# 21ST CENTURY NOMAD

AN EXPLORATION OF GLOBAL / DIGITAL NOMADS THROUGH DESIGN

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NOT ALL THOSE WHO WANDER ARE LOST - J.R.R TOLKIEN



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## **PREFACE**

Over the past ten years, I have moved six different times to five different states — Arizona, Tennessee, Missouri, Illinois and Pennsylvania. While beginning my thesis research, I had the opportunity to live in Copenhagen and travel throughout Europe - visiting more than 15 cities over the span of three months.

For me, traveling is a necessity. Not knowing where I will go next is exciting, which is why I decided to focus my thesis research on the 21st century nomad. We have the tools and means to live location-independent lifestyles, and global or digital nomads have decided to pursue this direction on a long-term/permanent basis.

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## **ABRSTRACT**

This thesis began with an exploration of the huntergatherer and migratory lifestyles of our early ancestors and the expressions of their nomadic tendencies, which remain evident in human life today. The 21st century nomads, influenced by the effects of globalization and digital technology, are captured by the terms "digital nomads" or "global nomads." Also referred to as backpackers, this sub-set of society embodies the location-independent lifestyles of our hunter-gatherer past and challenges the normative associations with spaces (i.e. home, work, and play) which are rapidly changing and becoming increasingly flexible.

In keeping with the transient qualities of 21st Century Nomads and the established ideas of location independence, this thesis aims to re-conceptualize the Amtrak experience by creating a hybrid space that fuses hospitality and working areas for the Coast Starlight train route. The 36-hour trip connects Seattle, WA to Los Angeles, CA with over 30 stops offering opportunities for commuters and tourists alike. Additionally, the project explores the continuation of nomadic sensibilities within a fixed site, the train station, that offers opportunities for work, play and stay.

The project questions how the modern nomadic lifestyle affects design. What are the important design decisions to consider for 21st century nomads? How is the industry succeeding in meeting these needs? How are current approaches lacking? What is the overall effect of nomadism and digital mobility within residential, commercial, and hospitality design sectors? Where will these nomadic trends lead?

# **KEY DEFINITIONS**

#### **GLOBAL NOMADS**

A person living a mobile and international lifestyle. Global nomads aim to live location-independently, seeking detachment from particular geographical locations and the idea of territorial belonging.

#### **DIGITAL NOMAD:**

A person who use telecommunications technologies to earn a living and, more generally, conduct their life in a nomadic manner

# LITERARY REVIEW

#### Introduction

The concept of travel has evolved throughout human history originating from the mobility and migration patterns of our nomadic ancestry. As of June 2017, tourism¹ as an industry had statistics showing that nearly 600 million people had traveled internationally this year.² As expressed in figure 1, travel can be broken into smaller categories based on the overall time and distance of trips. The primary focus of this paper are the travelers who are abroad for longer periods of time – spanning, at minimum, a few months to even years.³ According to C. Michael Hall and Dieter Müller, many countries do not count those traveling for longer than six months to

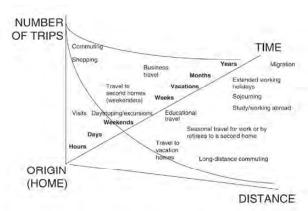


Fig. 1 Extent of Temporary Mobility in Space and Time

one year because they believe that tourism only applies to those traveling short-term for leisure purposes.<sup>4</sup> For this literary review, I will briefly discuss the link between our nomadic ancestry and the modern nomad. A further review of published works will discuss the overall impact this movement has on design; from mobile architecture and design concepts, to sustainability and nomadic-minded design considerations in permanent structures.

#### Historic Hunter-Gathers: Mobility versus Migration

"The impulse to migrate is inherent in human nature – an instinctual and inborn disposition and inclination to wonder and to wander in search of new opportunities and new horizons..." - Anthony J. Marsella and Erin Ring<sup>5</sup>

The evolution of contemporary human beings — Homo sapiens, to be specific — has been more than a seven-million year<sup>6</sup> process with countless miles of migration. It is not uncommon that links are made between our hunter-gather heritage and those of the modern nomads. As stated by Russell King, the first human species, Homo erectus, evolved from our "apelike ancestors" as a result of overpopulation and food scarcity. In fact, King argues that "humans are born migrants: our evolution is fundamentally linked to the act of migration, to moving from one place to another and adapting to the new environment." Archaeologist Peter Bellwood (2013) explains that it is important to address that these historic peoples were both mobile in their day-to-day livelihood, but also migratory on a larger scale. The definition of migration, according to Bellwood, is focused on the concept of "permanent translocation" – a departure from one territory to another with no means or plans to return<sup>8</sup> (As will be discussed within this literary

According to the World Tourism Organization, "tourism" can be defined as activities of visitors and consists of three levels forms: domestic travel; inbound travel and outbound travel

World Tourism Organization UNWTO, "International Tourism - Strongest Half-Year Results since 2010," accessed October 11, 2017, http://media.unwto.org/press-release/2017-09-07/international-tourism-strongest-half-year-results-2010.

N McIntyre, D Williams, and K McHugh, Multiple Dwelling and Tourism: Negotiating Place, Home and Identity (CABI, 2006), ProQuest Ebook Reader.

<sup>4</sup> C. Michael Hall, "Of Time and Space and Other Things: Laws of Tourism and the Geographies of Contemporary Mobilities," in Tourism and Mobilities: Local Global Connections, ed. P.M. Burns and M Novelli (CABI, 2008), 247, ProQuest Ebook Central.

Anthony J Marsella and Erin Ring, "Human Migration and Immigration: An Overview," in Migration: Immigration and Emigration in International Perspective, ed. Leonore Loeb Adler and Uwe Peter Gielen (Greenwood Publishing Group, 2003).

<sup>6</sup> Russell King, ed., "The Dawn of Humankind," in The Atlas of Human Migration (Buffalo, NY: Firefly Books, 2007), 192.

<sup>7</sup> King

<sup>8</sup> Peter Bellwood, First Migrants: Ancient Migration in Global Perspective, 1st ed. (Wiley, 2013), ProQuest Ebook Central.

review, it is to be noted that in contemporary society the topic of migration is not as rigid). Throughout history, migratory patterns could be attributed to factors such as population growth, limited resources, migration of main food sources and natural disasters.

For millions of years, humankind continued to evolve and to migrate. During this time, campsites were the primary dwellings and crucial to the social development of our kind. While detailing artifacts found from an archaeological dig, Marcos Garcia-Diez and Manuel Vaquero describe these hunter-gather campsite as "physical expressions" of their social organization<sup>10</sup>. They explain that these camps, though used for shelter, were also important for the advancement of their interpersonal relations and activities (food sharing, etc.). Interestingly, they detail the typical dwelling type for these mobile hunter-gatherer campsites as being built in a circular or semi-circular fashion. This is due primarily to the structural capabilities of the dome shape, the interior square footage achieved and the protection these dwellings provide from outside forces<sup>11</sup>. These social campsites helped propel mankind forward. Around 10,000 B.C.E., humans began to cultivate food in addition to gathering it, making agriculture a driving force in the development of mankind.<sup>12</sup>

#### Modern Nomads

In contemporary society, globalization and advances in digital technology have challenged the preconceived concepts of mobility and migration. According to Daniel R. Williams and Sarah R. van Patten, globalization has changed the definitions of both mobility and rootedness (an antonym of migration in this case) by enabling people to create multi-centered identities. Individuals can tether their identity to not just to one place, but as many places as they choose<sup>13</sup>. It is important to note that this notion of tethering to a site is similar to the concept of place attachment, which will be discussed shortly. As globalization expands, increased forms of mobility and migration become feasible. Many Western cultures have "experienced new forms of immigration with substantial social and cultural consequences. Mobility for work, studies and tourism has also increased dramatically" <sup>14</sup>.

In tandem, technology – largely focused around advances made in regard to the Internet and mobile technologies – has enabled the creation of a "global village" of sorts<sup>15</sup>. As discussed by Konstantinos Kazakos, David Kirk and Abigail Durrant, mobile lifestyles have created communication needs and presented challenges for connecting and sustaining communities from afar.<sup>16</sup> With the development of such technologies, Kazakos et al. mentioned the potential and opportunity for "transcending spatial, temporal and possibly even cultural boundaries<sup>17</sup>" as originally discussed by Amanda Williams, Ken Anderson and Paul Dourish<sup>18</sup>. Studies have shown that mobile technologies, even as basic as the telephone, are capable of "mediating closeness<sup>19</sup>," and from the number

- 11 García-Diez and Vaquero.
- 12 King, "The Dawn of Humankind."
- Daniel Williams and Susan R. Van Patten, "Home and Away? Creating Identities and Sustaining Places in a Multi-Centered World," in Multiple Dwelling and Tourism: Negotiating Place, Home and Identity (Wallingford: CABI, 2006), ProQuest Ebook Central.
- 14 Maintyre, Williams, and McHugh, Multiple Dwelling and Tourism: Negotiating Place, Home and Identity.
- Tom Twist, "The Impact of Technology on the Travel and Tourism Sector," Linkedin Pulse (blog), May 9, 2016, Linkedin Pulse.
- Konstantinos Kazakos et al., "Design-Led Inquiry for Mobile Lives," in Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems, CHI EA '15 (New York, NY, USA: ACM, 2015), 2393–2396, ACM Digital Library.
- 17 Kazakos et al.
- Amanda Williams, Ken Anderson, and Paul Dourish, "Anchored Mobilities: Mobile Technology and Transnational Migration," Proceedings of the 7th ACM Conference on Designing Interactive Systems, DIS '08 (New York, NY, USA: ACM, 2008), 323–332, ACM Digital Library. In Kazakos et al., "Design-Led Inquiry for Mobile Lives."
- 19 Kirk, D.S., Sellen, A., and Cao, X. Home video communication: mediating 'doseness.' Proc. DIS 2010, ACM Press (2010), 135–144 in Kazakos et al., "Design-Led Inquiry for Mobile Lives."

Bellwood.

Marcos García-Diez and Manuel Vaquero, "Looking at the Camp: Paleolithic Depiction of a Hunter-Gatherer Campsite," PLoS ONE 10, no. 12 (December 2, 2015), https://doi.org/10.1371/journal.pone.0143002.

studies reviewed in preparation for a workshop discussion, Kazakos et al. found that *communication* was often a key component of providing a sense of "home" when living a more mobile lifestyle<sup>20</sup>. Together, globalization and technology have, in effect, expanded our access to and interconnectedness with the whole of the world<sup>21</sup>

Those who are driven by the urge to wander, not unlike the inherent migratory nature of humans as described by Marsella and Ring<sup>22</sup>, can be described as modern nomads for the sake of this lit review. The modern nomad is an overarching term consisting of various groups of people traveling for purposes of either leisure or work over extended periods of time, typically six months or longer<sup>23</sup>. These groups include backpackers (and flashpackers<sup>24</sup>), digital nomads, study abroad students, traveling volunteers, migrant workers, as well as retirees and families pursuing similar mobile lifestyles<sup>25</sup>. According to trend forecaster, Li Edelkoort, at a recent Dezeen X MINI Living livestream on nomadic living, many modern nomads today tend to be the young professional, creative types who are rehashing the romantic ideals of experiencing life to the fullest<sup>26</sup>. These people choose to live their lives as nomads both at home and at work, which challenges the pre-conceived notions about these places.

In contemporary society the definition of migration may be re-evaluated as the movement of modern nomads and the overall effect globalization has on this phenomenon. Norman McIntyre finds it would be more beneficial to express migration as "temporary migration," which is a subset of migration that refers to situations such as "commuting, career and life-cycle migration, multiple dwelling and retiree migration"<sup>27</sup>. Though largely discussing the nature of second-home owners, McIntyre found that temporary migration tends to pertain to a more cyclical, or seasonal, time schedule, and that the travels meet needs of either "production" or "consumption." Driven by the desire for experience and improved quality of life, this "consumption-driven" form of migration, according to McIntyre, is better known as amenity tourism.<sup>28</sup> Described as "mobility in search of leisure, landscape and quality of life," amenity migration is, ultimately, the most relevant definition of migration in regard to modern nomads.

The modern nomad, as explained during the Dezeen X MINI Living, is moving away from the long-term ideals of home ownership and tenure in search of a more adventurous and mobile lifestyle. The true meaning of being a nomad, as described by Edelkoort, is "not to have borders" – within the home, office and life in general. Edelkoort explains that, from a work-life standpoint, offices need to better accommodate modern nomads by creating more relaxed environments and fostering remote work opportunities. In follow up, Peter Zuspan of Bureau V and Corinna Natter of MINI Living discussed the evolving definition of home. It is a space that is becoming more flexible, is capable of growing with you, and is even "disposable" as in time shared or shippable homes. According to Edelkoort, the human capacity to adjust and form feelings of place attachment is surprisingly quick – with only a few, essential possessions to boost the overall feel of the space even the most basic "volume" can become a "home" within a week or two.<sup>29</sup>

<sup>20</sup> Kazakos et al

Per Gustafson, "Place Attachment and Mobility," in Multiple Dwelling and Tourism: Negotiating Place, Home and Identity (Wallingford: CABI, 2006), ProQuest Ebook Central.

<sup>22</sup> Marsella and Ring, "Human Migration and Immigration: An Overview."

Hall, "Of Time and Space and Other Things: Laws of Tourism and the Geographies of Contemporary Mobilities."

Backpackers of an older age (above 30), sometimes of a more luxury-travel mindset in Allan Beaver, "Flashpacker," Dictionary of Travel and Tourism, Oxford (Oxford University Press, 2012).

Li Edelkoort, Peter Zuspan, and Corinna Natter, "Dezeen X MINI Living: Nomadic Living" (New York, NY, USA, October 19, 2017), Dezeen.

<sup>26</sup> Edelkoort, Zuspan, and Natter.

<sup>27</sup> Malntyre, Williams, and McHugh, Multiple Dwelling and Tourism: Negotiating Place, Home and Identity.

<sup>28</sup> McIntyre, Williams, and McHugh.

<sup>29</sup> Edelkoort, Zuspan, and Natter, "Dezeen X MINI Living: Nomadic Living."

Expanding further on the ideals of place attachment, specifically when paired with long-term or frequent travel, Marianne G. Petersen, Aviaja Borup-Lynggaard, Peter G. Krogh and Ida W. Winther studied the homing tactics of highly-mobile people. Based off Deleuze and Guattari's terminology of "homing", Petersen et al. describe it as home-making activities done within a space to help an individual feel at ease, much like Edelkoort's description of transforming a "volume" into a "home" (discussed previously).<sup>30</sup> Petersen et al. break down the notion of "home" into four categories: the home as a tangible place; the idea of home as abstract ideals of the domestic; homing as the act of becoming more at ease with a space; and the feeling of home as a complex blend of restlessness, homelessness and homeliness, potentially associated to an idea, body or language. Prior to their own study, they found that many place-attachment and homing studies focused on the nuclear family. That is in contrast to the housing scenarios more commonly seen today – multiple-home owners, children of divorce, migrant workers, etc.<sup>31</sup> They found that global nomads live in constant contrast between home and non-homely space and that, as the spaces become more familiar, the space transforms into a home-like place. Following their research and subsequent study, Petersen et al. described seven tactics that individuals may express in varying degrees while homing: <sup>32</sup>

- Territorializing: Taking in more / new territory
- Bubbling: Shutting out context of the new surroundings
- Outboxing: Preparing artifacts for moving between places
- Connecting: Staying in touch with family and friends while traveling
- Differentiating: Contextualizing the home feeling
- Doubling: Copying things from the primary home
- Rhythming: Continuation beyond mobility

Petersen et al. note that the most homely tactics include doubling, connecting and territorializing, while rhythming and bubbling tend to be better suited as coping tactics for avoiding the unfamiliar surroundings; they also commented on the use of technology as a tool for communication in a number of the tactics (connecting, bubbling, doubling, etc.), which relates back to influence of technology as mentioned earlier.<sup>33</sup>

Beyond the realm of leisure- and work-based travel, there are also those who live mobile lifestyles within a larger capacity and who may be more synonymous with the "permanent translocation" definition of migration associated with our hunter-gatherer ancestors. These mobile peoples include refugees, displaced peoples, religious pilgrims, nomadic tribal cultures, and gypsies, among others. Though the mobile design precedents discussed shortly are certainly relevant to these groups, they are not the primary focus of this literary review and in-depth design solutions for these peoples will not be discussed.

#### Design Precedents

In considering the well-traveled nature of global nomads, design precedents relevant to this topic are quite broad and may

Marianne Graves Petersen et al., "Tactics for Homing in Mobile Life: A Fieldwalk Study of Extremely Mobile People," in Proceedings of the 12th International Conference on Human Computer Interaction with Mobile Devices and Services, MobileHCI '10 (New York, NY, USA: ACM, 2010), 265–274, https://doi.org/10.1145/1851600.1851646.

<sup>31</sup> Petersen et al.

<sup>32</sup> Petersen et al.

<sup>33</sup> Petersen et al.

pertain to several of the overarching design industries: hospitality, commercial (specifically co-working) and residential, to name a few. As noted previously, migration in regard to global nomads is better stated as "amenity migration" – mobility in search of leisure, landscape and quality of life.<sup>34</sup> It seemed appropriate to select design precedents that were instilled with a similar notion of temporality and/or mobility, regardless of the intended length of use or category of use. As such, examples of campsites, pop-ups and small-scale living quarters will be discussed in detail.

#### Temporary Design: Camps

"In regards to mobility, camping is an important idea and pastime to consider. Much like mobility itself, to camp is a cyclical activity – siting to clearing to making to breaking." – Charlie Hailey, Campsites<sup>35</sup>

Similar to the dwelling habits of our hunter-gather ancestors, campsites and transportable, temporary architecture are an important genre of design for modern nomads. As mentioned, humans are adaptable to spaces<sup>36</sup> and can deploy a variety of homing tactics to instill a sense of place attachment.<sup>37</sup> The idea of the campsite, as explained by Charlie Hailey in his book, *Campsites*, creates a permanent act of thresholding in which one is simultaneously in an act of arriving and departing. This notion frees them from the restriction of boundaries (as is common with traditional architecture),<sup>38</sup> and also relates back to the ongoing act of homing, especially in regards to global nomads, as discussed by Peteresen et al.<sup>39</sup> Connecting the idea of camp back to place attachment, Hailey explains that, as a flexible entity, camp – especially nomadic camp – is never rooted to a place, but rather "a multiplicity of camps forms an open network in which the nomadic subject makes connections through repeated but differentiated operations".<sup>40</sup> Hailey describes several categories of camps appropriate to modern nomads, including glamps, holiday camps, RV club camps, RV camps, and urban camps, among others.<sup>41</sup> Interestingly, Hailey comments that camps have the ability to stimulate



Fig. 2 Tent Village (sketch)

global situations, creating a small micro society, and that, in camping, we can fulfill the urge "to escape, to retreat, to find ourselves". $^{42}$ 

Two contemporary examples of campsites exemplifying this are A-Kamp47 (Malka Architecture) and Tent Village (Dré Wapenaar). Evident in Wapenaar's Tent Village, originally completed in 2001, is the idea of creating a micro society. It was important to the designer that both public and private spaces were provided to greater support the whole of the community. As seen in figure 2, Tent Village incorporates

<sup>34</sup> McIntyre, Williams, and McHugh, Multiple Dwelling and Tourism: Negotiating Place, Home and Identity.

Charlie Hailey, Campsite: Architecture of Duration and Place (Baton Rouge, LA: Louisiana State University Press, 2008).

<sup>36</sup> Edelkoort, Zuspan, and Natter, "Dezeen X MINI Living: Nomadic Living."

<sup>37</sup> Petersen et al., "Tactics for Homing in Mobile Life."

<sup>38</sup> Hailey, Campsite: Architecture of Duration and Place.

<sup>39</sup> Petersen et al., "Tactics for Homing in Mobile Life."

<sup>40</sup> Hailey, Campsite: Architecture of Duration and Place.

Charlie Hailey, Camps: A Guide to 21st-Century Space (Cambridge, MA: MIT Press, 2009).

<sup>42</sup> Hailey, Campsite: Architecture of Duration and Place.

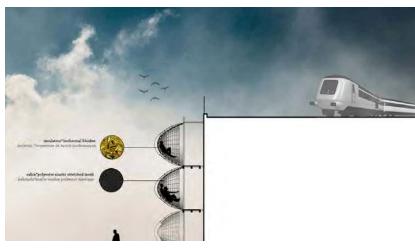


Fig. 3 A-Kamp47 Section

several modules placed together on varying levels and proximities.<sup>43</sup> Wapenaar has revisited the Tent Village several times since the original was completed, yet the overall orientation of the tents in relation to each other has remained consistent.

