SEA Sensory Room Case Study

Guidance document

Purpose	The purpose of this document is to provide guidance and best practice examples for stakeholders aiming to introduce similar initiatives related to accessibility and assistance to persons with disabilities in an airport environment. The case study is not intended to endorse any technology or provider, but rather provide details of the key considerations as well as various implementation models which could be adopted. The intended audiences may include but are not limited to: Airports, Airlines, Technology Providers, and Regulatory Bodies.
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Scope of this Guidance	This guidance is provided as a source of information to help and support industry players to implement initiatives related to accessibility and assistance to persons with disabilities in and airport environment.
The Case Study Template	In some situations or jurisdictions, a prescribed case study template may be necessary that meets the local requirements of a particular business, organization, or regulatory body. For this guidance document, the following sections provide the general steps involved in developing a business case and/or case studies, including a brief explanation of their purpose, benefits, and considerations.

CASE STUDY details

Background/Business Needs

Accessibility Overview
The Port of Seattle continually works to increase accessibility for passengers and staff to create an equitable travel experience. To work toward the goal of becoming the "most accessible airport" in the US, in 2017 the Port of Seattle hired Open Doors Organization (ODO) to conduct an initial evaluation of accessibility at Seattle-Tacoma International Airport (SEA). The project was an accessibility assessment that included six public meetings to gather feedback from Seattle's disability community and thirteen fact-finding sessions with Port and airport employees, vendors, and stakeholders. The resulting report provided detailed recommendations for short, medium, and long-term improvements, and became the basis for SEA's current accessibility transition plan.

The Port of Seattle has continued to prioritize accessibility at SEA and this was represented in the formal development of the SEA Access Program. The SEA Access Program is co-led by an interdepartmental team of Customer Service and Facilities & Infrastructure and is responsible for leading the implementation and management of accessibility initiatives. Most recently the Port passed an Accessibility Order to expand interpretation of two of the Century Agenda goals/objectives to reflect a formal commitment to prioritize accessibility considerations. The Century Agenda outlines the Port of Seattle's highest level strategic goals for the organization. Leadership support in combination with staff dedicated to advancing accessibility supports the SEA Access goal of a welcoming, safe, and comfortable travel experience for all.

Sensory Room
One of the ODO report recommendations was to build out or retrofit an existing space into a "quiet room". While "quiet rooms" can incorporate different design elements than a Sensory Room, the overall intent is similar. During the early design development of the Interfaith Prayer and Meditation room in 2019, the team saw an opportunity to carve out space for a Sensory Room as a pilot project. It was developed as a pilot due to the innovative nature of the space and limited knowledge of the long-term impact. Multiple peer airports had recently introduced sensory rooms and SEA saw it as an opportunity to provide a valuable amenity to the travelling public and to remain competitive. The space is complimentary to other customer service amenities such as the Sunflower Lanyard program (first launched in the US by SEA in 2019), a SEA Social Story (created in 2020 in collaboration with The Arc of King County and Washington Autism Alliance), and the Customer Service frontline staff who provide in-person support to a wide range of travelers, including neurodiverse travelers. The addition of a Sensory Room has expanded offerings for neurodiverse travelers and become a staple in the journey of many passengers.

Design Goals
The SEA Sensory Room was specifically designed to provide a safe space where passengers can decompress and self-regulate during a stressful travel experience. There was a focus on neurodivergent passengers including those with Autism and other sensory processing disorders (SPD) but was intended to support any passengers seeking respite from the sights and sounds of the terminal. The space was designed to calm and/or engage senses through interaction with carefully selected finishes, lighting, and furniture that support the needs of neurodivergent and other travelers.

