city with its outer areas. Finally, the tram serves the main parts of the city and some of the outer areas but is a much slower option for riders given frequent stops and share right of ways. Even though Rome's transit network is quite robust it has grown out over the last decade into a more fragmented system with operational issues and unreliable transit integration of al the modes creating ongoing challenges for riders transferring between modes[xiv].

Figure 29 - Shared Scooters in Rome

In recent years the city has also allowed shared mobility devices including bike sharing and electrical scooters through a variety of vendors (See Fig. 29). This have been embraced in the historic center by tourist and locals as reliable last-mile connections options. The topography of many areas of the city (e.g. *Spanish Steps*) limits the viability of these often times scattered dockless devices and can create obstruction hazards to pedestrian pathways around the historic sites. Therefore, walking is still the most essential mode in Rome given the multiple street patterns dating to the

original Roman-era network. Most major historic sites are within a walking distance which facilitates travel for tourists. Pedestrian traffic challenges do exists given some of the outdated and aged pedestrian infrastructure when it comes to meeting universal access standards. The transit system also faces challenges around service reliance on large buses running around the historic center and the often-circuitous routes which can be unreliable due to ongoing traffic congestion. The city is currently undergoing major building renovations and attempting to address some of the aforementioned issues for the much-anticipated 2025 Jubilee celebrations which anticipate 35 million visitors over that period. Overtourism already places a burden on the public transportation system, and it is expected to be one of the main challenges for the local authorities planning for this upcoming surge.

VII. **Florence**

I arrived at Florence Santa Maria Novella train station from Bologna. Bologna and Florence are connected via the highspeed rail which allows riders to arrive there in under 40 mins to Florence. Over the last decades, Florence has been implementing pedestrianization strategies to support the preservation of the historic center and deal with its ongoing overtourism challenges. Florence has improved its pedestrian infrastructure in recent years to include safe pedestrian crossings, activation of public spaces, wider sidewalks to improve pathways to encourage walking. The ZTL zone covers most of the historic center and has been a key factor in eliminating vehicular traffic congestion and pollution in these areas. Florence's ZTL is aided by camera monitoring vehicles violating the restricted zones with large fines for violators to deter violations.

In addition to the efforts above, the city has also used strategies such as road diets with lane reductions to widen pedestrian pathways to be safe and accessible. There are several streets today that are pedestrian only or car-less providing safe connections to Piazza del Duomo sites and the shopping street of "*Via dei Calzaiuoli*" for example. These efforts have supported the safer access via walking for locals and tourist to the UNESCO designated sites and other major destinations. Just over the last few decades piazzas, like *Piazza della Republicca*, have transitioned from one that was mostly dominated by cars to one that is back to its origins with cafes, restaurants and shops spilling out for the benefit of "*fiorentinos*" and visitors alike.

Figure 30 - Florence Tram system

The city has a robust tram system (see Fig. 30) that was built over the course of the last 15 years and has been expanded to serve the regional Amerigo Vespucci airport. The tram provides a key connection point to passengers and tourist arriving via rail at the major train station, Santa Maria Novella station, to connect via walking into the historic center to visit some of the gems of the Renaissance - Michelangelo's David, Brunelleschi's Duomo, and others culturally important sites. Similarly to Rome and Bologna, Florence has introduced city-wide bike infrastructure improvements and promotes bike-sharing options and micromobility devices to use for short last-mile connections. These efforts have contributed to both alleviating traffic congestion and pollution in the historic center. Florence is on a steady path to become more sustainable and pedestrian forward city as it advances many of these and other efforts ensuring accessibility for all while navigating the overtourism pressures it faces today as one of Italy's most visited destinations.

IX. Notes on other additional hilltowns visited:

During the fellowship I also managed to include several day trip visits to other hilltowns in the vicinity of Civita: *Montepulciano, Montefiascone, Chianciano Terme, Soriano nel Cimeno, Bolsena, San Quirico d'Orcia, Bagno Vignoni and Lubriano.*

These hilltowns share similar elements. As the word "hilltown" suggest they sit high above the terrain overlooking beautiful scenic landscapes. Most often these towns were built over the 'tufo' stone and originally settled by the Etruscans during pre-Roman times. The architecture is typically defined by its original defensive elements. The towns typically included a fortified city wall with gated access for protection. The architectural style is defined as vernacular style, typically including medieval street layouts which included narrow roadways for pedestrians built out of stone. [xv]

Figure 31 - ZTL Signage in Montepulciano

These narrows stones preceded the need to design for cars therefore these places are naturally very walkable and pedestrian oriented. The towns often feature historic buildings spanning multiple eras (e.g. renaissance, gothic, medieval) making the urban fabric we see today with occasional towers that make part of their skylines against the rolling landscape. Each town was planned around a central piazza flanked with a church, city hall and other noble buildings around the perimeter. The hilltowns have become a sort of internal tourism attraction offering a slower pace and often more quiet romantic setting for Italians and visitors from Europe and beyond to enjoy. Visitors typically enjoy the quiet picturesque experience and the specialty cuisine that has been offered in recent years.