Similar to Wapenaar's Tent Village in creating a sense of community, Malka Architecture's A-Kamp47 is both a political art piece and temporary dwelling solution – though intended as a more fixed dwelling structure. Arranged like "stealth" pockets, Stpéhane Malka cantilevered vinyl tents off a still lattice to provide temporary shelter for both the homeless and

modern nomads, in which people can diagonally lay in a comfortable fashion within each tent (see figure 3). In critique of the global housing crisis, A-Kamp47 is a ready-made solution that is "simple, light and easy to install".<sup>44</sup> The idea of community comes in not only in the twenty-three individual modules, but also in the unification of the tents to provide protection from weather and vandalism.<sup>45</sup>

Building off the idea of setting camp, temporary dwellings, like buBbLe – a temporary dwelling prototype by MMASA Studio and Cipriano Chas, focus on the ease of assembly and affordability; this type of mobile dwelling is commonly seen following disaster situations. He call, these structures are capable of being transported and set up by only the individual. However, that is not always is the case with temporary dwellings. MMASA Studio's buBbLe was designed as an urban solution for creating nomadic, short-term

residences in hopes of answering four common design problems: creating uniformity in height, providing adaptable insulation and protection from the outside, solidity within the overall structure and basic hygiene facilities. <sup>47</sup> As seen in figure 4, the bubble can be self-contained and transported within an integrated, suitcase-like exterior shell (measuring 130x45x45cm); from there, the setup of the buBbLe is relatively straight forward and simple enough for 1-2 people as diagrammed in figure 5. Once complete, the entirety of the structure measures 2x2x2m and comes outfitted for up to two days (with an integrated inflatable



Fig. 4 MMASA Studio's buBbLe

<sup>43 &</sup>quot;Dre Wapenaar // Canvas-, Steel-, and Woodprojects // Tentvillage Prototype," accessed October 30, 2017, http://www.drewapenaar.com/project.php?id=58.

<sup>44 &</sup>quot;A-KAMP47 / Stephane Malka," ArchDaily, December 26, 2013, http://www.archdaily.com/461696/a-kamp47-stephane-malka/.

<sup>&</sup>quot;Malka Architecture Erects A-Kamp 47 Stealth Shelters from Tents," designboom | architecture & design magazine, November 19, 2013, https://www.designboom.com/architecture/malka-architecture-erects-a-kamp 47-stealth-shelters-from-tents/.

Adham Hany Abulnour, "The Post-Disaster Temporary Dwelling: Fundamentals of Provision, Design and Construction," HBRC Journal 10, no. 1 (April 1, 2014): 10–24, https://doi.org/10.1016/j.hbrcj.2013.06.001.

<sup>47 &</sup>quot;BuBbLe (Temporary Dwelling Prototype)," accessed October 30, 2017, http://worldarchitecture.org/architecture-projects/vnnf/bubble\_temporary\_dwelling\_prototype\_-project-pages.html.

air mattress, cook-top, sink and lighting).<sup>48</sup>

#### Temporary Design: Pop-Ups

"Lurking behind every pavilion, pop-up and parasol is the dream of an escape. A removal from everyday routines, the notion of being a nomad... Pavilions, pop-ups and parasols in a reverie are instant and ephemeral reactions of our enterprises, our moods and our hopes..." Leon Van Schaik, Pavilions, Pop-Ups and Parasols, Are They Platforms for Change?<sup>49</sup>

Capturing the essence of the nomadic lifestyle, what would happen should we infuse our architecture with the same notion of transience? As detailed by Peter Bishop, a professor at the Bartlett School of Architecture, in a special issue of Architectural Design on the topic of pavilions, pop-ups and parasols, the past decade has seen an influx of mainstream, temporary design, in part due to the effects of social communications and shifting boundaries between enterprise and culture. As a result, Bishop explains, temporary design is allotted opportunity for "experimentation," potentially being used as forces for change, and allows us to re-think existing and/or scarce spaces within the urban environment. Increasingly, city officials and private developers have begun installing pop-up schemes to abandoned sites. When utilized correctly, these temporary, pop-up destinations have the potential to bring life, fun and excitement to the community. As a result, the set temporary pop-up destinations have the potential to

A common problem in urban areas across the globe, especially in places like London and New York, is an increasing number of abandoned buildings. In part, this is due to unreasonably high rent prices. To avoid risk of squatters and lost income, efforts are being made to solve the problem temporarily. In London, The SHED Project provides tenants with affordable rent prices (monthly rents of £300 or less) in exchange for a tiny-house sized living accommodations (a mere 120 square feet) within an abandoned property. Designed by Studio Bark, in conjunction with Lowe Guardians (a property management firm), SHED utilizes environmentally-

friendly materials (such as lamb's wool insulation and recycled polycarbonate) and is designed to be constructed in one day (figure 6). According to Tim Lowe, Director of Lowe Guardians, the aim of the project was to solve the financial and environment waste of abandoned sites in London while also creating a sense of community for the SHED dwellers.<sup>52</sup>

Another example of adapting abandoned spaces, albeit from a commercial standpoint, is Papirøen (Paper Island) in Copenhagen. Situated within a prime area of Copenhagen Harbor, the industrial building which formerly housed paper storage for the Procurement Association of the Danish Press had been abandoned. In an experiment to test the potential of the island,



Fig. 6 The SHED Project set up

<sup>48 &</sup>quot;BuBbLe (Temporary Dwelling Prototype)."

Leon van Schaik, "Pavilions, Pop-Ups and Parasols: Are They Platforms for Change?," *Architectural Design* 85, no. 3 (May 1, 2015): 8–15, https://doi.org/10.1002/ad.1895.

Peter Bishop, "From the Subversive to the Serious: Temporary Urbanism as a Positive Force," *Architectural Design* 85, no. 3 (May 1, 2015): 136–41, https://doi.org/10.1002/ad.1913.

<sup>51</sup> Bishop.

<sup>&</sup>quot;The Shed Project - Studio Bark," accessed October 31, 2017, http://studiobark.co.uk/projects/the-shed-project/.



Fig. 7 Tengbom's Östermalm Square

a temporary urban revitalization project that runs until the end of 2017 brought in selected merchants. The Copenhagen Contemporary Gallery, retail establishments, and Copenhagen Street Food – a large, food-truck themed pop-up eatery with over twenty vendors, created an urban oasis. Because of the success of this temporary venue, plans have been finalized for the redevelopment of the building into a mid-rise, mixed-use space.

The Swedish architectural firm Tengbom faced a different challenge in refurbishing and modernizing a long-time market place near Östermalm Square in Stockholm. Due to a Swedish law prohibiting the sale of fresh produce outside, The firm needed a viable solution to keep the existing produce market vendors in business. A temporary structure was needed before the refurbishing could occur.

Tengbom's temporary building was built with well-intentioned materials – lightweight, cost effective and sustainable – and constructed using a modular mounting system (figure 6) to allow for the re-use all materials following the termination of the project. The relatively simple design maximizes daylight and creates "a positive effect on its surrounding day and night". Highlighting the success of the space, it was later announced that business in the temporary hall was performing better than in the old.<sup>53</sup>

#### Literary Review Conclusion / Future Directions to Explore

In closing, transient tendencies of modern nomads should be taken seriously and carefully considered in terms of architecture and design. Society is moving towards a resurgence of the romantic ideals of exploration and the mobile lifestyles seen in the past. These trends should be celebrated rather than ignored. As discussed, modern nomads are interested in a lifestyle beyond the borders depicted by societal norms (the house, the job, the car). Spaces should freely flow from one purpose to the next, as in thresholding in regard to campsites, or they should be planned for temporary uses from the start. There is a need to discover what options exist to create habitable and usable spaces for the modern nomad within larger, fixed structures – potentially creating the opportunity to re-use existing, unused structures. I would like to further expand the dynamic between co-living and co-working communities. This subset of adaptation could be the foundation for the development of a hybrid, cross-over residential and hospitality related community that would fit the modern nomadic lifestyle.

<sup>53 &</sup>quot;Östermalm's Temporary Market Hall / Tengbom," ArchDaily, June 5, 2016, http://www.archdaily.com/788616/ostermalms-temporary-market-hall-tengbom.

# RESEARCH SUMMARY



As revealed by the research covered in the literary review, designing for 21st century nomads comes down to meeting key wants and needs in order to create spaces that respond well to these more transient lifestyles.

#### **WANTS**

Unique Experiences Versatility Unbounded Lifestyles Better Quality of Life

#### **NEEDS**

Access to Technology Nomad-Friendly Spaces A Sense of Community Opportunities to Nest

# THESIS PROJECT

COAST STARLIGHT AMTRAK ROUTE AMTRAK SUPERLINER & TRAIN STATION

## **DESIGN INTENT**

- To develop a program and design a space that reflects transient qualities of the global / digital nomad.
- To create a space that encompasses the idea of being just as much as bout the experience as it is about the destination.
- To appeal to a variety of market groups and create the opportunities for community building and inclusivity.
- To challenge preconceived perceptions of space.







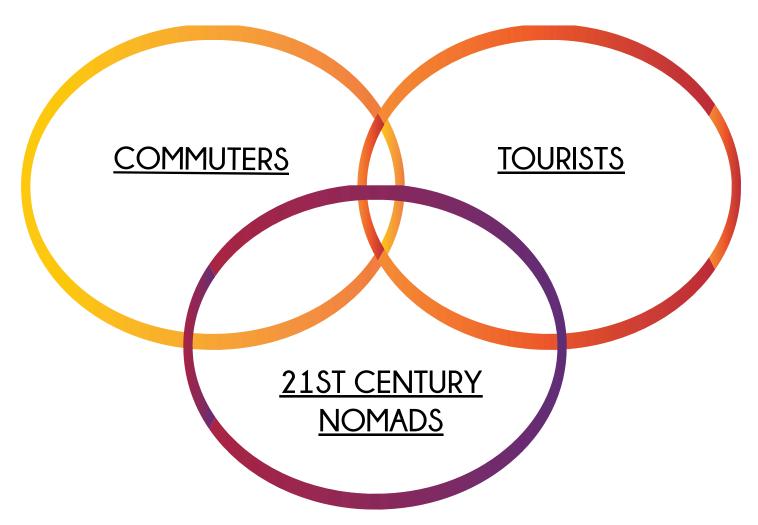
#### STATEMENT OF DESIGN INTENT

Focusing on details that maximize use potential within small footprints - as exhibited within Arlo SoHo (Appendix X) - this project will aim to meet the wants and needs of location-independent lifestyles as detailed in the Research Summary.

Throughout the process, the design decisions made should directly respond to the above intentions: does the decision reflect the transient qualities of the 21st Century Nomad? Does the decision add to the overall experience within the space? Can the decision be usable for all? Does it promote group interaction? Does the decision challenge any preconceived notions, especially in regards to the overall design and layout of the train?

# TARGET AUDIENCE

Although research for this project focused extensively on 21st Century Nomads, the nature of the site expands the intended audience of both the train and train station to include tourists and commuters.



## SITE

#### COAST STARLIGHT AMTRAK ROUTE

When considering the background of my thesis research, I selected Amtrak's Coast Starlight route, which features the Amtrak Superliner train, and operates between Los Angeles and Seattle on a once daily basis. The train travels between a number of popular tourist destinations as well as popular cities within the technology industry, including Santa Barbara, Calif.; Oakland, Calif.; and Portland, Oreg. From start to finish, the journey lasts just shy of 36 hours with 29 stops in total.

Currently, the Amtrak Superliner offers five main car types: coach & first-class seating, sightseer lounge, dining and sleeping. The Amtrak Superliner is a two-story train that is 85' long and 10' - 2" and has about 1,600 SF per car, 25% of which is reserved for mechanical and plumbing needs.

Amtrak trains reflect the nomadic sensibilities exhibited by digital and global nomads. It is also an idea setting to explore being about the experience in addition to the destination.

In addition to the train, this thesis project will also explore the train station as a counterpart to the story and programming of the train itself. The idea behind the station aspect of the project the designs from this project could be adapted to any station along the route. However, portion of the project will focus on the Santa Barbara Depot in Santa Barbara. Calif.



Fig. 26 Coast Starlight route



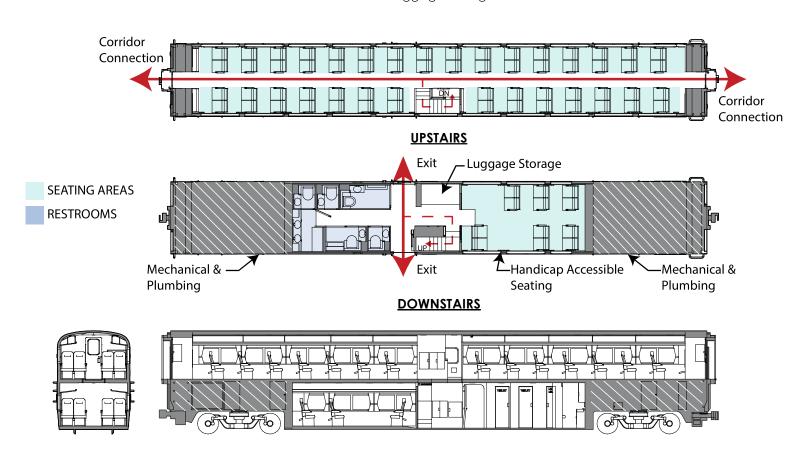
Fig. 27 Superliner Observation Car



Fig. 28 Coast Starlight Route

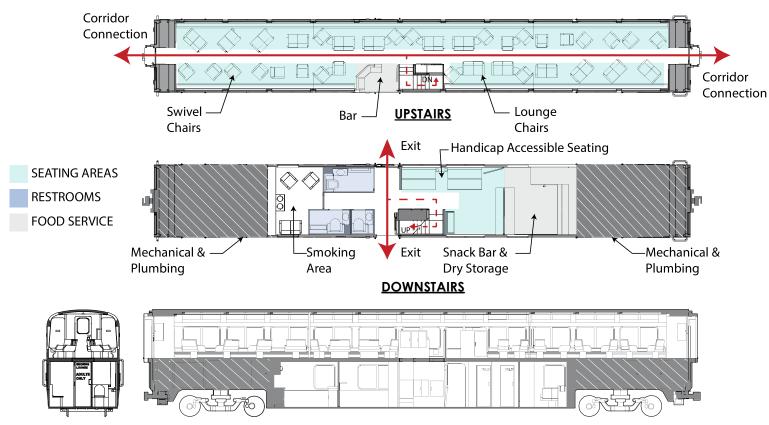
## **AMTRAK SUPERLINER**

The existing coach seating cars features standard seating on both the first and second floor; however, the first floor seating area offers handicap accessible seating. Additionally, the first floor has five restrooms -- one handicap accessible -- and luggage storage.

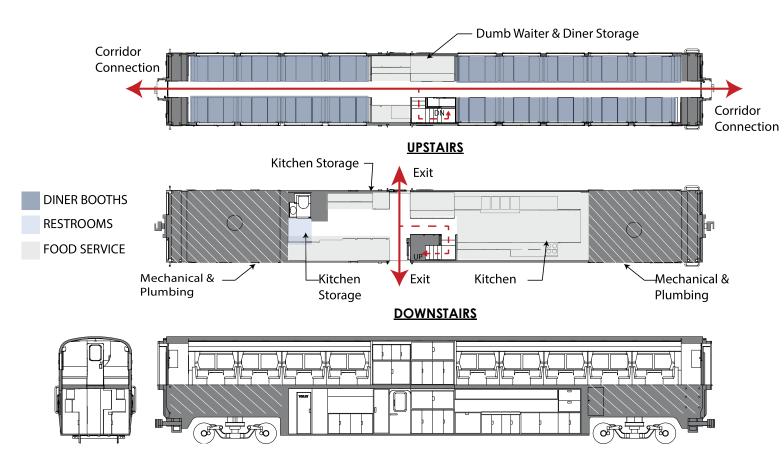


EXISTING COMMUTER CAR SCALE: 1/8" = 1'-0"

The existing sightseer cars features a variety of seating options (lounge and swivel) on the second floor, with handicap-accessible seating on the first floor. The lounge features separate bar and snack areas, restrooms and a smoking area.

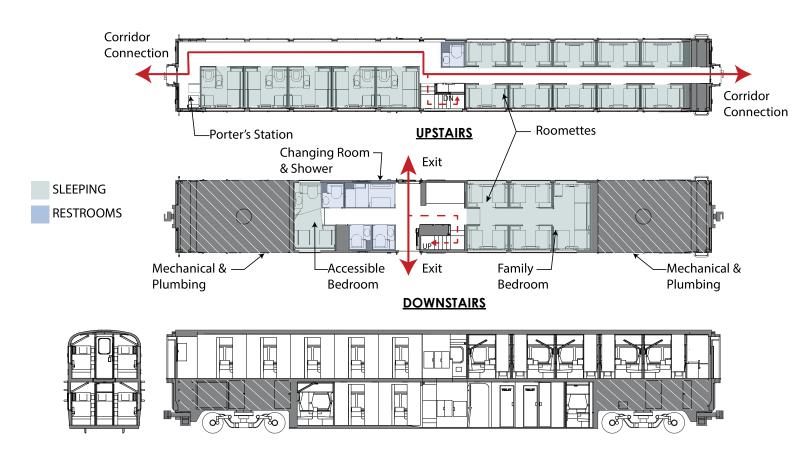


EXISTING SIGHTSEER CAR SCALE: 1/8" = 1'-0" The existing diner cars feature standard 4-person booths on the second floor. Guests are expected to combine parties to fill each booth and maximize seating. Kitchen facilities are on the first floor, with dumb waiter access between the floors.



EXISTING DINING CAR SCALE: 1/8" = 1'-0"

The existing sleeper cars feature a variety of room styles: roomettes, standard bedrooms, family bedrooms and accessible bedrooms. The standard and accessible bedrooms have an en suite toilet, and the remaining rooms share the restrooms. For the car, there is only one shower and changing available.



EXISTING SLEEPER CAR SCALE: 1/8" = 1'-0"



Fig. 29 Coast Starlight Route Map

## PROGRAMMING + CODES

#### COAST STARLIGHT AMTRAK ROUTE

The programming for the train will be largely based around the idea of creating communities and offering flexible spaces that can be used for a variety of purposes throughout the day.

#### **CO-WORKING / HOSPITALITY TRAIN**

10 Train Cars (~1500 SF/CAR)

(2) Commuter-Oriented Cars

(4) Amenity-Oriented Cars

Co-Working Gym Lounges Bar/Cafe

Dining

(4) Sleeper Cars

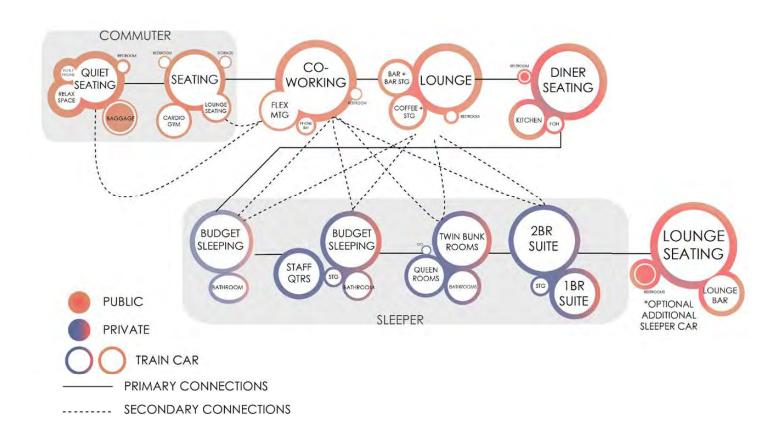
Budget (Sleeps 31) Standard (Sleeps 12) Deluxe (Sleeps 12)

#### CODE ANALYSIS & OCCUPANCY

By code, each train car was limited to a 50-person occupancy max. However, planning and design decisions regulated the number of ticket passengers able to board at any given time based on seats and beds available.

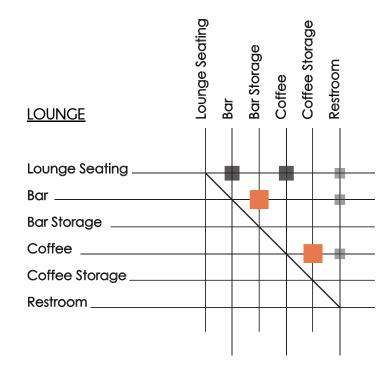
Ticketed Occupancy: 200 passengers

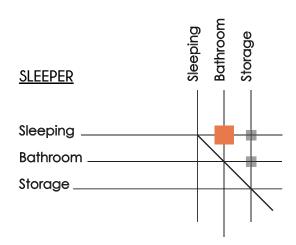
NFPA 130.8.8.1 (Emergency Egress Facilities): Each vehicle shall be provided with a minimum of two means of emergency egress located on the sides or at the ends, installed as remotely from each other as possible.

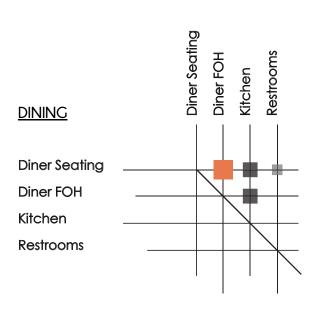


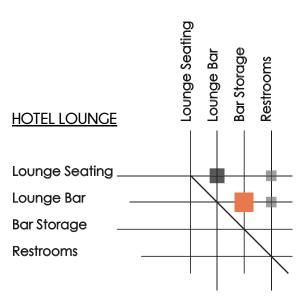
The concept behind the train design is based on creating a user experience that adapts to the many interpretations of travel today - be it more for a work purpose or solely personal.

The trains, in a modular capacity, will offer options and amenities for both commuters and long-distance travelers, including re-imagined passenger seating and lounge areas, co-working spaces, and an-on board gym. The variety of sleeper car styles allow for a variety of price points, ranging from budget friendly to standard rooms to deluxe suites.