SEA developed design goals to focus on addressing the following criteria:

- Quiet space for users and adjacent spaces
- Calming environment targeted to neurodivergent passengers of all ages and their companions
- Safe space for users even with potential of emotional meltdown
- Passenger ability to modify environment for self-regulation
- Sensory seeking opportunities
- Sensory avoiding opportunities
- Ability to accommodate multiple people at once including passengers with reduced mobility
- Maintainable space to ensure best customer experience

These criteria were addressed in the following ways:

- Enhanced acoustics in wall assembly and acoustic wall panels that offer tactile engagement opportunity
- Cool color palette in shades of blues for wall and ceiling paint, upholstered fabrics, and custom art
    a. Local artist designed artwork implying movement with free-flowing water patterns in shades of blue to offer a calming focus printed on a durable finish

    b. Captured Pacific NW Sense of place with through materials and furniture selection
- Custom casework and furniture made with natural materials
    a. All casework has rounded edges and corners for passenger safety
    b. Storage shelving for luggage and multiple outlets to support electronic devices
- Lighting:
    a. Dimmable backlit starlit sky specialty ceiling
    b. Dimmable indirect lighting throughout the space
- A variety of seating including:
    a. A seating nook to curl up in
    b. A cushioned rocking chair
    c. A chair that gently squeezes and/or rocks to support sensory seeking input
    d. Large firm pillows that can be rearranged or engaged with in multiple ways
- Vinyl flooring and wipeable seating surfaces

Research and Design Process
To begin the design process, the SEA team reached out to multiple airports around the country with existing Sensory Rooms for lessons learned and visited an existing sensory room at Century Link Field (currently Lumen Field) in Seattle, WA. The project team consulted local occupational therapists who work with neurodivergent people (primarily children) and met with Port staff with neurodivergent children to understand the impact of design alternatives. The project team also consulted with SEA's Accessibility Advisory Committee during the design process. After multiple discussions it was clear that there was a very wide range of potential neurodivergent passenger needs. If we were to address the full range of potential needs, the design would evolve into a padded room, which didn't align with other architectural or passenger experience goals. When researching existing spaces, it was clear that many were designed for children, and we wanted to develop a space that adults felt comfortable using as well as children. The need for these spaces doesn't disappear after childhood and we felt strongly that they should be designed to be comfortable for all ages. We wanted to provide a safe environment that addressed as many sensory needs as possible with a maintainable high-level design aesthetic in alignment with SEA Architectural Standards.

Throughout the design process we were challenged with how to address the widest range of different passenger needs within a small space as well as provide a flexible space where passengers had increased control of environment. As a pilot effort the design was limited to a small irregular shaped footprint of 176 sf. Acoustic design was important from the beginning to reduce the noise traveling to the adjacent Interfaith Prayer and Meditation Room as well as creating a quiet space within the Sensory Room. When framing out the Sensory Room, an offset stud assembly, additional acoustic cavity insulation, and acoustic wall panels were used to improve acoustic quality of the space with a wall STC of over 60.

The design team took advantage of the L shape of the room and careful placement of the custom recessed bench to create distinct zones where passengers can experience the space in different ways depending on their needs. Passengers entering the space are immediately facing a custom upholstered recessed bench seat that offers a comfortable area to curl up or lay down with wall wash lighting above. Concern about potential meltdowns happening within the room led to a focus on limiting sharp edges or other potential hazards if someone is in emotional distress. Passengers turning to the left enter a more visually and physically interactive space with a full height local artist designed graphic on the wall, three-dimensional acoustic wall panels, backlit starry night ceiling, a cushioned rocking chair with ottoman, and a soft squeeze chair. To the right passengers find another more secluded nook that has simple white walls and is filled with rock shaped pillows of different sizes. The rock pillows can be used as a "crash pad" or alternative seating with a more secluded feel. A cool color palette and use of natural materials aligns with aesthetic and functional goals.

To provide passengers more control of the environment we integrated dimmable lighting in both the backlit starry sky fixture as well as wall wash fixtures. Outlets are available for charging since some passengers may regulate through use of electronic devices. After a two-year design and construction process, SEA opened its first Sensory Room in April 2021.

Maintenance and Operations
During the design process operational and maintenance concerns were discussed. To limit barriers for passengers and reduce risk of accidental access discrimination the room started with open access 24/7. Operationally there was initial hesitation to require an access code because passenger demand was unknown and there wasn't operational capacity to add additional work to staff. Maintainability was a high priority, and the space was designed with durable finishes that are easy to clean and the ability to replace finishes and fixtures easily. Vinyl flooring and high-performance fabrics were selected for durability and cleanability. All of the cushions on the custom casework are removable for cleaning and repair. Food and drink were allowed in the space since it was shown that some people used food and drink to self-regulate. A trash can was provided to address trash from

food or drink. As a pilot effort there was a lot of interest in understanding if the space was being used. To understand more, the project installed a door frame-mounted people counter to track usage. Data was pulled on a monthly basis and within a short time of opening, the foot traffic was consistently increasing.