Given the hilly terrain and medieval street patterns access infrastructure is still challenging to improve making it difficult for some populations (i.e. less-able bodied and seniors) to get around safely. Although all the towns I visited include some form of ZTL (see Fig. 31) to discourage vehicular traffic congestion, many of the places still visited lack the necessary pedestrian infrastructure (e.g. safe crosswalks and ramps) to support adequate universal access. Municipalities and other intergovernmental efforts such as the UNESCO-listed sites can augment the support to increase funding around pedestrian access to support mobility for the aging population of the hilltowns.

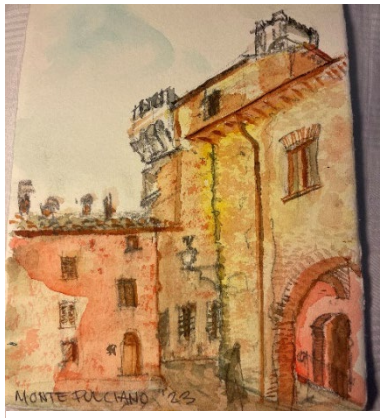

Figure 32 – Watercolor from Montepulciano

Italian hilltowns still face multiple challenges beyond improving the accessibility infrastructure. Most hilltowns are experiencing population decline and face economic challenges given its dependence to the tourism and hospitality sectors. The residents of the hilltowns typically look elsewhere for employment options given job scarcity at some of these locations. There are still barriers facing the costs to operate small businesses given the isolation and more difficult to access location for small businesses to make economic sense of the volatile seasonal tourism market they serve. Some areas like Civita still need proper reliable digital infrastructure and connectivity to serve opportunities for remote work and attract other populations. Many hilltowns still face challenges to improve public utilities given the aging infrastructure and the cost that is needed to rebuild at these difficult topographical locations. More awareness on the issues facing the hilltowns and increasing local and international advocacy efforts will prevent future abandonment of this historically rich places.

X. Reflections on Returning Home to Seattle

I am grateful to the Civita Institute for allowing me to be part of the fellowship which provided the experience to research and live in the hilltown environments with my family. We were able to get a real exposure into a more pedestrian-friendly, quiet, and peaceful way of living in the stunning Italian countryside. In contrast I have lived for most of my life in fast-paced urban environments that are mostly large cities with car-centric plans, which make it difficult for pedestrians to thrive in the streets.

The Italian 'piazza' or public square has served as the anchor for gathering in these communities over centuries (See Fig. 33). There are many opportunities for creating our own version of the 'piazza' at home when thinking of placemaking opportunities around stations and town centers. If we truly prioritize pedestrians over cars, then we should have more spaces for communal gathering in the streetscape. Creating more active public space in our neighborhoods can provide space for community activities, public events, more public art, farmers' markets, temporary space for small vendors which ultimately helps to develop and preserve the local neighborhood identity. When done successfully the spaces present the opportunity to attract more visitors by becoming more of a regional destination.

As a planner and designer, I feel responsible to facilitate urban plans at home that improve walkability with a pedestrian-oriented infrastructure. The Italian hilltowns, like Civita, prioritized walkability by design given the narrow streets and ped-only roadways. Transit villages at home can become truly walkable neighborhoods including some ped-only streets that restrict car access. Pedestrian-centric streets will promote healthier lifestyles for everyone and help reduce pollution in urban areas. City planners should consider a variety of tools to implement to encourage more walkability and traffic calming solutions. Creating wider sidewalks for pedestrians, designing curb-less streets that can be used for plaza space, improving bike infrastructure, and implementing universal design practices for all can help create more walkable environments. Seattle is investing in station area planning efforts around public transit and light rail which should also be planned in conjunction with mixed-use development including active ground floor space and multiple mobility options for residents and riders.

In Seattle, transit stations and the immediate surrounding context provide the best opportunity for urban revitalization. Station area plans should be envisioned with strong collaboration between urban planners and transit planners working with local jurisdictions to create pedestrian oriented streets. There should be strong engagement of the development community to participate in recognizing both cultural and historic elements present in our communities and identifying new areas for economic and urban transformation. All these efforts will require adequate investments for accessibility and pedestrian mobility infrastructure in order for neighborhoods to truly become thriving walkable communities.

Figure 33 - Performance at Piazza San Donato

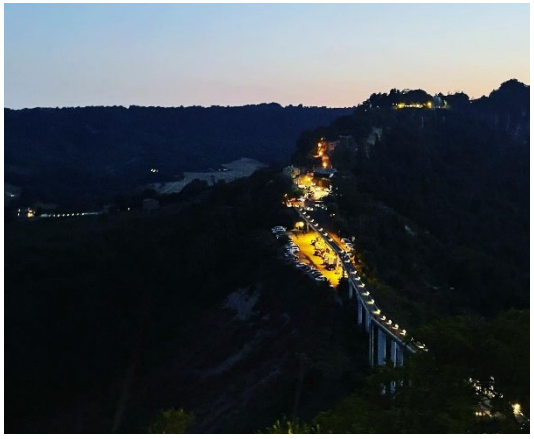

Figure 34 - Civita at Sunset

Other Notes:

Diagrammatic maps were created with *onthegomap.com* online tool. Sketches, watercolors and photos were provided by the author.

Acknowledgements:

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Figure 36 - Sketch from Pienza

Figure 356 – Watercolor from Bagno Vignoni

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Figure 37 - Watercolor from Civita