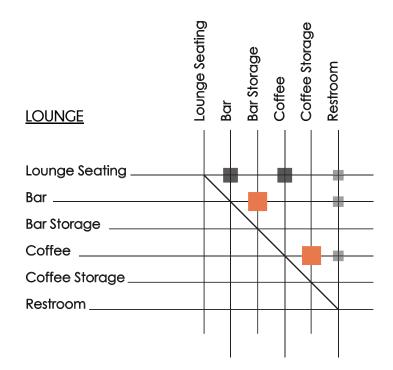


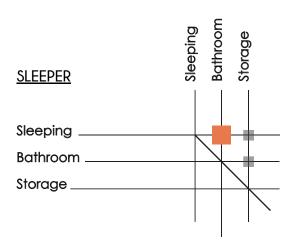


Must

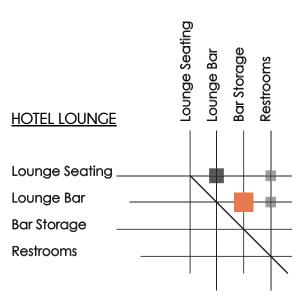
Should

■ Would Be Nice









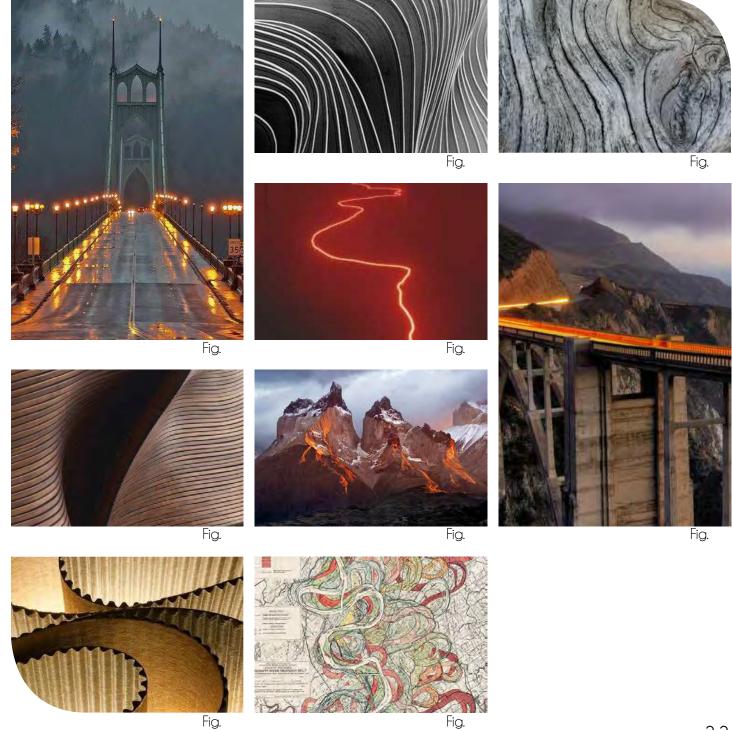
Must

Should

Would Be Nice

# DESIGN INSPIRATION

### COAST STARLIGHT AMTRAK ROUTE



## WAYFINDING

#### COAST STARLIGHT AMTRAK ROUTE

In order to direct train passengers throughout the train, an effective wayfinding scheme is necessary. The approach is two-part in that both iconography and color are used.

ICONOGRAPHY: Each car is assigned a simple icon to help passengers quickly and efficiently identify the use of the car. The icons are displayed on each elevator shaft as well as at each transfer door between cars. As passengers move from one car to another, the doors feature the icons for the car ahead, the current car (displayed larger) and the car behind.

COLOR: The color scheme of the icons, and the color palette of the cars, gradually shift as passengers travel from more public areas to the private, hospitality-focused cars. In this project, the public-use cars feature orange tones and the sleeper cars use more blue tones. The color palette of the train overall shows a gradient of hues meant to mimic the colors of sunset.

Additionally, as passengers travel from the public cars towards the private cars, the floor tone gradually darkens to create a more intimate feel. Floor patterning is used within in cars to differentiate the path of travel.



COMMUTER (QUIET)





COMMUTER + GYM



CO-WORKING



LOUNGE



DINING



**SLEEPER** 



**SLEEPER** 



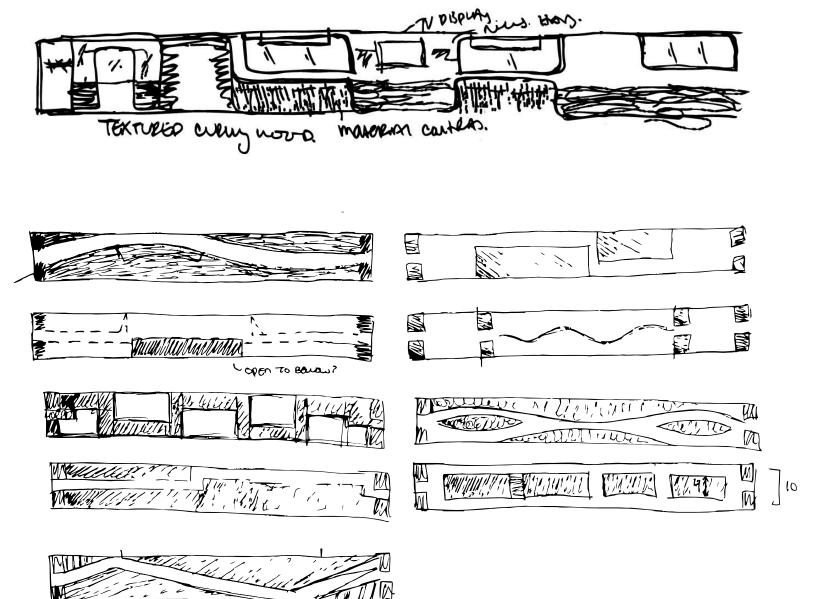
**SLEEPER** 



SLEEPER



# INITIAL CONCEPT SKETCHES



## **USER EXPERIENCES**

#### COAST STARLIGHT AMTRAK ROUTE

#### NAWEED II 26, MALE

Fun-Employed (Backpacker)

Route: Los Angeles, CA - Seattle, WA

Room Type: Budget Bunk

Nights: 2

Planned Activities: Applicable Cars:

Freelance Work
Socializing
Budget Sleeper
Lounge Cars
Relaxing
Dining Car

Possible Cars:

Co-Working

Gym

#### GERALDINE & ED || EARLY 60s, COUPLE

Semi-Retired (Finance)

Route: Portland, OR - Pasa Robles, CA

Room Type: Queen Sleeper

Niahts: 1

Planned Activities: Applicable Cars:

Relaxing Standard Sleeper Socializing Hotel Lounge Car Possible Cars: Dining Car

Gym

#### ANA | 32, FEMALE

Museum Curator

Route: San Jose, CA - Santa Barbara, CA (8 hours)

Room Type: N/A Nights: N/A

Planned Activities Applicable Cars:

Meetings Co-Working
Socializing Commuter + Gym

Light Cardio Lounge









#### NIKO, VAL, COOPER AND STERLING || FAMILY

Niko: 43, Male, Private Chef

Val: 39, Male, Food Blogger & S.A.H. Dad

Cooper: 16, Male

Sterling: 6, Male, Learning Disabilities

Route: Seattle, WA - Los Angeles, CA + extended stop-

over in Santa Barbara, CA

Room Type: Family Suite

Nights: 2

#### Planned Activities:

Niko: Relaxing, Socializing & Family Time Val: Light Work, Family Time & Socializing

Cooper: Exploring

Sterling: Family Time & Homework

#### Applicable Cars:

All: Sleeper Car, Dining Car & Lounge Cars

Niko: Gym

Val: Co-Working

Cooper: All Cars

Sterling: Primarily with Family Members

Stopover: Family misses planned train in Santa Barbara, stays at Santa Barbara Station Micro-Suites (Twin & King

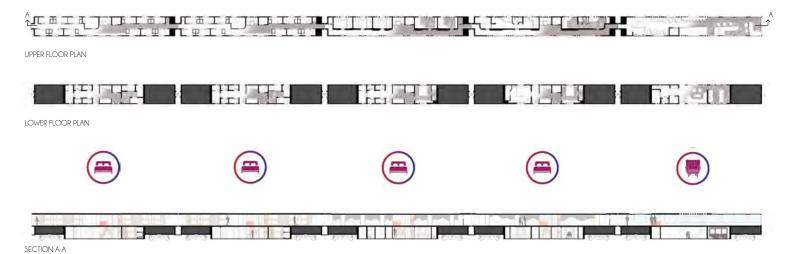
Rooms)

### **DRAWINGS**

COAST STARLIGHT AMTRAK ROUTE



SCALE: 1" = 30' - 0" // CARS 1 THROUGH 5



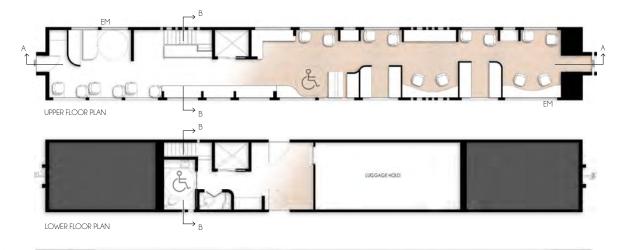
SCALE: 1" = 30' - 0" // CARS 6 THROUGH 10

# COMMUTER (QUIET)



The commuter cars focus on providing a variety of secting options for riders, including desk seating, sliding chairs and benching. Charging ports are built into seating and tables.

Within the quiet car, benching is built into bookcase storage to give a library feel to the space in hopes of encouraging passengers to use the space only when commuter use is low.







SECTION A-A

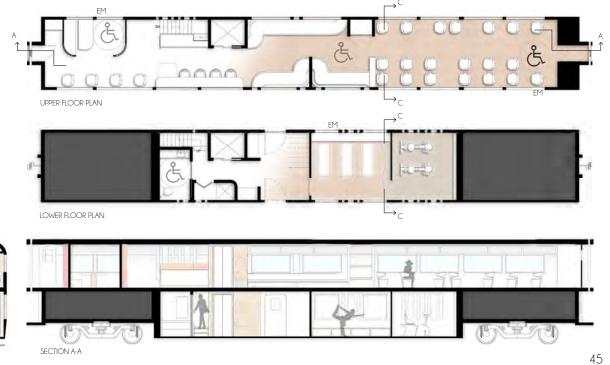
SCALE: 1/8" = 1" - 0" EM: EMERGENCY EGRESS

# COMMUTER + GYM





The typical commuter car offers seating more customary to traditional train seating. Like the other quiet commuter car, this car also features a variety of seating, including counter seating, individual, table and bench seating.



SCALE: 1/8" = 1' - 0" EM: EMERGENCY EGRESS

SECTION C-C

4.

#### **CO-WORKING**



The co-working car brings the conveniences of coworking spaces to the train. It offers lounge seating, private meeting rooms, work zones and a streamlined office center for both sleeper passengers and commuters.

All seating and work zones are outlitted with power outlets and the train offers Wi-Fi throughout; however, enhanced Wi-Fi is accessible in the co-working car.

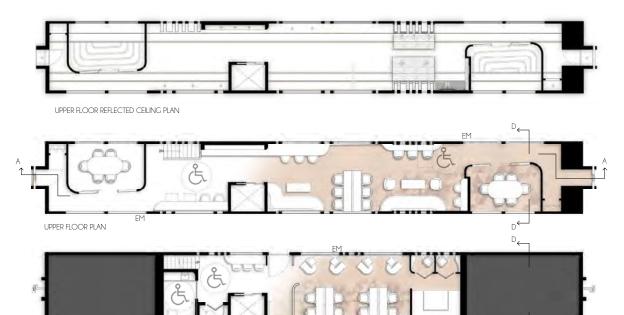
The private meeting rooms can be reserved ahead of time via an app.

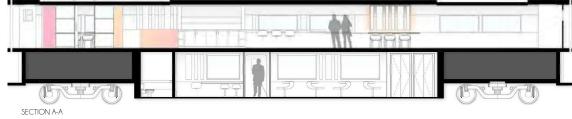
The reflected ceiling plan offers an idea of the lighting considerations throughout the train. In all cars, the twin panels running the length of the train ceiling feature fabric panels with cutouts for LED lighting, while also helping with acoustic. Additionally, small fixtures are included in meeting and seating spaces. When possible, furniture pieces are designed with integrated lighting to create a layered approach to lighting.



LOWER FLOOR PLAN

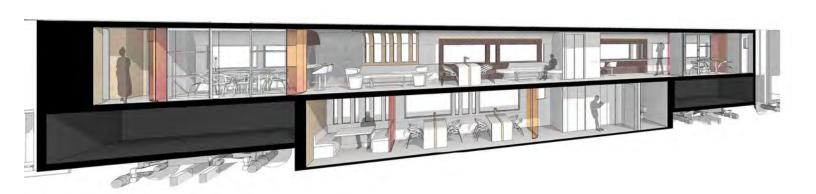
SCALE: 1/8" = 1" - 0" EM: EMERGENCY EGRESS





# **CO-WORKING**

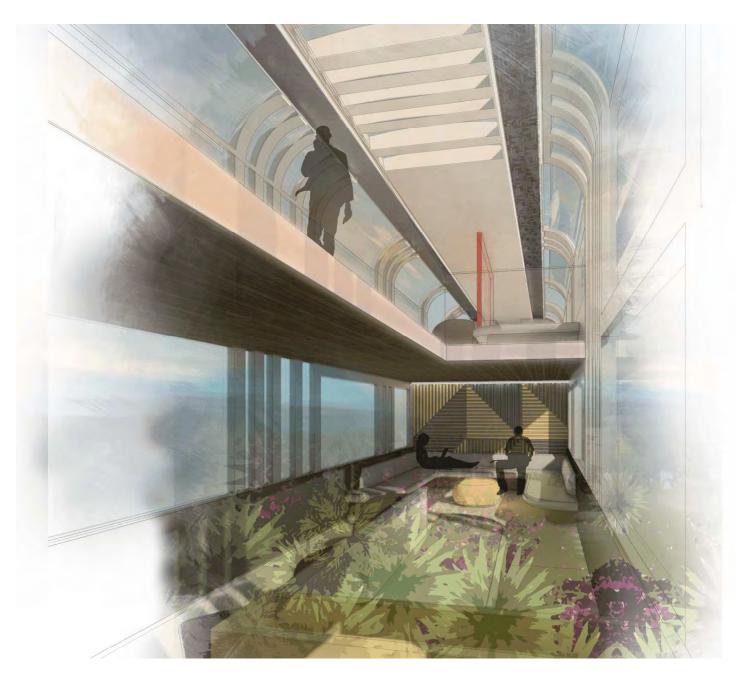




SECTION-PERSPECTIVE SECTION FOR SECTION FO



CO-WORKING PERSPECTIVE

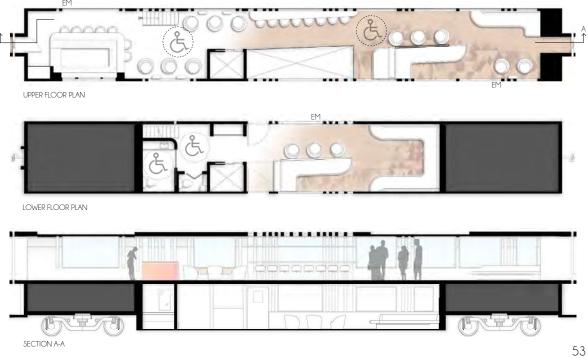


LOUNGE PERSPECTIVE

# LOUNGE



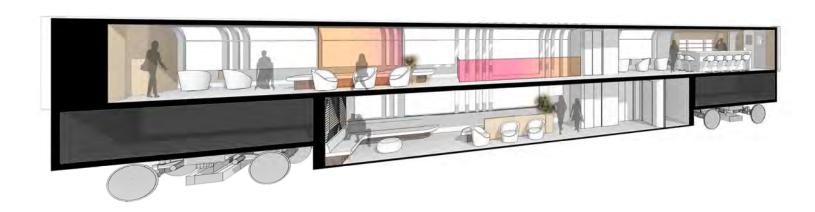
The lounge cars explore the overall volume of the train car through a double-tielight space and windows run floor-to-ceiling. The lounge offers more relaxed seating along with a snack and beverage bax.



SCALE: 1/8" = 1" - 0" EM: EMERGENCY EGRESS

# LOUNGE





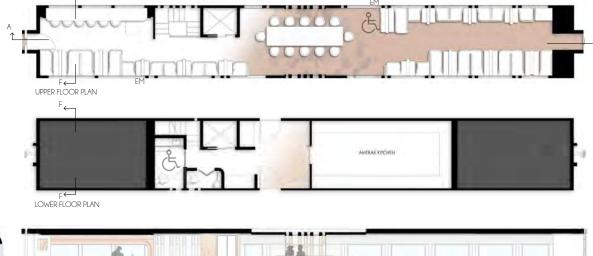
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### **DINING**

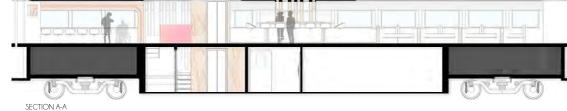


The dining car acts as the divide between the public-use cars and the sleeper cars. Guests for the dining car would primarily be overnight guests; however, the option to dine is available to other guests with reservations made through the app. In this car, passengers begin to see the transition of colors towards the more blue shades and tones. Additionally, the flooring becomes slightly darker to help areate a more intimate mood for dining.

Seating options include individual counter seating, booth seating (2- and 4-top) and a community table to create the maximum opportunity for passenger interaction.







SCALE: 1/8" = 1" - 0" EM: EMERGENCY EGRESS



DINING PERSPECTIVE



SLEEPER CAR STAIRWELL PERSPECTIVE

### SLEEPER (BUDGET)

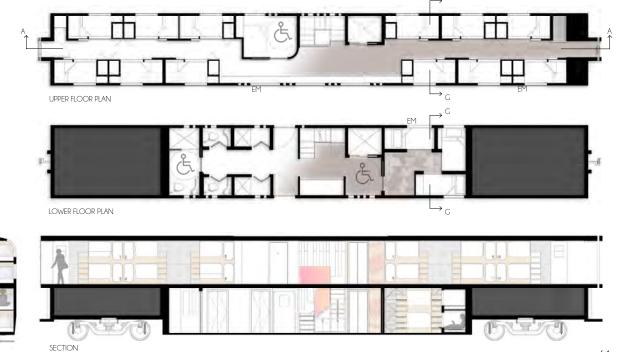


The budget sleeping option is bunks with private luggage storage. Each bunk is outfitted with a personal screen for privacy, power outlets, individual lighting controls and a TV screen.

All sleeper cars and most passenger cars offer additional luggage storage options on the first floor.

Both sleeper cars offer 6 guest bunks within an enclosed room on the first floor, which can alternatively be allocated for staff.

Sleeps 31 (1 accessible room)

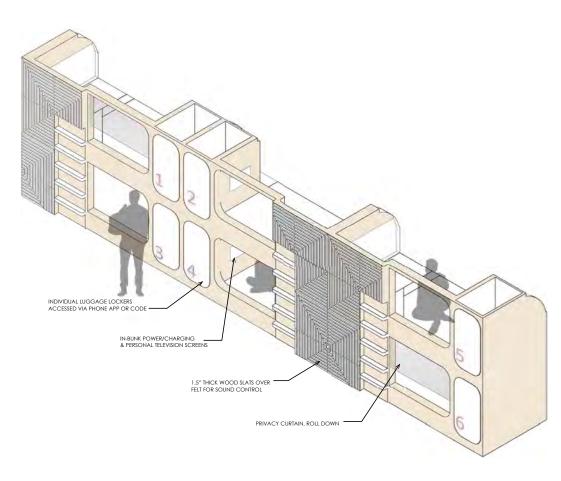


SCALE: 1/8" = 1' - 0" EM: EMERGENCY EGRESS

SECTION G-G

# **BUDGET BUNKS AXO**





SCALE NTS

# SLEEPER (STANDARD)



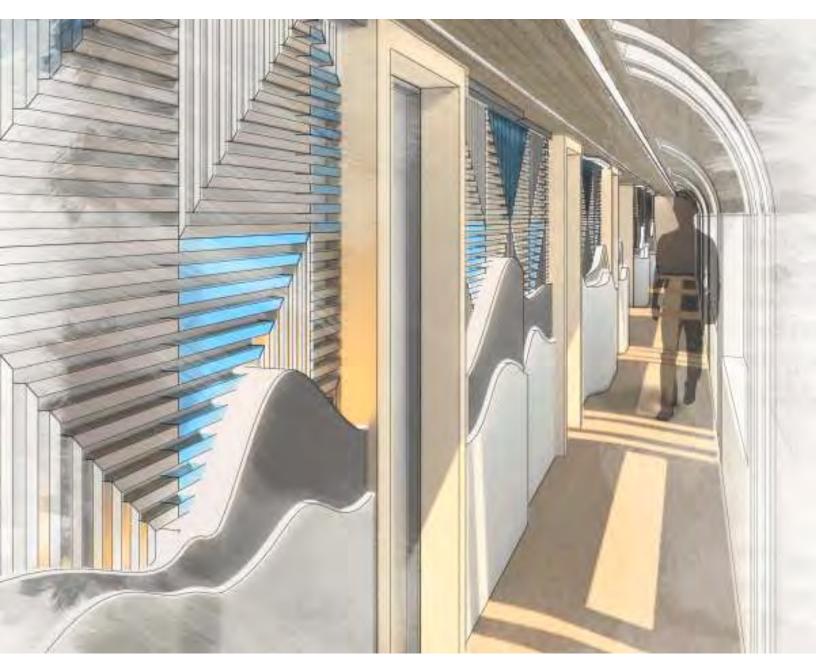
The standard sleeper offers private rooms with twin- or queen-sized Murphy beds.