Signage
During the development of the Sensory Room signage it was discovered that there was no universal icon recognized for Sensory Rooms. The SEA Signage and Wayfinding standards require iconography in addition to written language for effective wayfinding. While there were multiple symbols used within the Autism community there was not a single agreed upon icon for Sensory Rooms or neurodiversity. The project decided to create a custom icon for the Sensory Room. The signage team developed multiple graphic options that were vetted internally by SEA staff and externally by a group of autistic stakeholders, organized by Stacia Irons from The Arc of King County. The feedback from the groups was incorporated into the final design, see attached pictures.

Custom descriptive signage was developed outside and inside the room to help introduce passengers to this unique amenity. A customer service survey was created that is accessible via a QR code located within the room. Gathering firsthand feedback from passengers has been critical to understanding the value of the space and how we can improve in the future.

Staff Communication
In advance of the Sensory Room public opening, a one-sheet training guide was shared with key frontline staff. Additional communication to key stakeholders, such as airline partners, also occurred after opening. The aim of the one-sheet and communication was to proactively inform on the Sensory Room features, intended audience, and location.

Benefits

Sensory Room passenger feedback is collected through a QR code-based survey that is within the Sensory Room, comments left through the customer care website link, or emails sent directly to SEA Access staff. The initial feedback from community stakeholders was overwhelmingly positive. The ability to use the space after going through a potentially stressful security screening has become a valuable step in the travel journey and works in conjunction with other accessibility initiatives offered at SEA. In addition, SEA has historically participated in practice flights with local Autism organizations, promotes and distributes the Sunflower Lanyard, and offers a social story to provide a step-by-step guide to explain what to expect when flying through SEA. The addition of a sensory room in the journey makes air travel accessible to a larger audience.

Passenger and stakeholder feedback is valuable and one of the ways to gauge success of a project. Below is a small sample of feedback regarding the impact of the Sensory Room on their travel experience.

> *The Port of Seattle, through this project, is expanding access for all individuals to have a positive interaction with the airport and feel included and valued as travelers. A sensory room creates an opportunity to help neurodiverse individuals to feel a sense of belonging in this public space. It would offer them (and their families, companions, and caregivers) the ability to regulate and manage the demands of air travel, calm their sensory systems between flights, and have a quiet, sensory friendly way to find respite in an environment that is well known for being loud, busy, unpredictable, and visually overwhelming.*
> *As an occupational therapist with over 20 years of experience in supporting individuals with sensory processing challenges and with advanced certification in Sensory Integration, I am beyond excited to see SEA Airport become a more welcoming and neurodiverse space. When everyone is included in design, it decreases barriers and improves the ability for all people to live their lives to the fullest!*
> *— Carey Goldenberg MS, OTR/L, SIPT Certified, CEO, Seattle Therapy Network*
>
> *The new Sensory Room at the airport will make a huge difference in the lives of those travelling with autism, dementia, and other sensory processing and anxiety disorders, their families and all air travelers. The space is designed to allow individuals who have become over-stimulated by the environment the chance to calm down and decompress before boarding a flight. Having a quiet space with soothing light, calming colors and an opportunity for proprioceptive input (interactive pushing, pulling, lifting) will relax the over-stimulated nervous system, allowing that individual the opportunity to reset prior to the rest of their trip. This room will be utilized by all ages, as sensory processing disorders can occur across the lifespan. Parents and travel companions could plan their trip with this room in mind, as a destination safe spot prior to departure and on their return from their destination. Airport, airline and TSA employees would now have a calming place they could share with passengers, to assist those in need of respite. The Sensory Room at Seattle-Tacoma International Airport is a welcome addition to all and we cannot wait to share this with our families.*
> *— Stacia Gallaher Irons; Board of Directors, The Arc of King County; Program Manager, Wings for Autism*
>
> *My highly impacted special needs LOVES the sensory room!! Thank you so much! It gave him a safe place to be free and unwind during our layover after a day of traveling!"*
> *— Passenger Feedback*
>
> *About 15 years ago I discovered noise-cancelling headphones, and they changed my travel experiences forever. The sensory room at SeaTac has become my new favorite thing about flying. It's like headphones for my whole body. I can't thank you enough for installing it. I'm lying here right now, surrounded by peace and calm. It is giving me back the two hours of mental and nervous energy I would have lost killing time of the cacophony of the concourse. Deep thanks.*
> *— Passenger Feedback*
>
> *I loved that the sunflower lanyards were so easy to get and they didn't ask me why I needed it (I was worried about judgment or need to prove my disabilities). The person at the desk, Dianne, was so helpful and friendly and showed me where the sensory room was and gave clear directions. It was an awesome experience!! And the sensory room is perfect, especially the adjustable lighting.*
> *— Passenger Feedback*