Sleeps 12 (1 accessible room)



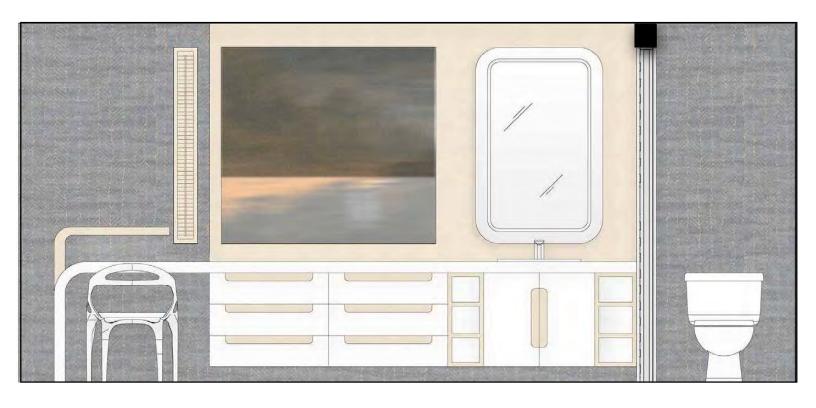


SCALE: 1/8" = 1" - 0" EM: EMERGENCY EGRESS



SLEEPER CAR HALLWAY PERSPECTIVE

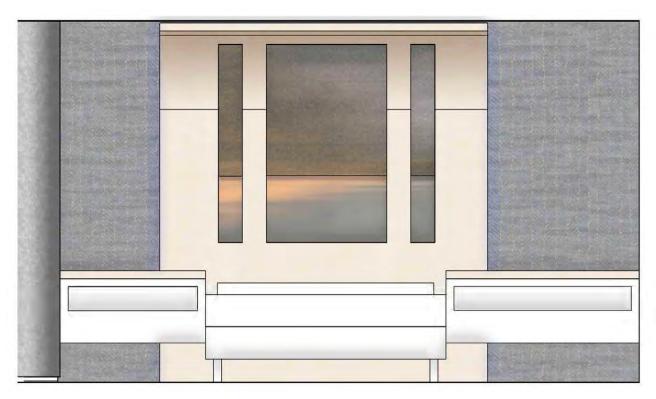
# TRAIN SLEEPER ROOMS ELEVATIONS



DELUXE SLEEPER - MILLWORK SCALE: 1/2" = 1' - 0"

As with furniture throughout the train, the guest rooms feature custom millwork decisions that grow from the train and combine modernist, streamline curves with the natural feel of materials.

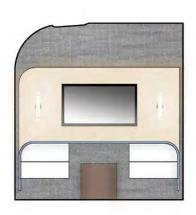
Standard rooms feature Murphy beds and floating storage consoles, while the Deluxe Rooms offer arranges more customary of a traditional hotel room, including an en-suite bathrooms



DELUXE SLEEPER - BED SCALE: 1/2" = 1' - 0"



DELUXE SLEEEPER SCALE: 1/4" = 1' - 0"



STANDARD SLEEPER - STORAGE SCALE: 1/4" = 1' - 0"

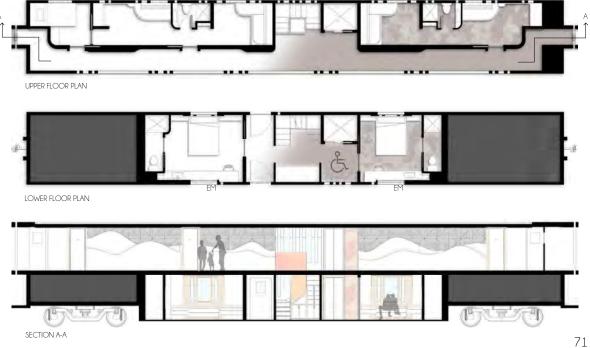
### SLEEPER (DELUXE)



The commuter cars focus on providing a variety of secting options for riders, including desk seating, sliding chairs and benching. Charging ports are built into seating and tables.

Within the quiet car, benching is built into bookcase storage to give a library feel to the space in hopes of encouraging passengers to use the space only when commuter use is low.

Sleeps 12



SCALE: 1/8" = 1" - 0" EM: EMERGENCY EGRESS

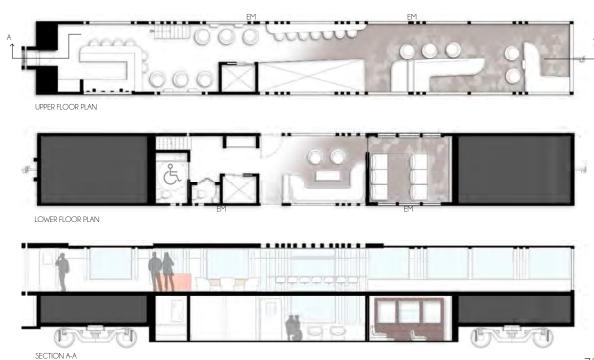
/ \_

### LOUNGE



Different from the public lounge, the hotel lounge is the caboose car of the train and features a large window out the back of the train. Additionally, the hotel lounge also includes a theater-like TV viewing area for movies and relaxing during the frip.

Movies schedules offer a variety of film options and can be viewed ahead of time via the train app.



SCALE: 1/8" = 1' - 0" EM: EMERGENCY EGRESS

73

## **MATERIALS**



Fig. XX Plywood Interior



Fig. XX KireiUSA Coco Tiles



Fig. XX Cork Bark for Cork Flooring

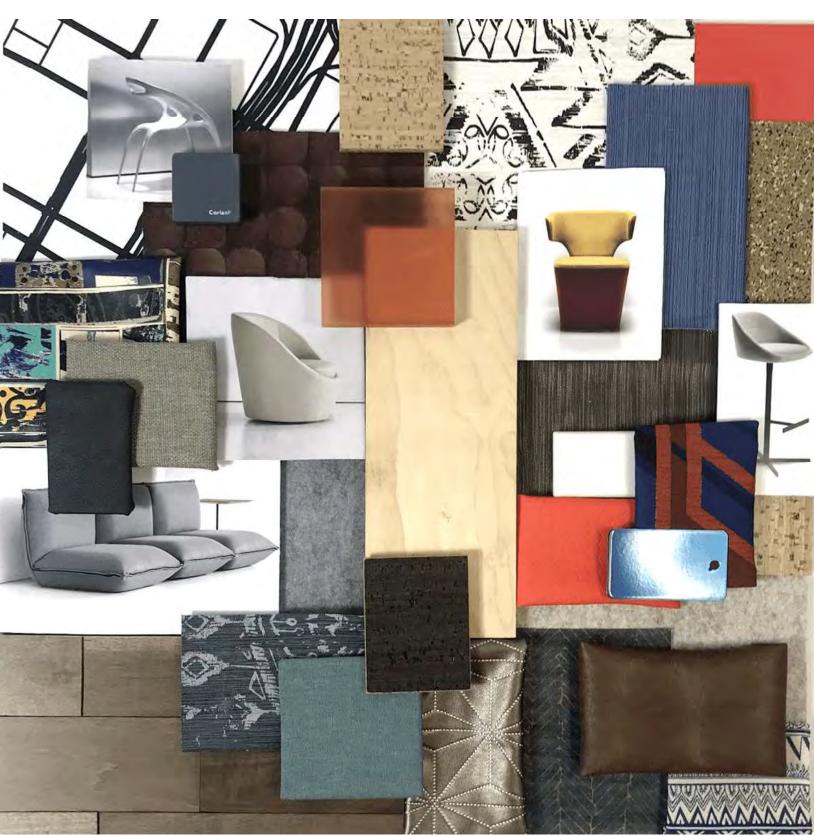
Similar to the concepts explored in Design Probe #3 (Appendix G), comparing and contrasting the sustainable materials used in budget-conscious, temporary housing and a design-oriented hotel, the selection of sustainable materials within the train focuses on both sustainability and aesthetics.

Within the train, in order to juxtapose the common design notions associating transportation interiors with modernistic travel, natural finishes and textures were selected to keep the passengers in a more relaxed, West Coast state of mind.

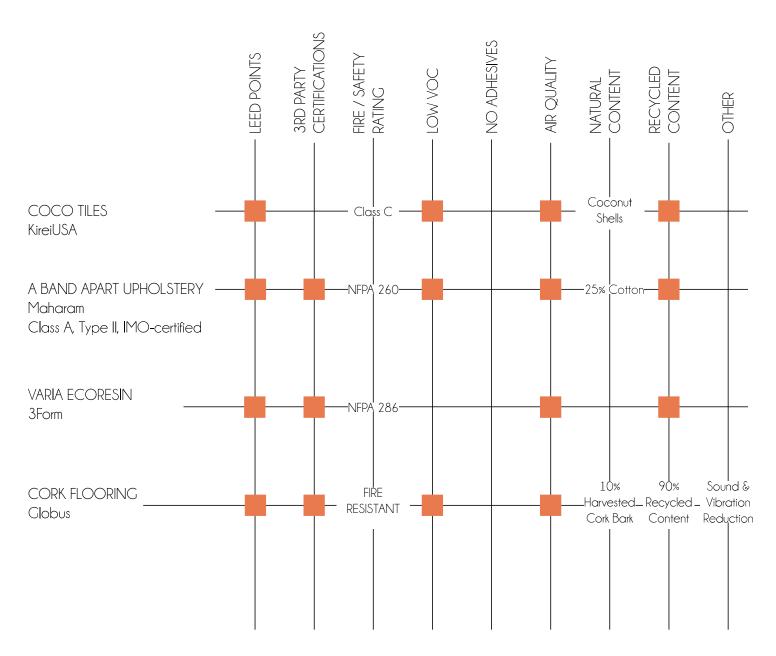
Common materials used within the train include:

- · Finished plywood
- · KireiUSA Coconut Tiles
- · Cork Floor Tiles

The inclusion of natural materials also relates back to the research in that they help create a space that better 21st century nomads can connect with, thus forming feelings of place attachment, and therefore becoming more comfortable within the environment.



MATERIALS PALETTE



MATERIALS MATRIX

## SUSTAINABILITY + LEED

### COAST STARLIGHT AMTRAK ROUTE

According to Amtrak, "traveling by train is 33% more efficient than traveling by car and 12% more efficient than domestic airline travel on a per-passenger-mile basis". Exploring similar notions of sustainability within the train was considered throughout the project, and ultimately, many of the sustainability decisions were consistent with LEED credit options. Unfortunately, due to project requirements for a fixed site, the train itself is not eligible for LEED certification.

**Location + Transportation**: In order to make the commuter cars more adept to the commuter lifestyle, bike storage was incorporated to promote biking and decrease vehicular traffic to and from train stations.

Water Efficiency: Low-flow fixtures were selected to help decrease overall water use on the train, which is applicable to the credits regarding the reduction of indoor water use.

Material + Resources: As detailed in the materials matrix, many of the materials selected consist of natural materials and/or recycled content and also provide LEED points for advantages such as air quality and location sourcing, if the project were eligible.

Indoor Environment Quality: Several design decisions made coincide with the IEQ credit category, including window placement, to increase daylighting and provide quality views, the selection of low-emitting materials and integrated LED strip lighting within furniture and architectural elements. Cork and felt products were selected for sound attenuation.

<sup>1</sup> National Railroad Passenger Corporation, "Sustainability at Amtrak," Amtrak, accessed March 13, 2018, https://www.amtrak.com/about-amtrak/sustainability/travel-areen.html.

# SITE

## SANTA BARBARA DEPOT



Fig. 30 Santa Barbara Depot exterior



Fig. 31 Santa Barbara Depot outdoor seating



Fig. 32 Santa Barbara Depot ticketing

Built in 1905 by architect Francis W. Wilson, the Santa Barbara Depot serves the Coast Starlight and Southern Pacific Railroad routes. The

mission-style building was selected due to it's location, as Santa Barbara is a popular destination for tourists and professionals.  $^{\rm 1}$ 

Starr, Kevin (1991). Material Dreams: Southern California Through the 1920s. Oxford University Press. p. 260. ISBN 978-0-19-507260-0.





Hotels

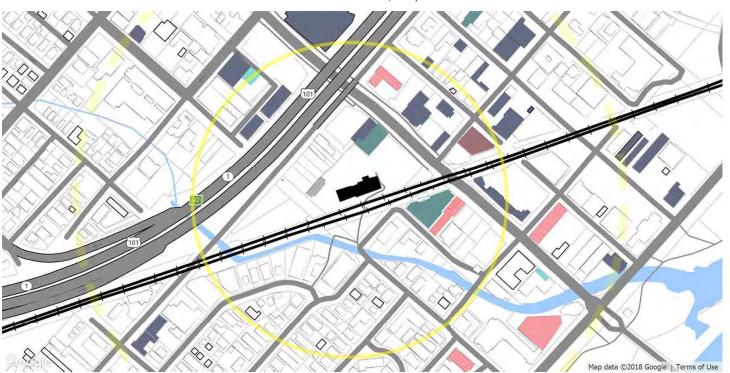
Museums / Cultural

Coffee Shops

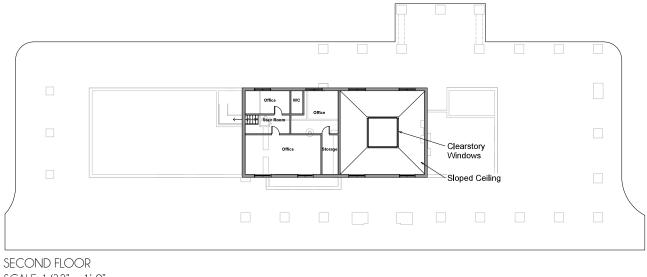
Restaurants / Bars

Site

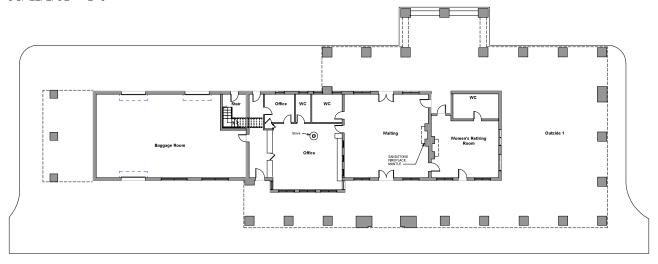
The Santa Barbara Depot is located within the downtown area of Santa Barbara, nearby to attractions such as The Funk Zone and the beach. The station is also located near Santa Barbara City College and University of California Santa Barbara, which has one of the highest ranking entrepreneurial programs in the United States. In the area, there are limited cafes, many restaurants and a few hotels.



The site is a two-story station with approximately 4,000 SF interior space, and an additional 4,000 SF covered space on the first floor.



SCALE: 1/32" = 1'-0"



FIRST FLOOR SCALE: 1/32" = 1'-0"

## **PROGRAMMING**

### SANTA BARBARA TRAIN DEPOT

The programming for the train station, like the train, is based heavily around the idea of creating communities and offering flexible spaces that can be used for a variety of purposes throughout the day.

Within the train station, however, a modular core is implemented that acts as a hub for meeting, ticketing, waiting, working and retail zones.

### SANTA BARBARA TRAIN DEPOT

Train Station Hub Santa Barbara Depot (~8,000 SF)

55% Public Use

Cafe

Co-Working

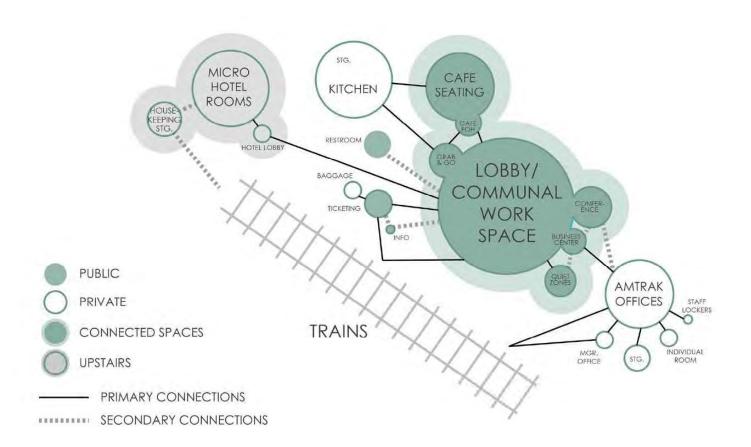
Waitina

20% Amtrak / Private Office Use

15% Limited-Service Boutique Hotel

(3) 150 SF Micro Suites

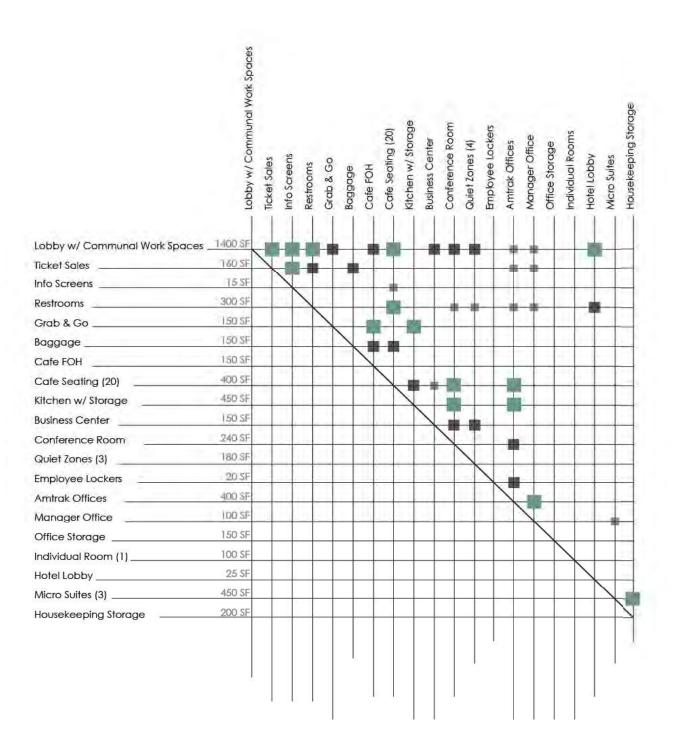
20% Circulation



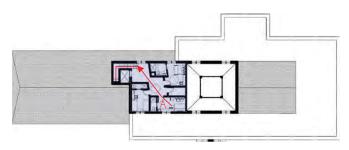
Separate from the train programming, the train station will be realized as more a communal offering. The station will offer train riders, travelers and community members spaces for dining, working and waiting with the intention that the space is flexible enough to adapt to uses throughout the day, shifting from business to social.

Additionally, the train station will include limited-service micro-suite hotel rooms. Amtrak offices and a kitchen.

The intention surrounding the train station programming is that it can be scaled up or down to work with any station.



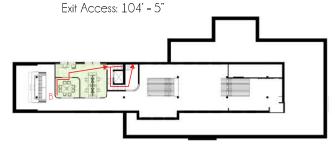
## CODE SUMMARY



THIRD FLOOR // SCALE: 3/128" = 1' - 0"

R-1

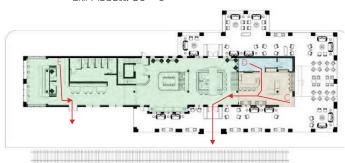
Route A: Common Path of Travel: 30' - 4"



SECOND FLOOR // SCALE: 3/128" = 1' - 0"

В

Route B: Common Path of Travel: 40' - 0" Exit Access: 80' - 3"



FIRST FLOOR // SCALE: 3/128" = 1' - 0"

M

Route C: Common Path of Travel: 32' - 8"

Exit Access: 77' - 10"

A-2

Route D: Common Path of Travel: 48' - 7" Exit Access: 99' - 9"

A-3

Route E: Common Path of Travel: 28' - 4" Exit Access: 30' - 4"

### CALIFORNIA BUILDING CODE 2016 (VOL 1)

Adopts with Amendments: IBC 2015

Total Square Feet:	6,543 SF
First Floor:	4,853 SF
Mezzanine:	584 SF
Second Floor:	1,106 SF

Outdoor Lounge Square Feet: 4,000 SF

Occupancy Type: Mixed-Use

A-2 (Restaurants, Cafes & Commercial Kitchens)

A-3 (Waiting areas in Transportation Terminals)

B (Business)

M (Mercantile) R-1 (Short-term hotels)

Occupant Load: 279 people Waiting Areas (15g) 252

Mercantile (60g) 11
Storage (200g) 1
Sleeping Areas (120g) 9
Commercial Kitchens (200g) 1
Business (100g) 5

Common Path of Travel

A, M 75' Sprinklered
R 75' Sprinklered
B 100' Sprinklered

Exit Access Travel Distance:

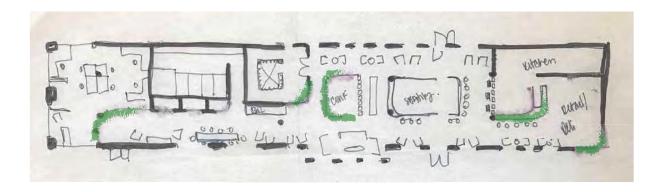
A, R, M 250' Sprinklered
B 300' Sprinklered

#### CALIFORNIA PLUMBING CODE 2016

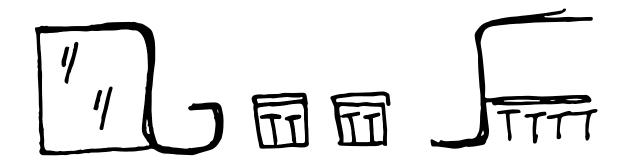
A, M, B,: 2 Men + 4 Women = 6 Fixtures

R-1: 1 Fixture/Room

# INITIAL CONCEPT SKETCHES

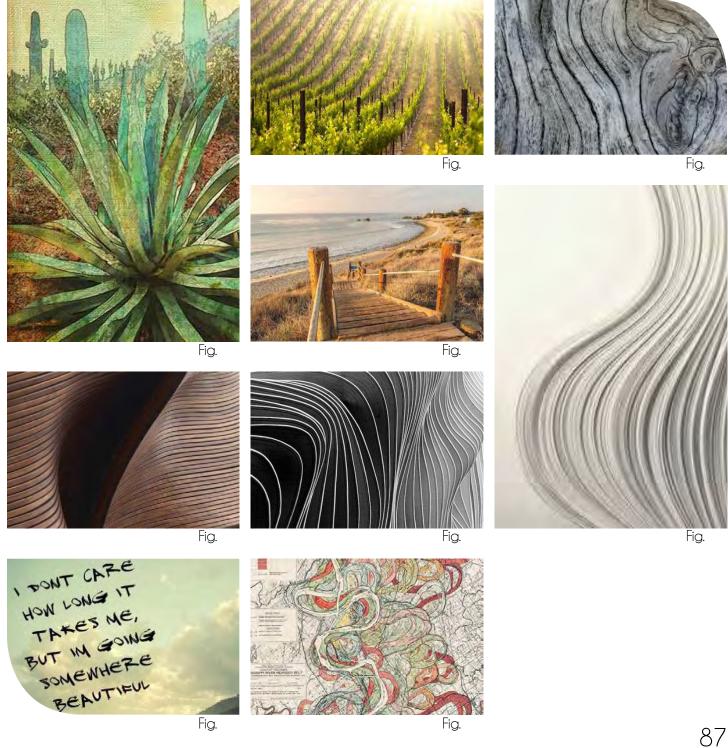


BLOCKING SKETCHES



PARTI + EXPRESSION SKETCH OF CORE COMMUNAL UNIT

# DESIGN INSPIRATION



## DRAWINGS

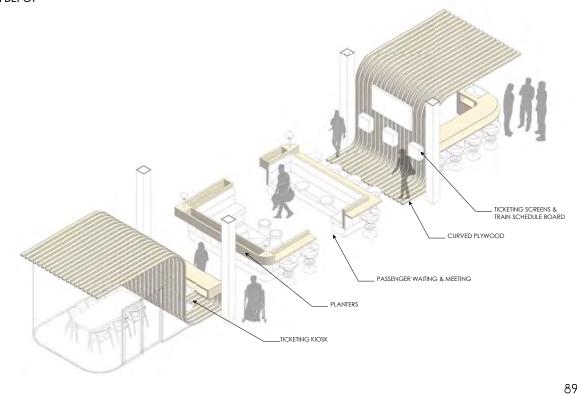
#### SANTA BARBARA TRAIN DEPOT

As mentioned, the concept behind the train station is that of brining communities together. Created as a modular form, which could be utilized in various train stations along the Coast Stalight route, or even across the country, the curved plywood structure provides opportunities for a number of purposes within the singular form.

In this particular expression, the curved plywood creates spaces for meeting, ticketing, waiting and working, as well as food and beverage.

Planters are incorporated to add privacy in moments, such as between the main ticketing klosk and the seating areas Incorporating nature also helps soften the acoustics within the space.

Ticketing is offered through both digital, touchscreen and ticketing agents on either side of the communal waiting/working zone. Display screens for updated departure times, travel alerts and general announcements are installed at each ticketing area. The digital ticket machines also provide wayfinding assistance for the train station (in multiple languages).



SCALE: NTS

Ο.

### FIRST FLOOR PLAN

Focused on the curved plywood form within the middle of the space, the first floor plan is comprised of a series of zones:

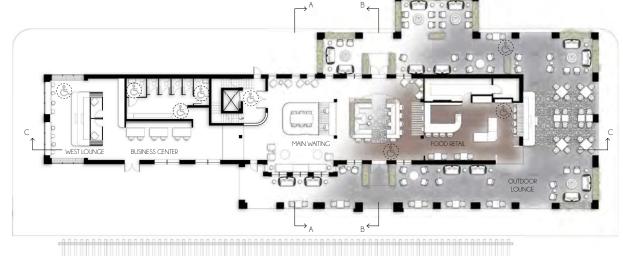
- West Lounge + Business Center
- Main Hall
   Forage (Food Retail)
- Outdoor Lounges

Another design goal was to better integrate outdoors with indoors, which was achieved through improved seating zones, installing sliding door and window systems within the food retail zone, and planting local fauna throughout the space.

Overall, the stronger connections between outdoor and indoor areas creates a unified space for various activities to occur.

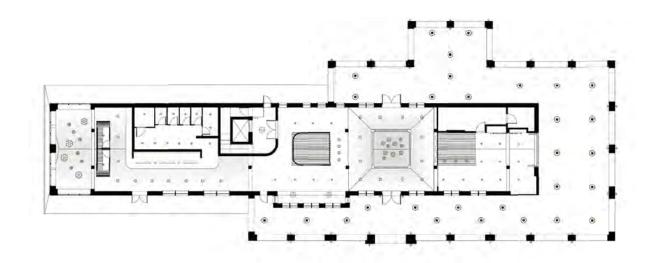
WEST LOUNGE + BUSINESS CENTER: Provides opportunities for printing and business needs, meeting spaces, work surfaces, phone rooms and tiered seating (with possibility to reserve for events)

FORAGE: Provides variety of pre-assembled deli sandwiches, salads and snacks using locallysourced ingredients. Local beer and wines are also available on tap from the full-service coffee



SCALE: 1/16" = 1' - 0"

# REFLECTED CEILING PLAN FIRST FLOOR

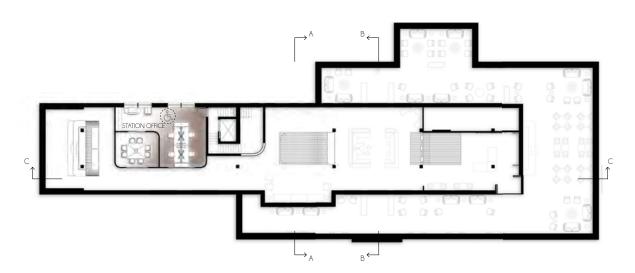


93

SCALE 1/16" = 1'-0"

## **MEZZANINE FLOOR PLAN**

Amtroik support offices have been relocated to the newly constructed mezzanine level (584 SF), accessed via key card from the stainwell.



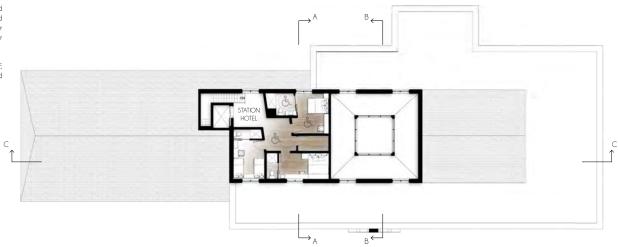
95

SCALE 1/16" = 1'-0"

## SECOND FLOOR PLAN

Utilizing the top floor of the station for added privacy, three micro-suite hotel rooms were added to offer last minute hotel solutions for passenger who were only commuting for an evening or missed their train.

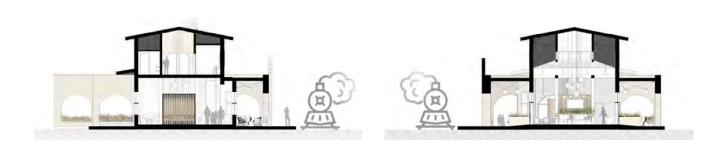
The guest rooms are all between 150 - 200 SF, with a queen accessible unit, a double twin and single king options.



97

SCALE: 1/16" = 1'-0"

## SECTIONS





99

SCALE: 1/16" = 1'-0"



TICKETING + WAITING PERSPECTIVE



FOOD RETAIL PERSPECTIVE



WEST LOUNGE PERSPECTIVE

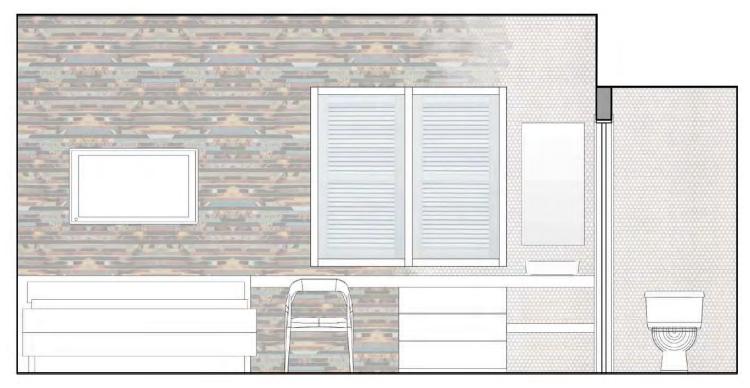


OUTDOOR CAFE SEATING PERSPECTIVE



OUTDOOR LOUNGE PERSPECTIVE

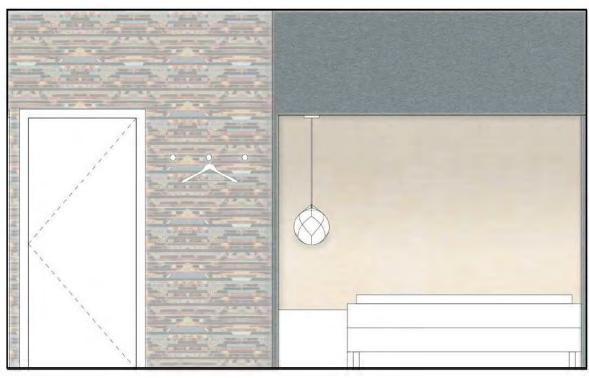
# **GUEST ROOM ELEVATIONS**



KING ROOM SOUTH WALL SCALE: 3/8" = 1' - 0"

In order to maximize the square footage of the guest rooms, integrated millwork solutions were designed to combine guest storage, desk and bathroom wash basin needs.

Materials for the guest rooms were fairly consistent from room to room; however, different wallcoverings were selected to give each room a unique feel.



KING ROOM NORTH WALL SCALE: 3/8" = 1' - 0"



DOUBLE TWIN ROOM SOUTH WALL SCALE: 1/4" = 1' - 0"



DOUBLE TWIN ROOM WEST WALL SCALE: 1/4" = 1' - 0"

## **MATERIALS**

Continuing with the expressions of California Modernism and use of natural finishes as seen within train, the palette for the station explores these concepts while also connecting with more bohemian spirit of the Southern California area.

Finishes feature a variety of textures and patterns to add vibrancy and excitement to an otherwise calm color palette (primarily achieved through soft greens) and plant life.

In contrast to the train, which featured primarily built-in furniture options, the furniture selections for the station featured a variety of styles to add to the overall eclecticism of the space. Furniture manufacturers included Bernhardt Design, Kettal and Allemuir.

Common materials used within the train include:

- · Ann Sacks Mixare Floor Tiles
- · European Finished Plywood
- bent Tempered Glass

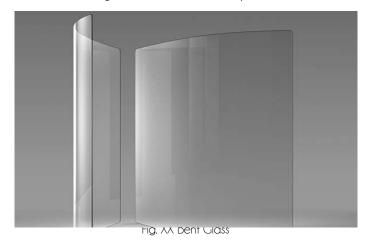
The inclusion of natural materials also relates back to the research in that they help create a space that better 21st century nomads can connect with, thus forming feelings of place attachment, and therefore becoming more comfortable within the environment.

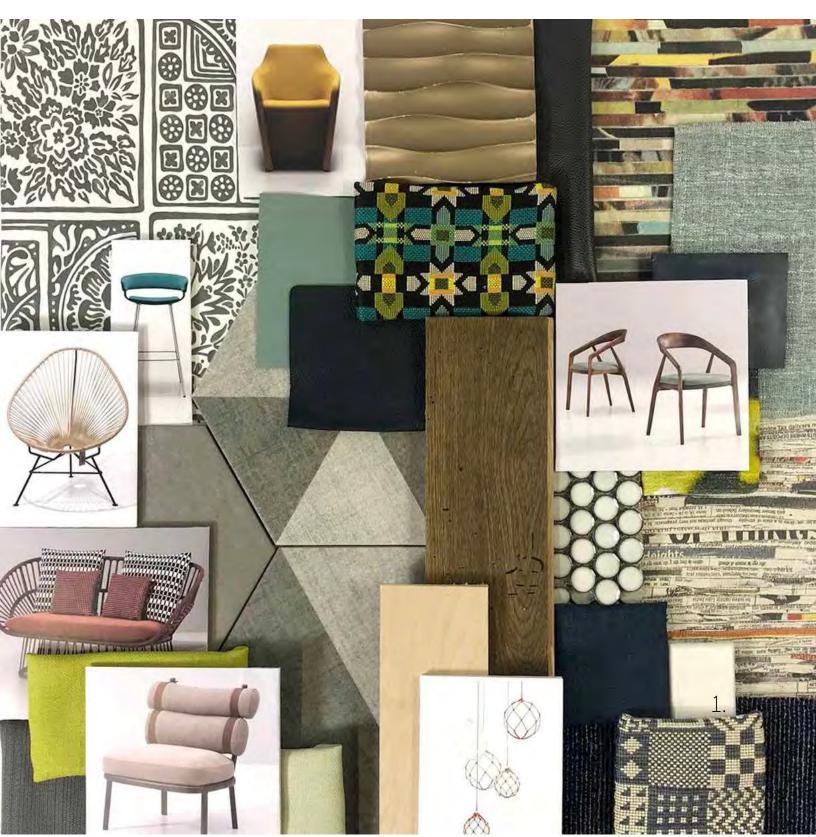


Fig. XX Ann Sacks Mixare Tile

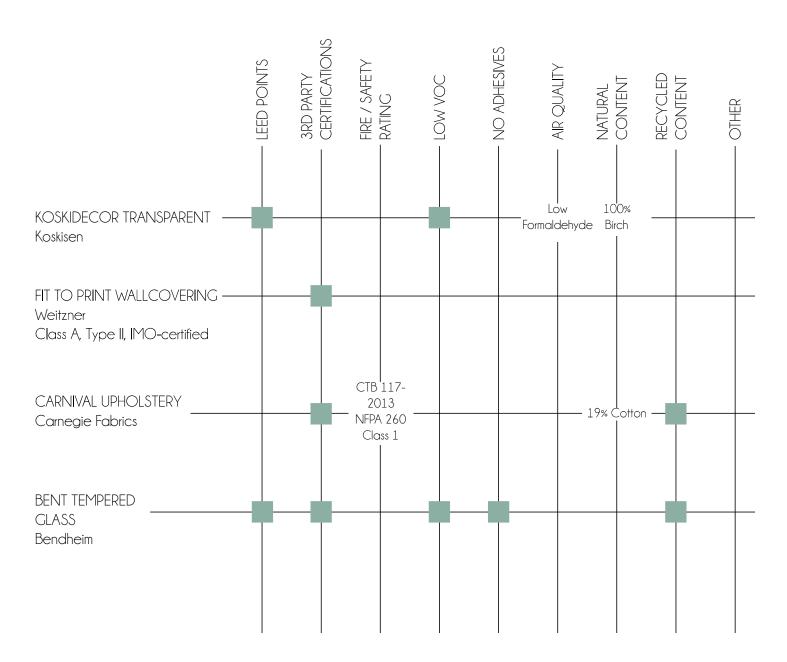


Fig. XX KosikDecor Finished Plywood





MATERIALS PALETTE



MATERIALS MATRIX

## SUSTAINABILITY + LEED

#### SUSTAINABILITY + LEED CONSIDERATIONS

Although the train station, unlike the train, is eligible for LEED certification, the focus of the project was on creating a more modular approach to creating areas for waiting, ticketing, working, etc within a train station. Sustainable considerations are found primarily within materiality; however, overlap with LEED credits still applies.

**Sustainable Sites:** The inclusion of plant life was essential to the design scheme of the train station - providing privacy and sound attenuation in various zones throughout the site - and also overlaps with ideas promoted within the SS credit category.

Water Efficiency: Low-flow fixtures that reduce total water consumption by 20% are selected. According to California Plumbing Code 2016, certain fixtures and fittings are required to meet heightened standards in regards to sustainability.

Material + Resources: Materials selected for the station, as in the train, consist of natural materials and recycled content. Waste management practices for the space include adhering to California's Mandatory Commercial Recycling Law. Within the cafe, alcohol available from the bar is served via taps and sustainable food packaging materials are used to reduce food-service waste.

Indoor Environment Quality: Though windows were primarily kept as existing, walls were expanded within the space to improve opportunities for natural lighting. In some areas, however, openings were enlarged to maximize indoor-outdoor connections and to provide natural ventilation for heating and cooling purposes.

## **APPENDICES**

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### **APPENDIX A:**

#### POTENTIAL DESIGN PRECEDENTS

#### Commercial:

Co-Living Projects (Various Locations)

#### Hospitality:

The Pop-Up Hotel (Pink Cloud) (Conceptual Project)

Sleeping Around (Antwerp, Belgium)

#### Museum:

The Nomadic Museum (Shigeru Ban) (New York, NY)

#### Other:

buBble (MMASA Studio) (Conceptual Project)\*

A-Kamp47 (Malka Architecture) (France)\*

Tent Village (Dré Wapenaar) (The Neterlands)\*

Urban Camping (Import.Export Architecture)

#### Retail:

Östermalm Market (Tengbom) (Stockholm, Sweden)\*

Paper Island (Copenhagen, Denmark)\*

#### Residential:

The SHED Project (Studio Bark) (London, UK)\*

Recreational Vehicles / Tiny Homes

<sup>\*</sup> Discussed in the literary review

### APPENDIX B: PRECEDENT STUDY SELECTIONS LITERARY REVIEW









### **APPENDIX C:**

#### LUXURY TRAIN PRECEDENTS

Separate from the precedents explored in the Literature Review (Tent Village, A-Kamp-47, the SHED Project, among others), other projects became relevant once the site was realized to help develop a program that better suited train hotel concept.

Train travel has been a form of transportation since the early  $1800s^1$ , and in the 1830's, sleeper cars were introduced to provide the opportunity for passengers to enjoy "hotel" accommodations for cross-country travel.<sup>2</sup>. In 1883, the Orient-Express introduced the concept of luxury train travel, and today, hotel companies such as Belmond and Cruise Train, capitalize on the same concept of providing high-end train accommodations.

Further analysis of three particular trains - the Shiki-Shima, Seven Stars and Twilight Express in Japan -- provided insight to the basic layout structure and amenities offered within working luxury trains.

<sup>1 &</sup>quot;Train History - Railroad and History of Trains," accessed February 15, 2018, http://www.trainhistory.net/.

<sup>2 &</sup>quot;RailsWest.Com Pullman Sleeping Cars Add Comfort To Travel," accessed February 15, 2018, http://www.railswest.com/pullman.html.

#### SHIKI-SHIMA1

Luxury Sleeper Train 65 MPH (110 KPH) 34 Guests

#### **SLEEPER CARS**

17 Rooms Standard Suites (Fold-out sofa beds & bathrooms) Shiki-Shima Suite (Two-level loft with living room)

#### **AMENITY CARS**

(2) Observatory Cars Lounge Car Dining Car



Fig. 8 Shiki-Shima Dining Room



Fig. 9 Shiki-Shima Observatory Car



Fig. 10 Shiki-Shima Standard Suite

<sup>1</sup> Japan's Spectacular Train Suite Shiki-Shima Is Like None Other," DOGOnews, accessed February 18, 2018, DOGOnews.



Fig. 11 Seven Stars "Blue Moon" Lounge



Fig. 12 Seven Stars Guest Room



Fig. 13 Seven Stars "Blue Moon" Lounge

#### KYUSHU SEVEN STARS TRAIN<sup>1</sup>

Luxury Sleeper Train Seven Cars 30 Guests

#### **SLEEPER CARS**

14 Unique Guest Rooms Standard Suite (3 per car) Deluxe Suite (2 per car)

#### **AMENITY CARS**

"Blue Moon" Lounge Car "Jupiter" Dining Car

<sup>&</sup>quot;Cruise Train Seven Stars in Kyushu Japan's First Cruise Train, the Luxurious 'Seven Stars in Kyushu," accessed February 18, 2018, http://www.cruisetrain-sevenstars.com/.

### **APPENDIX D:**

## CASE STUDY ARLO SOHO, NEW YORK, NY

After establishing the Superliner Train and Santa Barbara Train Station as the intended sites for the project, Arlo SoHo was decided upon for a case study primarily due to its micro-hotel style. According to hotel staff, the Arlo SoHo strives to offer guests the opportunity to "live like a local" in small, well-planned rooms (to optimize square footage) with access to a variety of communal spaces allowing guests to create their own experience.

Micro-hotels maximize the experiential qualities of hotel rooms despite having a minimal footprint. With room sizes around 150-160 SF, micro hotels feature guest rooms described as "intricately designed custom layouts with highend finishes."

<sup>1 &</sup>quot;The Rise of Micro Hotels in the U.S. Hospitality Market," accessed February 11, 2018, Faithful+Gould.