While most of the overall feedback is positive, the number of negative complaints has increased. These can be grouped into the categories of misuse of the room (ex: travelers using it overnight to sleep, staff using it as a break room) and maintenance concerns (cleanliness issues). Operational changes to address these issues are being developed, including adding a camera within the room and adding access measures. These measures will continue to be evaluated. Despite the recent challenges, the Sensory Room is considered a successful space and

there is already a second Sensory Room that will be under construction in 2025, and a third location planned for a project still in early design. These additional rooms support ongoing feedback from travelers desiring more Sensory Rooms withing SEA.

Education

Public Education
Neurodivergent awareness is on the rise, but many public transportation facilities have yet to prioritize travelers with invisible disabilities. To improve the passenger awareness of the Sensory Room SEA has provided information about the room in multiple locations including the website, FlySEA app, directories, and SEA Access brochure. The Sensory Room has also been highlighted in Port of Seattle blog posts and social media posts. To educate passengers before they start their travel journey, SEA works with disability community partners to raise awareness and continues to promote SEA Access program through social media, community outreach, and at disability organization conferences and expos.

Staff Education
A mission of the Customer Experience team at SEA is to educate employees about the entire spectrum of disabilities and how to provide the best customer service for all passengers. The addition of the Sensory Room has brought Autism and neurodiversity to the forefront and has spurred important conversations about how SEA can improve passenger experience for the neurodiverse traveler. It has created opportunities for employee enrichment through in-person training sessions about and led by members of the neurodivergent and Intellectual and Developmental Disability (IDD) communities. The *Excellent Customer Service for Travelers with Disabilities* e-learning is required for all Aviation employees. It was vetted by the SEA Accessibility Advisory Committee and provides foundational information on how to best serve travelers with disabilities, including non-visible disabilities. Similar to other airports that were a resource for SEA, we became an additional resource within the aviation community to share our process and lessons learned. This collaborative interaction has given us an opportunity to connect with peers in the community, discover new perspectives, find inspiration, and learn about accessibility programs and Sensory Rooms at other airports around the world.

In 2024, SEA hosted a group of high school interns from Raisbeck Aviation High School to research and collaborate with SEA staff on ways to integrate sensory-friendly elements into the airport. In their 12-week program, interns met with various SEA stakeholders to learn about the facility and conduct research on neurodivergence, sensory rooms and strategies to create sensory inclusive features throughout the terminal. The internship concluded with a presentation of their proposal to Port of Seattle staff. Their proposal to add single-user sensory pods in multiple locations around the airport could fill a short-term need for sensory spaces while a more permanent space is in development.

Constraints

The three main constraints for the Sensory Room are the location, size, and user knowledge and awareness.

The room is located on the satellite train station (STS) level which is the lowest passenger facing level. It is adjacent to the elevator that accesses the STS level but is tucked away from main path of travel. It is a space you either stumble upon or actively seek out. As described previously the project was carved out of a separate project, the Interfaith Prayer and Meditation Room. The Interfaith Prayer and Meditation space was given more square footage than the Sensory Room to provide a large open space to accommodate group prayer needs and since it was the primary driver of the overall project.

The available space left for the Sensory Room was 176 sf and L-shaped. The shape of the room was originally thought to be a limitation, but it turned out to be an advantage because it led to creating smaller subspaces that can accommodate multiple visitors to use the space independently. While the small space is effective, it limits the number of passengers that can use it at any given time and the variety of features that can be installed. The size and proportions of the space do provide a cozy feel that adds to the overall ambiance of the space.