Fig. 14 Arlo SoHo Queen Bed Room



Fig. 15 Arlo SoHo Queen Room with Terrace



Fig. 16 Arlo SoHo King Room

#### **ABOUT ARLO**

Guest Rooms: 150-175 SF 325 Room Hotel

#### **TARGET AUDIENCE**

Young professionals Business travelers Europeans Digitally minded Fashion oriented

#### **OBSERVATIONS**

#### Arlo Liquor Bar ---

- Lockable, Sliding Cabinet Doors (enable bar space to be used as work lounge during the day).
- Mixed bar & lounge seating
- Lots of outlets
- Transit screen with events, weather and transportation updates

#### Workspaces ---

- Sliding partitions to block off for private meetings
- Rentable spaces (3-upstairs, 1-downstairs)
- Consistent theme

#### Overall --

- Guests enjoy the experiential aspects of the coordinated activities
- Attracts more "hip" clientele
- Good place for professionals to touch down

#### **COMMON COMPLAINTS**

- No room service
- Guest room size

#### **PROGRAMMING**

#### Public --

- Lobby
- Bodega
- Lobby Store
- "Living Room" Lounge
- "The Library" Workspace
- "Suites"
- "The Courtyard"
- Lobby Bathroom
- Arlo Liquor Bar
- Good Story Bar
- Harold's Meat + Three
- Open Kitchen

#### Guest Rooms --

- King
- Queen
- Queen + Terrace
- Twin
- Two Twin + Terrace
- Bunk

#### Back of House --

- Restaurant Kitchen
- Restaurant BOH
- Restaurant Janitorial
- Restaurant Storage
- Good Story Storage
- Arlo Liquor Bar Storage
- Staff Room w/ lockers
- Office
- Housekeeping



Fig. 17 Arlo SoHo City Queen floor plan



Fig. 18 Arlo SoHo City Terrace Queen floor plan



Fig. 19 Arlo SoHo Twin Bunk floor plan

Fig. 20 Arlo SoHo Bodega



Fig. 21 Arlo SoHo Liqour Bar



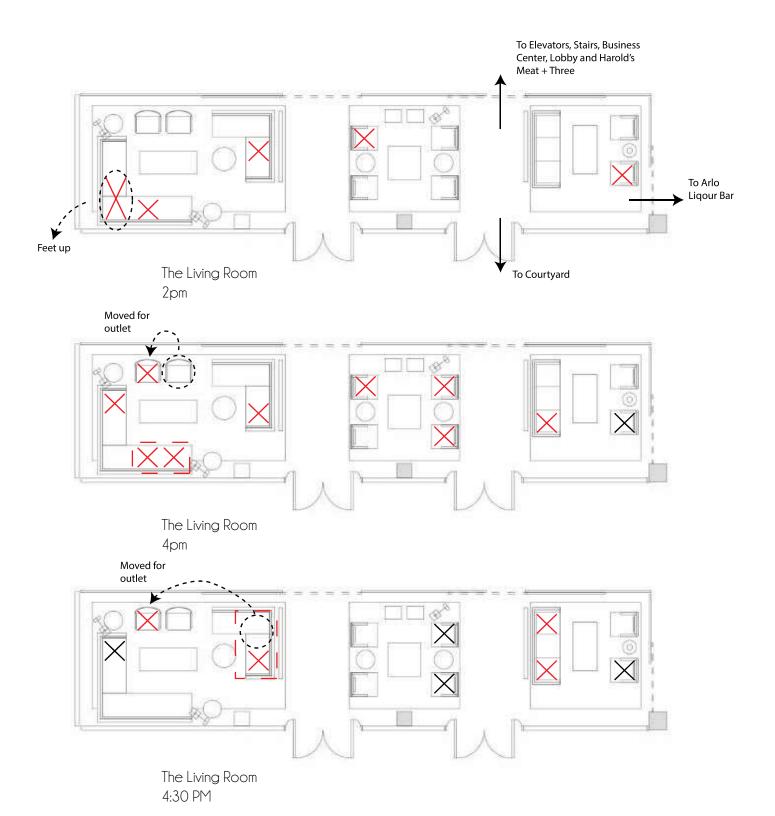
Fig. 22 Arlo SoHo "Suites"

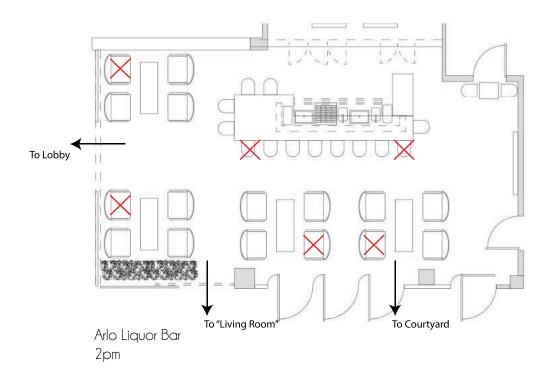
#### SITE OBSERVATIONS

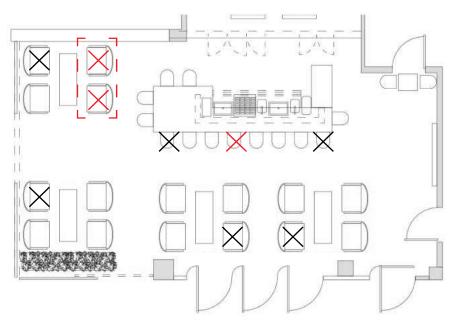
Beyond the layout and functionality of the guest rooms at Arlo SoHo, observing the common areas also proved to be beneficial. In order to fully cultivate an overall guest experience considering the size of the guest rooms, Arlo SoHo made an effort to maximize potential in the common spaces. This was achieved through offering a variety of spaces - from a typical hotel lobby (called "The Living Room") to business-oriented lounge spaces (called "The Suites") - for guests and non-guests to use throughout the day.

During a visit on January 19, 2018 between 1pm and 6pm, the following findings and diagrams mapping user activity were observed:

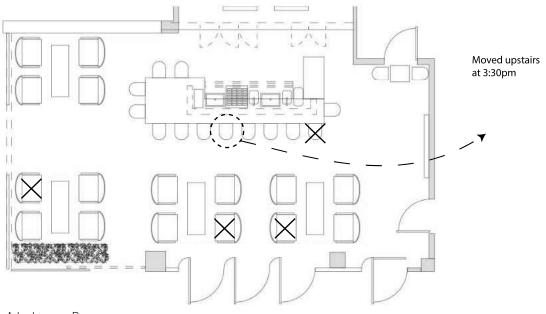
- Proximity to outlets was important throughout the day.
  Though Arlo SoHo did a good job of providing outlet
  access, people would move from their seats to another in order to better reach an outlet, if one was not
  already available.
- As the afternoon shifted, so did the activities taking place within the different spaces. Mid-day activity was primarily business related. Several groups were using the lobby/lounge spaces as touch down spaces for collaborative meetings. However, as the day progressed, more and more people began using the lobby and bar spaces socially.
- Unless working in a group, daytime users preferred to find private areas. Typically, this meant one person would sit in an area with four chairs, and people would prefer to not sit in the remaining three chairs unless no other option was available.



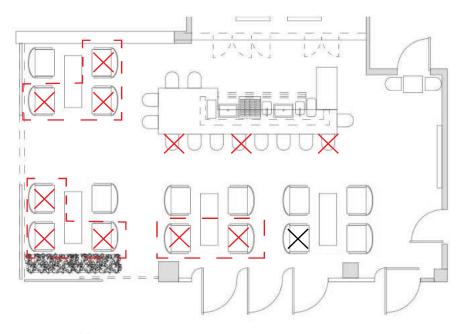




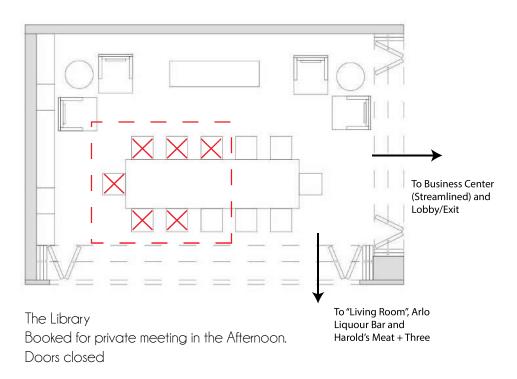
Arlo Liquor Bar 2:05 PM

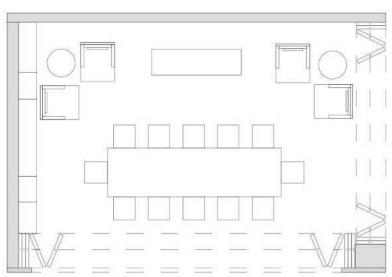


Arlo Liquor Bar 3:30pm

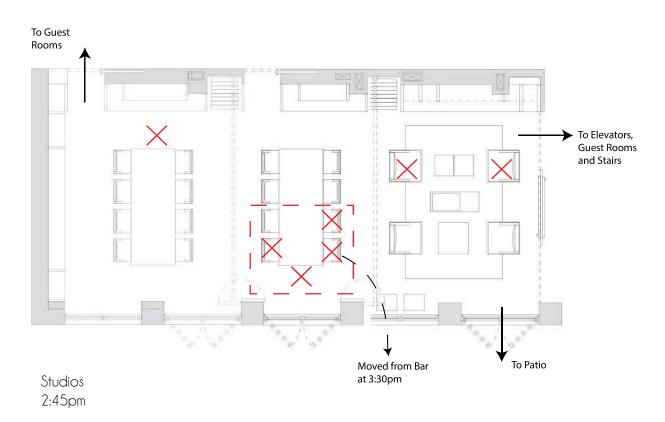


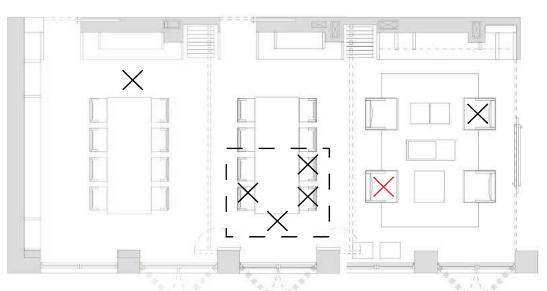
Arlo Liquor Bar 4:30 PM



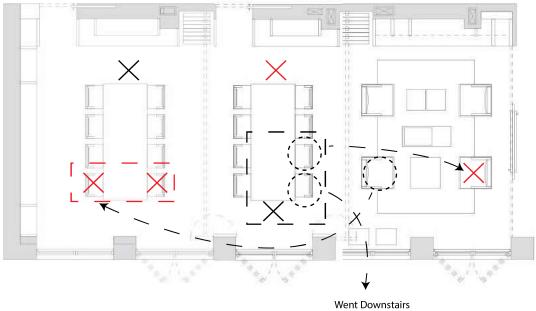


The Library After 4pm. Doors opened by staff

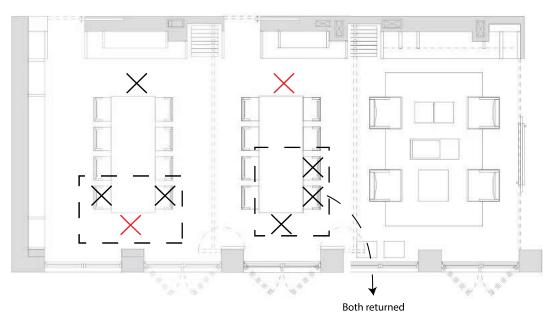




Studios 3:00pm



Studios 3:15pm



Studios 3:30pm

### **APPENDIX E:**

### HOTEL EXPERIENCE (CASE STUDY) SURVEY



Fig. 23 Arlo SoHo Lobby Seating



Fig. 24 Arlo SoHo "Library" Workspace



Fig. 25 Arlo SoHo Suites

#### SURVEY QUESTIONS

- What is your age? Gender?
- 2. How many times did you utilize hotel (or similar) accommodations last year?
- 3. Why are you typically in need of lodging accommodations (personal, business, etc)?
- 4. Rank the following in importance when considering a hotel? (1 being most important, 8 being least)

Amenities Decor Food
Location Price Personal Space

Quality

- 5. How important is the interaction with hotel staff during your check in/out?
- 6. How important is the interaction with hotel staff during your stay?
- 7. How would you rank the following accommodation types from most preferred to least (1 being most important, 8 being least)

Airbnb B&B Boutique Budget Campsite Hostel Luxury Mirco

- 8. Why would you stay at a hostel or AirBnb or other form of accommodation over a traditional hotel?
- 9. What are additional features or functional spaces that you wish hotels offered beyond basic amenities (comfier beds, air conditioning, etc)?

Coordinated Guest Experiences Enhanced work & lounge spaces Game Room Guest Kitchen Guest Laundry Gym

- 10. Have you ever stayed at a hostel before? What about hostel experiences do you like the most? Least?
- 11. Which room style are you most likely to stay in?

1-2 person w/ ensuite 1-2 person w/ shared 3-6 person (mixed) 3-6 person (gender) 6+ person (mixed) 6+ person (gender)

12. Other thoughts/opinions about hotels/lodging?

#### **CASE STUDY RESPONSES**

- People prefer luxury rooms at budget pricing
- People aren't necessarily concerned about privacy, but prefer not to stay at hostels
- People prefer 1-2 person bedrooms with an en suite, but if needed, are open to 3-6 person rooms
- AirBnb is preferred, typically, for personnel travel.

#### **HOTEL PRIORITIES**

- 1. Location
- 2. Price
- 3. Quality
- 4. Privacy
- 5. Amenities
- 6. Decor
- 7. Personal Space
- 8. Food

#### **HOTEL TYPE PREFERENCES**

- 1. Luxury
- 2. Boutique
- 3. Airbnb
- 4. Budget
- 5. B&B
- 6. Micro
- 7. Hostel
- 8. Campsite

#### **ADDITIONAL AMENITIES**

- 1. Enhanced work/lounge spaces
- 2. Guest kitchen
- 3. Gym
- 4. Guest laundry
- 5. Game rooms
- 6. Coordinated guest experiences

#### Hotel Preferences & Experiences

	,	/2 /s²	\  i.		and sector	go journe	National Property	so listeristi	e lientered	go Janes	st light light	o faire	  };		lite late	la l	light of the	late Let	la l	light for	No. of Street, or other party of the	/ //	gge <sup>r</sup> tent-en <sup>r</sup>	and the second	ga de prior	Ja Br. Ledi	A STATE OF THE PARTY OF THE PAR	•
Respo	ndent 1	28 Female	5-10		Location	Pios	Quality	Amenities	Décor	Personal Space	food	Privacy	8	9 Albrib	Boutique	Lucy	Budget 1	too	868 1	fodel	Campsite	Cym	Cenerally price or location (i.e. visiting more "senote" location where there are more Albribs than hatels).	Yes, not recently	Meeting fellow travelers Being about to find budget-friendly accommodations internationally.	Lack of privacy/personal space.  Generally lower quality.	1-2 person private + ensulte	
Respo	ndent 2	27 Female	10		Location	Pior	Quality	Amentities	Privacy	Personal Space	Decor	food	2	1 Boutque	Albrib	Budget I	Moo L	usuy	868 1	fodel	Compsite	Loundly	like Albrib's better because it's more private, the location and price are usually much better their a hotels.  I would stay at an Albrib's hen traveling outside of the country to tell safe over a hotel. With an Albrib, follows that lid most likely.	Yes	The food, but and the staff seemed very knowledgeable of things to do in the city	The location from the aliports. The hostels five stoyed in we've all for from the aliports	3-6 person rooms (nixed gender)	I like where ever firs staying to be clean and neat The staff to be listedly, but to leave me clone urises I need them. Comby back and pillows are always a huge pilus! I don't like when hatels add an extra fee for
Respo	ndent 3	29 -	1		Price	Quality	Location	Amentities	Privacy	Food	Penanal Space	Décor	5	5 Budget	Lucay	Aithrib I	Boutique - B	68	Miao I	fodel	Compsite	Cym	have an entire apartment hause to myself without wanying about my personal items.	No			Would not stay	pailing, especially when that's the only option for most of their guests.
Respo	ndent 4	63 Male	4		Price	Quality	Location	Amentities	Décor	Privacy	Food	Personal Space	1	3 Lousy	Budget	Mon i	Nibrib H	lostel	868 1	Boutique	Compute	Cym	oitarb	No			1-2 person private + ensulte	
Respo	ndent 5	30 Female	6		Location	Pice	Rivacy	Qualty	Food	Amenities	Personal Space	Décor	4	6 Albrib	Budget	868	Laury P	too	Boutique I	fodel	Compsite	Cym	Space to cook and relax	Yes	Cheap and easy	no pivacy, not confartable	1-2 person private + shared bath	hotels that offer environmental options for cleaning are always a stong plus with me
Respo	ndent 6	53 Male	3		Price	Quality	Privacy	Décor	Personal Space	Location	food	Amenities	9 1	0 Budget	Boutique	Mon .	Nêrb B	68	Compate 1	Locally	Hostel	Cym	yes	yes	Cheap	Communal		
Respo	ndent 7	37 Female	8		Location	Quality	Amenities	Price	Décor	Privacy	Personal Space	food	0	0 Boutique	Luxury	Budget	868 1	too	Albrib I	Compale	Houtel	Cym	Lack of availability of traditional hotel rooms	No			1-2 person private + ensulte	
Respo	ndent 8	30 Female	8		Pice	Location	Amenities	Qualty	Privacy	Décor	Food	Personal Space	2	3 Boutique	Luxury	Arbrio	368 8	udget	Hostel 1	Moo	Compsite	Cym	Pice and location and reason for the trip	No			1-2 person private + ensuite	Better consumer experince the better.
Respo	ndent 9	35 Male	10		Location	Price	Qualty	Pinacy	Décor	Food	Personal Space	Amenties	5	2 Albrib	Boutique	Luxuy	Budget (	Campsite	868 1	fodel	Mao	Coordinated Guest Activities	The personal experience. Being involved in the community and seeing how that ally less. Also a bettler place to bring bables and onlines than a hatel. Hotels aren't enally accommodating lowered bables and todders. Making space is nice with young ones.	Yes	The community	Comunity roooms	1-2 person private + ensite	For families alibiblis so much better or groups of guys wanting to go on tips together. Hatels are great for business tips and romantic getaways.
									Personal														I feel that it gives a more authentic experience. I also like having a littchen so I do not have to purchase all of my medis at a restaurant,					
	ndent 10	31 Female 29 Female	3	Secret	Location	Quality	Pice Location	Pavacy Amenities	Space	Amerities Personal Space	Décor	food		9 Aubrio 7 Budget	Boutique	Budget   Boutque	Mon A	ideach ideach				Loundy Cuest Richen Enhanced Lounge/Work Spaces	del, cate, etc.  For more room, if closer to location I want to be in	No Yes	Pior	Lack of privacy and feeling that belongings are safe	Would not stay 1-2 person private + ensulte	
												Personal														Clearliness and durn't people late at night are sometimes an issues. Also five had more safety concerns		
Respo	ndent 12	28 Female	4.5	Resonal	Pice	Quality	Location	Amerities	Décor	Food	Privacy	Space	6	7 Albrib	Budget	Hostel I	368 C	Compute	tuery 1	Soutique		Cuest Sichen Cuest Loundly Cym Cuest Sichen	Atnosphere, location, pilce	У	Cost and convenience	of hostels	enule	
Respo	ndent 13	37 Female	46	Butes	Location	Quality	Pice	Privacy	Space	Décor	Amerities	food		3 Boutique	Luxury	Budget	NBnb N	too	868 1	fodel		Enhanced Lounge/Work Spaces	for personal travel only and for budget purposes	No			Would not stay	
Respo	ndent 14	35 Female		15 Both	Quality	Pior	Pivacy	Location	Amerities	Personal Space	Discor	food	6	1 luxuy	Boutique	Aibib I	Micro B	68	Budget I	fodel		Cuert Loundy Machines Cuert Ritchen Enhanced Lounge/Islast	Alårå i good for group getavays. More common spaces, full litchens, etc.	No			1-2 person private + ensulte	
Respo	ndent 15	23 Fengle		11 Both	Location	Price	Amerities	Qualty	Physicy	Décor	Food	Personal Space	7	7 tunny	Boutique	Hostel I	368 /	dadii	Miao i	Cospile		Coordinated Cuest Activities Cuest Nitchen Enhanced Lounge/Work Spaces	A hastel is more accommodating to me as a young traveler, however an Aliftish gives more of an individualised and personal feeling to your stay.	Yes	Hostels are great when traveling alone not only because of the price but also because of the counties; interactions you are bound to have with other individual and group travellers.	Sharing a tolet and bedoom with sometimes 10+ people is never ideal.	3-6 person rooms (nixed gender)	
Respo	ndent 16	29 Male		Both - mainly 30 business	Location	Quality	Physicy	Amenities	Pice	Food	Personal Space	Décor	1	1 luxuy	Boutique	Mon I	Budget /	iibnb	868 1	fodel			If I was toweling to Europe, or was on a righter budget in the US	No			1-2 person private + ensulte	
Respo	ndent 17	23 Male		3 Personal	Décor	Quality	Amerities	Pice	Physicy	Personal Space	Location	food	6	1 linesy	Boutique	Mon i	NiBrib B	udget	868 1	fodel	Compsite	Cood gym, enhanced lounge/work spaces, game rooms, other pool	Pice	No	Pice	Room	1-2 person private + ensuite	Design  What about certain brands and why. For instance, Its a Hilton Diamond member (howe been for about 8 years now!) There are benefits
Respo	ndent 18	60 Male	25+	Both	Location	Qualty	Amerities	Pice	Décor	Personal Space	Pivacy	food	0	2 tosay	Boutique	Budget .	Nibrib B	68	Miao I	fodel	Conpsite		I wouldn't stay in either	No			Would not stay	that keep ne at Hillons and flust owings spend is about 50% per year. Brand alliance / awareness is important for a last of people.
										Personal												Guest Laundly Guest Ritchen Enhanced Lounge/Work Spaces	Aithriß is preferred due to lower cost paired with larger size and useful amenties (litchen, etc.) I have no interest in a hostel and				1-2 peson private +	
Respo	ndent 19	39 Male 30 Male		2 Personal 1 Personal	Pilvacy	Qualty	Location Pice	Pice	Décor	Space Personal	Anerites	Food		5 Albrib	868	Boutique 1				Sudget		Cone Rooms Cood gen	would not group the two	No			enule	
Respo	ndent 20	30 Male		1 Personal Both - mostly	Pilvacy	Quality	Pice	Location	Amerities	Space	hood	Décor	4	3 Lousy	Budget	Boulique	1 546	too	Compate i	Nibrib	Hostel	Oher Welhess	More afordable	No		Everyone is usually so	Would not stay  1-2 person private #	I always search Alibnib and cute hotels first if the pricing is sinilar but the hotel has a ger, I almost
Respo	ndent 21	32 Male	20+	personal	Location	Pior	Amerities	Décor	Quality	Space	Pivacy	food	6	8 Loury	Aibrb	Boutque 1	Budget B	68	Miao I	flodel		Cood gym More sound proofing so you don't hear people upstain/in the hall	Price for what you get e	Yes	Meeting other travelers	tveyone is usually so young/partying	1-2 person private + ensuite	picing is similar but the hotel has a gen, I almost always book the hotel.
Respo	ndent 22	43 Fensie		15 Personal	Pice	Location	Pliracy	Qualty	Amerities	Space	Décor	food	5	5 Budget	Aibrb	Cospile	Lacory B	arique	Micro I	368	Hostel	Pet tilendly options Coordinated Cuest Activities Cuest Laundly	Rice	No			Would not stay	The US needs of inclusive hotel/resorts  A lot of things can affect my decision when
Respo	ndent 23	32 Female		4 Personal	Qualty	Pice	Location	Amenities	Décor	Food	Privacy	Personal Space	2	1 lussy	Boutique	Budget .	Albrib B	68	Campste 1	Moo	Houtel	Cuest Nichen Erhanced wat/founge areas Pool Coold gym	Alvacy, location, price, amenities. Chose one over a hatelfor wedding	Yes	Activity room with gramms, food	Staff Interaction	1-2 person private + ensuite	choosing or staying at a hotel but it can also vary for reasons lin travelling or the location so i answered the best i could
Respo	ndent 24	55 Female		9 Both	Location	Price	Qualty	Amenities	Pivacy	Décor	Pesonal Space	food	7	5 tunay	Albrib	868	Boutique B	udget	Micro	Compalte	Hostel	Guest Michen Enhanced Lounge/Work Spaces	Over you a unique experience while also being budget friendly.	No	The over all atmosphere was very fur and		1-2 person private + ensulte	l appreciate cleanliness and well appointed liness.
Respo	ndent 25	23 Fensie		3 Personal	Location	Pice	Qualty	Privacy	Personal Space	Food	Anerites	Décor	8	8 Aldrib	Hostel	Budget I	368 C	anpole	Boutique I	Louey	Moro	Cuert Loundly Cym Enhanced Work/Lounge Spaces Enhanced lounge/york spaces	Hodels help you to meet other people with sinitar interests as well.  Altanb give operatinity to interact with locals and find the real gens.	Yes	exciting They i couraged interactions between guests and hadn't lots of amentiles other than ju- sleeping corders	Not having at least a lockable at locker as part of the room price to store your things	3-6 person rooms (nixed gender) 1-2 person private *	Having activities/places that connect the visitors with one another
Respo	ndent 26	46 Male	75 nights	Buiness	Qualty	Price	Location	Amenties	Pavacy	Space	food	Décor	4	3 luxuy	Budget	Boutique	868 1	too	Compate i	Nibrb	Hostel	Cym Facilles Cym Facilles	Majbe AifirB for pleasure but never work. Never Hostel	No			enuite  1-2 person private +  1-2 person private +	
Respo	ndent 27	21 Female		6 Personal	Amenities		Food		Space	Privacy	Pice		3	3 Moro	868	Compute		udget	Lucy			Cuest Nitchen Cym Facilities		Yes	Connunity	Noise	enuite enuite	
Respo	ndent 28 3	) Fensie	4	Personal	Quality	Location	Décor	Pice	Pesonal Space	Food	Anerities	Privacy	9 1	O luxury	Boutique	Arbrio I	Moo B	udget	868	Compalie		Ethanoed Lounge/Work Came Rooms	No houtel Alibrib II staying w/ group or to live like local	No			Would not stay	Beds must be contactable and clear. Showers
Respo	ndent 29	Fensie	5	Personal	Location	Pice	Amerities	Pilitacy	food				3	3 luxuy	868	Albrib I	budget fi	outique.	Miao I	fodel	Compsite	Cuest Richen Came Roon Coordinated Cuest Experience Cuest Laundw	Id stay of an Albab Fit includes the kitchen and I can cook my own tood while lin away from home	No			Would not stay	don't need to be fancy they just need to be clean
Respo	ndent 30	22 Female		3 Personal	Pice	Location	Qualty	Pesanal Spac	oe Plivacy	Amerities	Décor	Food	8	8 Aibib	Boutique	Hostel I	Maio B	68	Budget I	usuly	Compsite	Cuest Nichen Cuest Loundy	More options, cheaper, less touristy areas	Yes	Cheap, neet other people	Little privacy, share bathooms	gender)	
Respo	ndent 31	27 Female		2 Personal	Pice	Location	Plivacy	Personal Space	or Qualty	Décor	Food	Anerites	3	3 Boutique	Albrib	Compale	868 L	usury	Hostel 1	Noo		Enhanced Lounge/Workspace Came room	Albrib	No	freedon	Security Concerns	1-2 person private + ensulte	

### **APPENDIX F:**

#### **ORIGINAL DESIGN INTENT**





Detail-focused design will be the driving force for both the train and train station aspects of the project. This would allow for the opportunity to maximize the potential of the space despite size limitations while also answering the design problems central to the concept of 21st century nomads.

As seen at Arlo SoHo, detail-oriented planning allowed for fully-utilized spaces in the guest suites, where square footage was limited to 150-175 square feet, and also the common areas where the user experience was continually taken into consideration.





Examples of this from the Arlo SoHo case study included multi-purpose furniture (bed frame and guest storage), adaptable furniture that better works with the micro-sized rooms (closet pegs and fold-top desk), and integrated access for outlets.

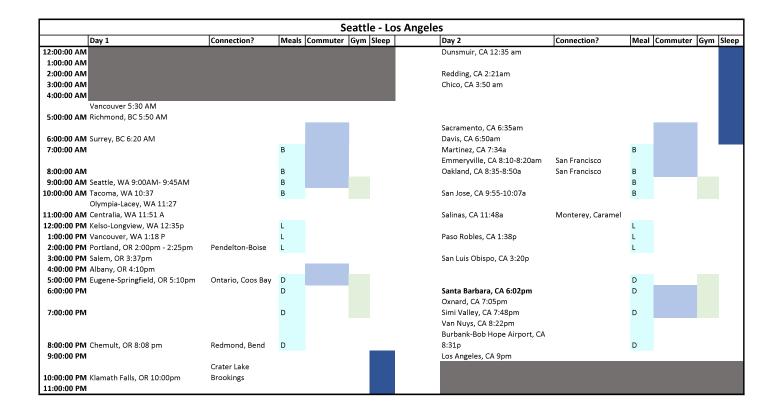


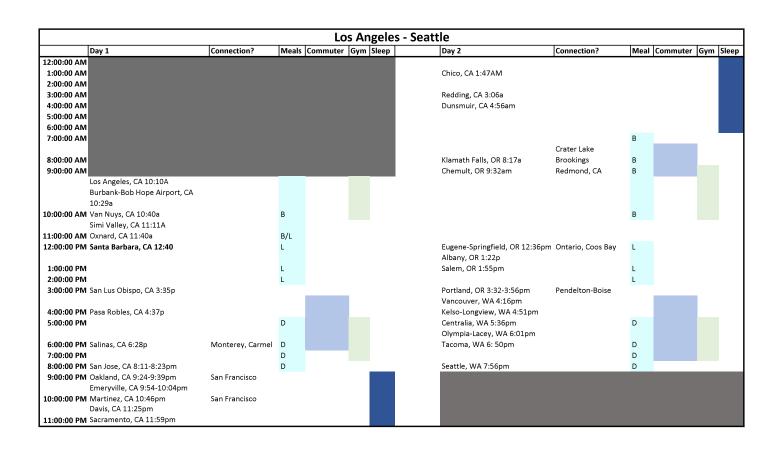


Fig. 45 -50 Arlo Soho Details

### **APPENDIX G:**

### TRAIN SCHEDULE SEATTLE TO LOS ANGELES





### **APPENDIX H:**

#### **AMTRAK COAST STARLIGHT STOPS**

# LOS ANGELES, CA POPULATION (2016) 3,976,322

25-34 YEAR OLD'S REPRESENT 15% OF THE POPULATION 51% FEMALE/49% MALE

LOS ANGELES UNION STATION 800 N Alameda St. Los Angeles, CA 90012

TOP COMPANIES<sup>1</sup>

Spacex

Blizzard Entertainment

HausteLook

RiotGames

Google

Technicolor

Beachbody LLC

Hulu

Activision

Snap Inc.

TOP ATTRACTIONS Disneyland

Griffith Park & Observatory Hollywood Walk of Fame

Hollywood Sign

Rodeo Drive



Fig. 51 Los Angeles

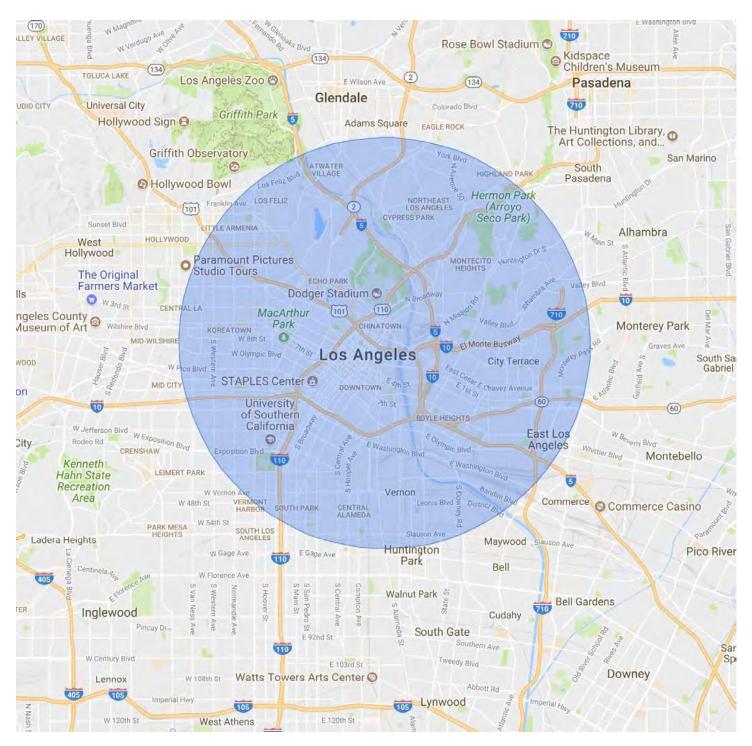


Fig. 52 Superliner Observation Car



Fig. 53 Coast Starlight Route

Built-In Los Angeles. https://www.builtinla.com/2017/31/los-angeles-top-100-tech-companies-2017



## SANTA BARBARA, CA

POPULATION (2016) 91.930

20 -39 YEAR OLD'S REPRESENT 32% OF THE POPULATION  $^{1}$  50% FEMALE / 50% MALE

SANTA BARBARA DEPOT 209 State St. Santa Barbara, CA 93101

TOP COMPANIES
University of California Santa Barbara\*
The Ritz-Carlton Bacara Resort & Spa

TOP ATTRACTIONS
The Funk Zone
Lotusland
Stearns Warf
The Santa Barbara Bowl
Summerland's Lookout Park

TOP EATS & DRINKS
The Funk Zone
The Lark
McConnell's Fine Ice Cream
Brophy Bro's
Pure Order Brewing

\* UCSB's Entrepreneurial Program is highly ranked, beating out competitor programs at schools such as Harvard University, Northwestern University, the University of Pennsylvania & the University of Southern California<sup>2</sup>

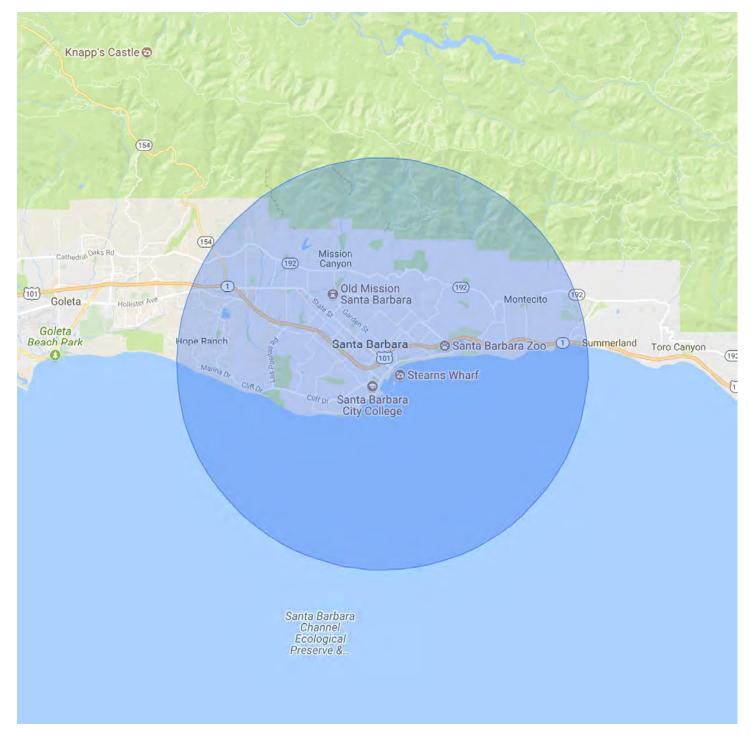






<sup>1</sup> http://www.towncharts.com/California/Demographics/Santa-Barbara-city-CA-Demographics-data.html

<sup>2</sup> Forbes.com "Startup Warks: US Santa Barbara Beats Wharton & Harvard. https://www.forbes.com/sites/johngreathouse/2014/09/14/startup-wars-uc-santa-barbara-beats-wharton-and-harvard/#720b-273fc064



# OAKLAND, CA POPULATION (2016) 420,005

20 - 39 YEAR OLD'S REPRESENT 35% OF THE POPULATION 1 51% FEMALE / 49% WOMEN

OAKLAND JACK LONDON SQUARE STATION 245 Second Street Oakland, CA 94607

TOP COMPANIES Kaiser Permanente The Clorox Company Sungevity Pandora Radio Ask Media Group

TOP ATTRACTIONS Angel Island Jack London Square Redwood Regional Forest

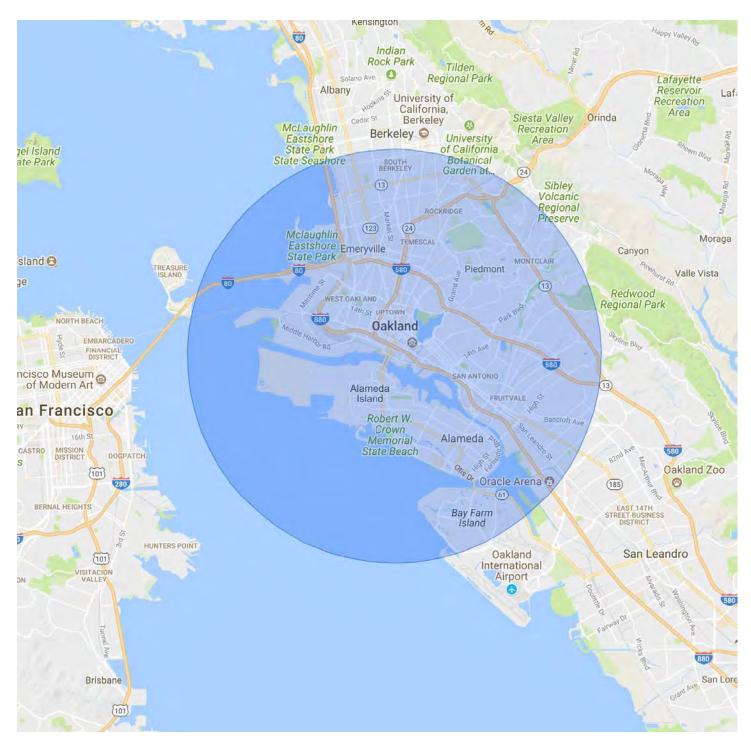
TOP EATS & DRINKS Scott's Seafood Restaurant Brown Sugar Kitchen Nido

Distance to San Francisco: 8 miles









# PORTLAND, OR POPULATION (2016) 639,635

20 - 39 YEAR OLD'S REPRESENT 36% OF THE POPULATION 50% FEMALE / 50% WOMEN

PORTLAND UNION STATION 800 NW Sixth Avenue Portland, OR 97209

TOP COMPANIES

Intel

NIKE, Inc

Colombia Sportswear Company

Xerox

TOP ATTRACTIONS

Oregon Zoo

Oregon Museum of Science and Industry

International Rose Test Garden

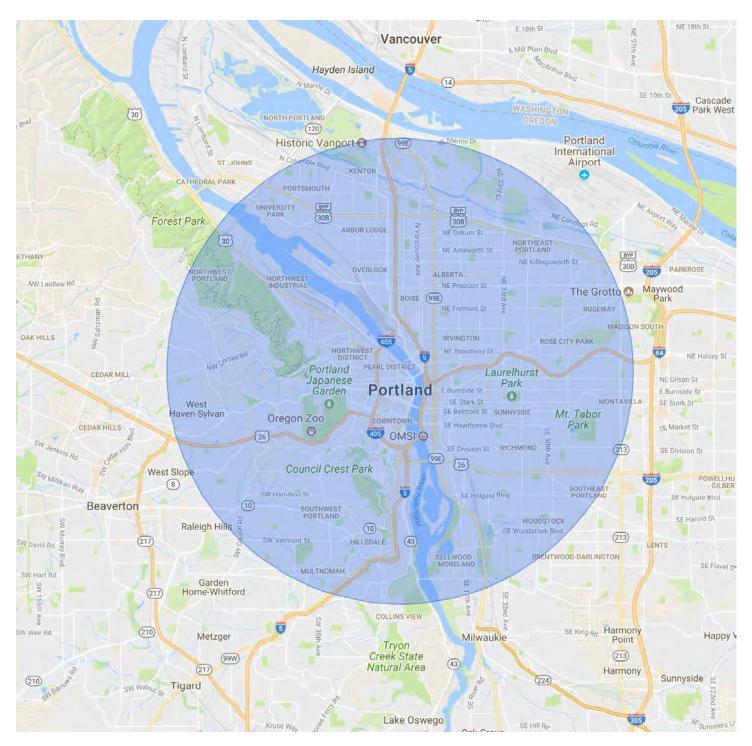
TOP EATS & DRINKS

Coquine Le Pigeon Castagna Nodoguru









# SEATTLE, WA POPULATION (2016) 704,358

20 - 39 YEAR OLD'S REPRESENT 39% OF THE POPULATION 1 50% FEMALE / 50% WOMEN

PORTLAND UNION STATION 401 S Jackson St Seattle, WA 98104

TOP COMPANIES T-Mobile USA Zillow Group Rover.com

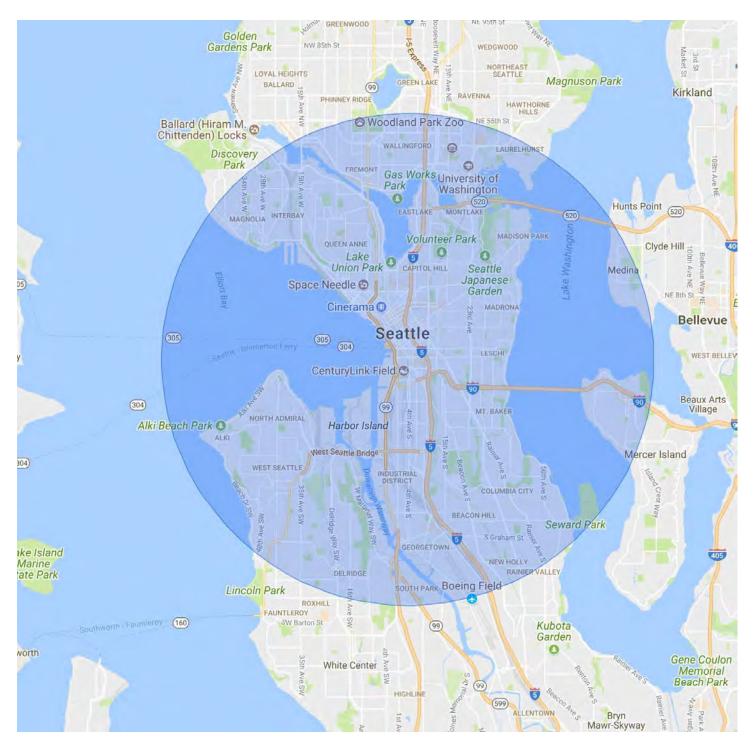
TOP ATTRACTIONS Space Needle Chihuly Gardens & Glass Puget Sound Pike Place Market Gum Wall

TOP EATS & DRINKS Coquine Le Pigeon Castagna Nodoguru









# **APPENDIX I:**

## TRAIN PROGRAM

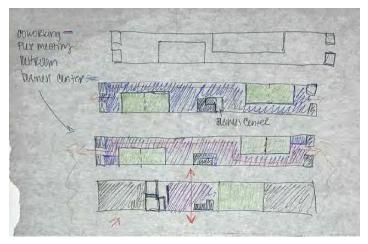
		Train Hotel	Programming				
Car#	Car Type	Programming	SF	QTY	Total SF	Up/Down	Pub <b>l</b> ic?
	Power						
	Power						
1	Commuter / Baggage	Quiet			1500		
		Phone Rooms	75	2	150	U	М
		Relaxation Pods	60	4	240	U	М
		Seating			450	U	Н
		Checked Baggage	300	1	300	D	L
		Restrooms	20	2	40	D	М
		Circulation	20%	-	240	U/D	Н
		Luggage Hold	50	1	50	U/D	М
				Total	1470		
2	Commuter	Loud			1550		
		Bike Storage	50	1	50	D	М
		Seating	500	1	500	U	Н
		Restrooms	20	3	60	D	М
		Circulation	300		300	U/D	Н
		Movie/Game Lounge	300	1	300	D	М
		Lounge Seating	250	1	250	U/D	М
		Handicap Restroom	40	1	40	D	L
				Total	1500		
3	Co-Working				1500		
		Business Center	50	1	50	D	Н
		Workspace	600	1	600	U	Н
		(2) Small meeting room	90	2	180	D	М
		Large meeting room	180	1	180	U/D	М
		(2) Phone Room	75	2	150	D	М
		Luggage Hold	50	1	50	U/D	М
		Circulation	20%	1	300	D	Н
		Restrooms	15	4	60	D	М
				Total	1210		
4	Gym				1500		
		(2) Changing Rooms	25	1	50	D	L
		Spin Bike Room	100	1	100	U	L
		Bike Storage	50	3	50	D	L
		(4) Restrooms	15	1	60	U/D	М
		(4) Showers	15	1	60	D	L
		Lounge	200	1	200	U	M

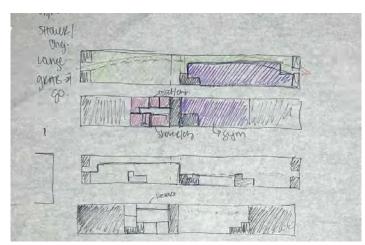
		Gym	600	1	400	U/D	М
		Grab & Go / Bar	400	4	200	U	Н
		Circulation	20%	-	300	U/D	Н
		Lockers	25	=	25	D	L
				Total	1445		
5	Lounge				1500		
		Lounge Bar	200	1	200	U	Н
		Lounge Seating	550	1	550	U/D	Н
		Coffee Cart	200	1	200	U	Н
		Bar Storage	200	1	200	D	L
		Circulation	20%	-	300	U/D	Н
		(2) Restroom	15	2	30	D	М
				Total	1480		
6	Dining				1500		
		Diner FOH	150	1	150	U	М
		Guest Seating	600	1	600	U/D	Н
		Kitchen	300	1	300	D	М
		Restrooms	15	1	30	D	L
		ADA	40	-	40	D	L
		Circulation	20%	-	300	U/D	Н
				Total	1420		
7	Sleeping				1500		
		Budget Sleeper - 4 Person Bunks	80	6	480	U	L
		(3) Restroom w/ shower	50	3	150	D	L
		Changing Room	50	1	100	D	L
		BOH Storage	40	-	40	D	L
		Circulation	20%	-	300	U/D	Н
		Staff Sleeping (4 person bunks)	80	2	160	D	L
		Lounge	200	1	200	U	М
		Staff Restroom	50	1	50	D	L
		Luggage Hold	100	1	100	U	М
				Total	1580		
8	Sleeping				1500		
		(3) QUEEN BR	120	3	360	U/D	L
		(5) Twin Bunk	100	5	500	U/D	L
		(4) Bathrooms + Shower	75	4	300	D	L
		Circulation	20%	-	300	U/D	H
		BOH Storage	40	-	40	D	L

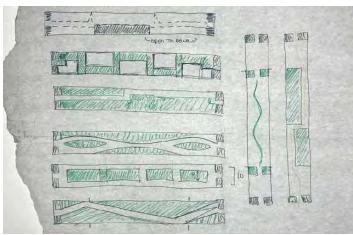
				Total	1500		
9	Sleeping				1500		
		2 BR Suite	600	1	600	U/D	L
		Circulation	20%	-	300	U/D	М
		1 BR Suite	400	1	400	I/D	L
		BOH Storage	150	1	150	D	L
				Total	1450		
10	Observatory				1500		
		Circulation	20%	-	300	U/D	Н
		(4) Restroom	15	4	60	D	М
		Lounge Seating	700	1	700	U.D	Н
		Lounge Bar	200	1	300	U	Н
		Storage	50	1	50	D	L
		ADA Bathroom	40		40	D	L
				Total	1450		
				Total	14505		

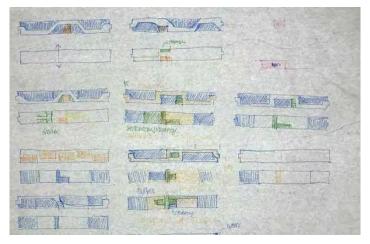
# APPENDIX J:

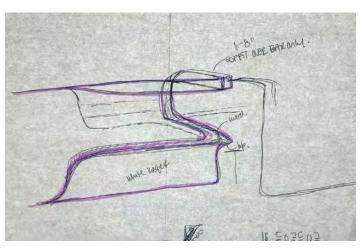
# PROCESS SKETCHES + PHOTOS TRAIN

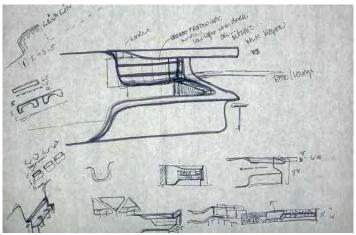


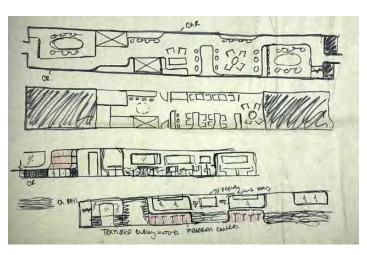




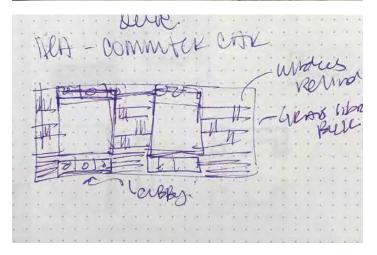


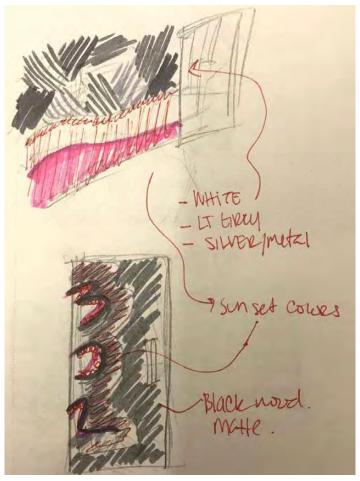








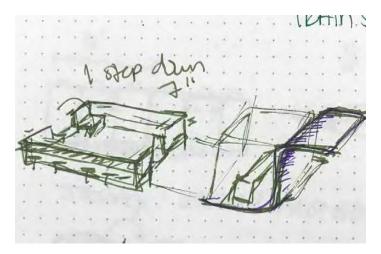


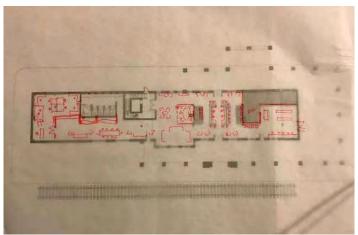


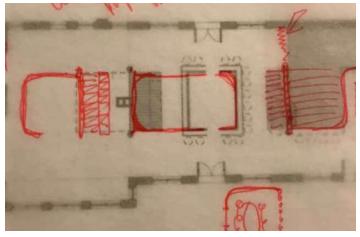


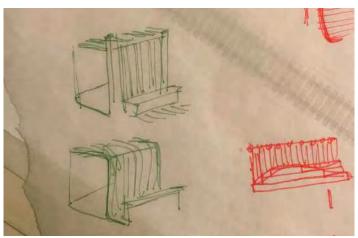
## APPENDIX H:

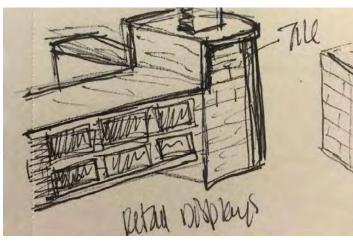
# PROCESS SKETCHES + PHOTOS TRAIN STATION

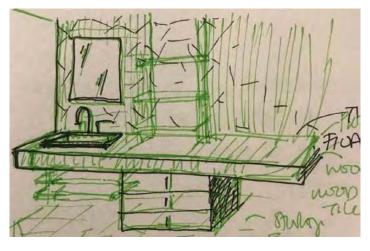












## **APPENDIX I:**

# PODIUM PRESENTATION NOVEMBER 13, 2017



and new horizons..."

"The impulse to migrate is inherent in human nature — an instinctual and inborn disposition and inclination to wonder and to wander in search of new opportunities

~Anthony J. Marsella & Erin Ring

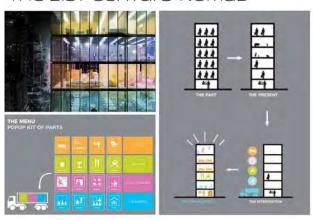
#### THE 21ST CENTURY NOMAD

The SHED Project London, UK



THE 21ST CENTURY NOMAD

Pop-Up Hotel Conceptual



## 21ST CENTURY NOMAD

#### **ABSTRACT**

This thesis explores the migratory habits of our hunter-gather ancestors and finds commonalities within human life today. The 21st century nomad (inclusive of global and digital nomads), influenced by factors like globalization and technology, portrays a similar transient-focused lifestyle. How is architecture and design catering to the mobile nature of these modern nomads? And what opportunities are there in interior design to create spaces that better parallel their lifestyles?



A PERSON WHO IS LIVING A MOBILE AND INTERNATIONAL LIFESTYLE. THIS PERSON TRIES TO LIVE LOCATION INDEPENDENTLY, DEPENDENT FROM THE IDEA OF "TERRITORIAL BELONGING".1

A PERSON WHO IS LOCATION INDEPENDENT AND USES TECHNOLOGY (SMART PHONES + CHEAP INTERNET) TO PERFORM THEIR JOB DUTIES REMOTELY FROM THEIR TRAVELS.2

#### TEMPORARY, TRANSIENT-FOCUSED DESIGN PRECEDENTS:

- The SHED Project // Studio Bark: Tiny house Pop-Up Hotel (Conceptual) // Pink deconstructed) in the span of one day.
- scale, pre-fabricated, temporary gallery space utilizing stacked shipping containers and carboard tubes.
- sheds available for low-cost rent prices Cloud: Transforms former office buildings within larger abadoned buildings (London). (now abandoned) into hotels with pre-Sustainable and designed to be built (or fabricated furniture and supplies to outfit a hotel for one week.
- Nomadic Museum // Shigeru Ban: A large- Östermalm Market // Tengbom: A temporary market hall built using wellintentioned materials to allowing for re-use following the termination of the project.

#### FUTURE CONSIDERATIONS:

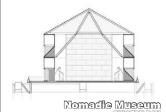
- Long-term temporary to permanent design solutions
- Nomadic spirit
- Utilze larger, abandoned structures as hosts
- Richards, G. & Wilson, J. 2004. The Global Nomad: Backpacker Travel in Theory and Practice. Clevedon: Channel View Publications

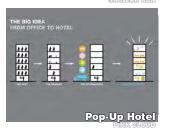










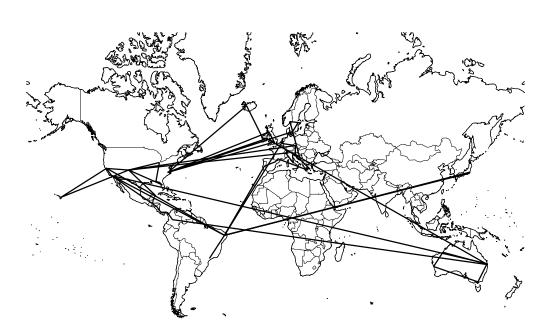




## **APPENDIX M:**

### **DESIGN PROBES**

Following the initial stage of research, design probes were explored to provide direction and insight as the project continued into the design phase. Three particular probes were investigated surrounding the concepts of scale (mapping and making), experience and materiality.





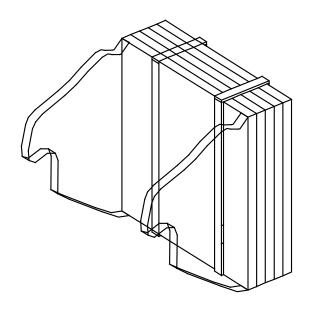


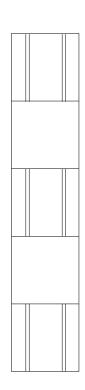
### Global Experience Mapping

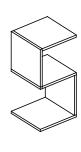
Results from a Facebook survey about places visited within the past year, and mapped. Primarily, respondents were 20-30; however, older/younger age ranges are also represented.





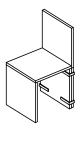














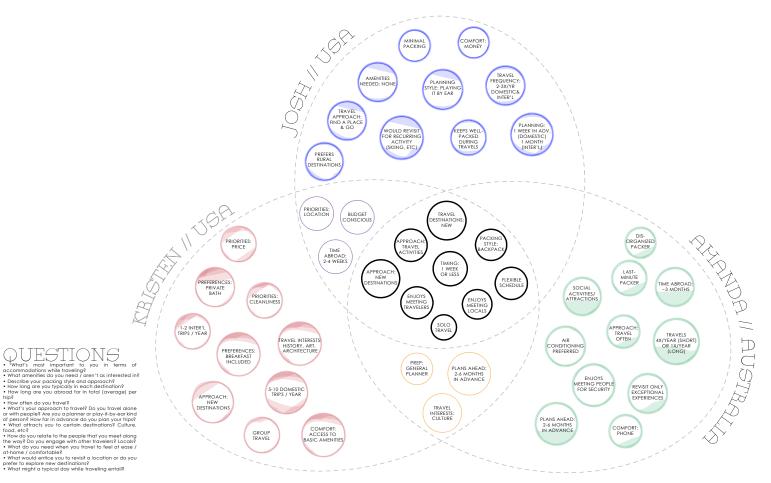
### **Jacob's Ladder-Inspired Furniture Pack**

18" x 18" x1" wood slats with padded sides on one side Arranged like a Jacob's Ladder Folds into: Table, Chair, Bookcase, etc









PROBE #2: EXPERIENCE

#### THE SHED PROJECT

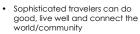
#### Smartply (formaldehyde-free OSB) // Lamb's Wool Insulation // Recycled Polycarbonate







- Easily constructible Low-budget Re-use abandoned build-ings are a larger shell



- LEED Standards:
- 54% of materials used to design the hotel are regional or reclaimed materials
- Rooms and common areas are decorated with environment-fo-cused artwork
- Each room is equipped with in-
- room recycling bins Every room has marble rain show-er with a 5-minute hour-glass timer to remind guests to conserve water









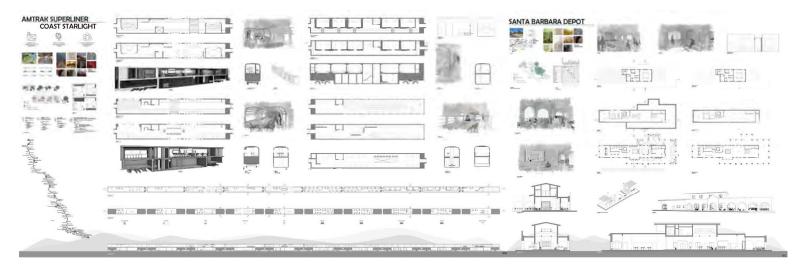


1 HOTEL BROOKLYN BRIDGE

Lauren Gillaspey // INTR 894 // Design Probe #3

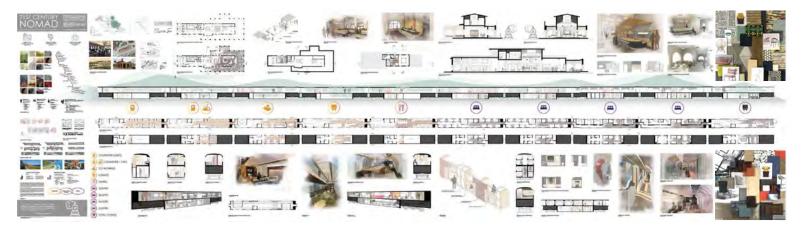
#### **APPENDIX N:**

SCHEMATIC DESIGN REVIEW APRIL 21, 2018



**APPENDIX O:** 

## FINAL THESIS PRESENTATION JUNE 2, 2018



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## FIGURE BIBLIOGRAPHY

FIG. 1	"Dre Wapenaar // Canvas-, Steel-, and Woodprojects // Tentvillage Prototype."
FIG. 2	"Dre Wapenaar // Canvas-, Steel-, and Woodprojects // Tentvillage Prototype."
FIG. 3	"Malka Architecture Erects A-Kamp47 Stealth Shelters from Tents."
FIG. 4	"BuBbLe (Temporary Dwelling Prototype)."
FIG. 6	"The Shed Project – Studio Bark."
FIG. 7	"Östermalm's Temporary Market Hall / Tengbom." ArchDaily
FIG. 8	"Japan's Spectacular Train Suite Shiki-shima Is Like None Other" DOGOnews
FIG. 9	"Japan's Spectacular Train Suite Shiki-shima Is Like None Other" DOCOnews
FIG. 10	"Shiki-Shima Luxury Train Travel" WorldlessTech
FIG. 11	The Seven Stars train in Kyushu - Japan" JTB Japan Specialist
FIG. 12	The Seven Stars train in Kyushu - Japan" JTB Japan Specialist
FIG. 13	"Cruise Train Seven Stars in Kyushu — Fukuoka, Japan" Louis Poulsen
FIG. 14	"Arlo SoHo" Arlo Hotels
FIG. 15	"Arlo SoHo" Arlo Hotels
FIG. 16	"Arlo SoHo" Arlo Hotels
FIG. 17	"Arlo SoHo" Arlo Hotels
FIG. 18	"Arlo SoHo" Arlo Hotels
FIG. 19	"Arlo SoHo" Arlo Hotels
FIG. 20	"Arlo SoHo" Arlo Hotels
FIG. 21	"Arlo SoHo" Arlo Hotels
FIG. 22	"Arlo SoHo" Arlo Hotels
FIG. 23	"Arlo SoHo." A Hotel Life
FIG. 24	"Arlo SoHo" AvroKo
FIG. 25	"Arlo SoHo (New York City, New York)" Jetsetter.com
FIG. 26	"Enjoy Stunning Views on the Coast Starlight" Amtrak Blog
FIG. 27	"The Coast Starlight is the Most Beautiful Train Ride in America" Country Living Magazine

FIC. 28 "Enjoy Stunning Views on the Coast Starlight" Amtrak Blog

FIG. 30 Santa Barbara Depot photos provided by Jean-Guy Dube

FIG. 29 "Amtrak Coast Starlight Route Guide" Amtrak

### Santa Barbara Depot photos provided by Jean-Guy Dube FIG. 32 Santa Barbara Depot photos provided by Jean-Guy Dube FIG. 33 "Baa Chair" lovoto FIG. 34 "Homemade Jacob's Ladder Toy" Teach Beside Me FIG. 35 "65 Creative Furniture Ideas" Spiceytec FIG. 36 "The Shed Project - Studio Bark." FIG. 37 "OSB (Oriented Strand Board)" erginbasahsap.com FIG. 38 "Colored Polycarbonate Sheets" Alibaba.com FIG. 39 "British Wool: From lamb to yarn" Women's Weekly FIG. 40 "Behold, Brooklyn Bridge Park's New Rooftop Oasis:" 1Hotels FIG. 41 "Used Railroad Cars" National Salvage & Service Corporation FIG. 42 "Reclaimed Distillery District Wood" The Distillery FIG. 43 "Inside Brooklyn Bridge Park's New Luxury Hotel" Gothamist FIG. 44 "1Hotel Brooklyn Bridge" 1Hotel FIG. 45 ""Arlo SoHo" Arlo Hotels FIG. 46 Photo taken by author FIG. 47 Photo taken by author FIG. 48 Photo taken by author FIG. 49 "Arlo SoHo (New York City, New York)" TripAdvisor FIG. 50 Photo taken by author FIG. 51 "America Best Places To Visit In The United States" King Bluey FIG. 52 "Hollywood Sign" Wikipedia FIG. 53 "Los Angeles Union Station" Wikipedia FIG. 54 "Santa Barbara Region" Central Coast Tourism Council FIG. 55 "Shopping in Santa Barbara" SantaBarbaraCA.com FIG. 56 Santa Barbara Depot photos provided by Jean-Guy Dube FIG. 57 "Seven Reasons to Move to Oakland, CA" Livability.com FIG. 58 "San Francisco housing frenzy shifts to Oakland" Finance & Commerce FIG. 59 "Oakland - Jack London Square station" Wikipedia FIG. 60 "Portland, OR Photos" U.S. Travel News FIG. 61 "Ben Jacobsen's Guide to Portland, Oregon" Departures

FIG. 62 "Portland Union Station" Wikipedia

FIG. 63 "Silicon Valley tech talent is fleeing to Seattle" CNBC.com

FIG. 64 "First 24 hours in Seattle, Washington, USA" Wanderlust

FIG. 65 "Seattle, WA Union Station" Wikipedia

ICONS: "The Noun Project"