Knowledge and awareness of the Sensory Room is limited due to the location and novelty of the space. Since it is on the STS level and down a hallway, there is less chance of passengers accidentally stumbling upon it unless they take the elevator down to that level. The remote location does provide a greater level of privacy for passengers using the room. Sensory Rooms are still a unique amenity and many passengers aren't aware that they are available in airports or what the purpose of the room is. This lack of knowledge and awareness has resulted in feedback from passengers noting the following types of misuse:

- Talking loudly or playing audio/video on electronic devices
- Using Sensory Room as break space for eating and sleeping
- Leaving behind trash or overfilling trashcan
- Moving furniture out of Sensory Room and into Meditation Room
- Engaging in disrespectful behavior or creating an environment that prevents passengers from feeling welcome in the Sensory Room

The general understanding is that people participating in these unintended behaviors are not using the space to accommodate sensory needs, but people taking advantage of a quiet, private space.

Despite the SEA efforts to promote the space through social media and other methods many travelers only reference airline websites and apps, limiting the passenger knowledge of the space. The Port of Seattle will continue to engage with the disability community to promote knowledge and awareness of the space.

Lessons Learned

SEA has gathered multiple lessons learned since opening the Sensory Room in April 2021. Many of our concerns were ones that were anticipated related to passengers potentially misusing the space but others were a surprise.

Anticipated:

- People using space for sexual relations or indecent exposure
- Lack of neurodivergent community awareness of SEA Sensory Room

Surprises:

- Use as break room – amount of trash left behind by employees
- Use for overnight sleeping
- Not understanding janitorial schedule and impact of communicating with that group
- Amount of room rearrangement
- Movement of furniture between adjacent rooms
- Feedback questioning if the space has enough “sensory activities”
- Happy surprise is that rocks haven’t been stolen

We can’t prevent people from bad behavior and there needs to be oversight of this space on a consistent basis to prevent people from continuing the behavior. Communication with the different companies working at the airport is key when their employees are caught using the space. The SEA Access team has addressed this topic at airport-wide meetings such as ISTAMA/STAMA (International Station Managers/Station Managers) and other management meetings.

Placement of a sensory room within the terminal can impact use. Choosing a highly visible location will increase the chances of passengers using the space. A sensory room in a more heavily trafficked area also decreases the chances of the room becoming a place for workers to “hide” or use the space as a break room. The challenge with placement is the scarcity of space available in concourses for amenities that do not generate revenue.

Access to the sensory room currently is not monitored by SEA. Due to some reported incidences of misuse, video monitoring is being implemented and limiting access to the room is being implemented as a pilot. The proof of how beneficial this room can be to neurodiverse users has made oversight and maintenance of the space a priority.

Next time SEA will evaluate incorporating some different elements for interaction. Due to size constraints, there were limits to what could be incorporated into the space. What has worked well was to create smaller areas vs wide open space.

Recommendations for Sensory Room Design:

- Location, Location, Location – clarify if this should be highly visible or something that is purposely sought out
- Break up and diversify seating options to accommodate the maximum number of users
- Provide multiple options for user experience and control over environment including furniture and lighting
- Proximity of a companion care restroom to the sensory room. Often users of companion care restrooms would benefit from the use of a Sensory Room and vice versa.
- Control access based on Operational needs and availability
- Coordinate with Security
- Understand janitorial operational requirements and what is needed to accomplish routine maintenance
- Set clear goals for targeted user and clarify expectations of space

Maintenance and Security

From the opening in 2021 through the first quarter of 2024, the Sensory Room was open to visitors 24 hours a day and access was not monitored. Over time it became apparent that there was an issue because the number of complaints regarding cleanliness increased. After multiple interdepartmental discussions we realized there was an issue with allowing 24-hour access. The maintenance schedule for deep cleaning was nightly between 12:00-4:00 AM and staff often would find passengers sleeping in the space during that time. If there were passengers in the space the janitorial staff would not perform the deep clean and the level of cleanliness declined over time. In addition, during the rest of the time it was observed that various aviation related staff would use the Sensory

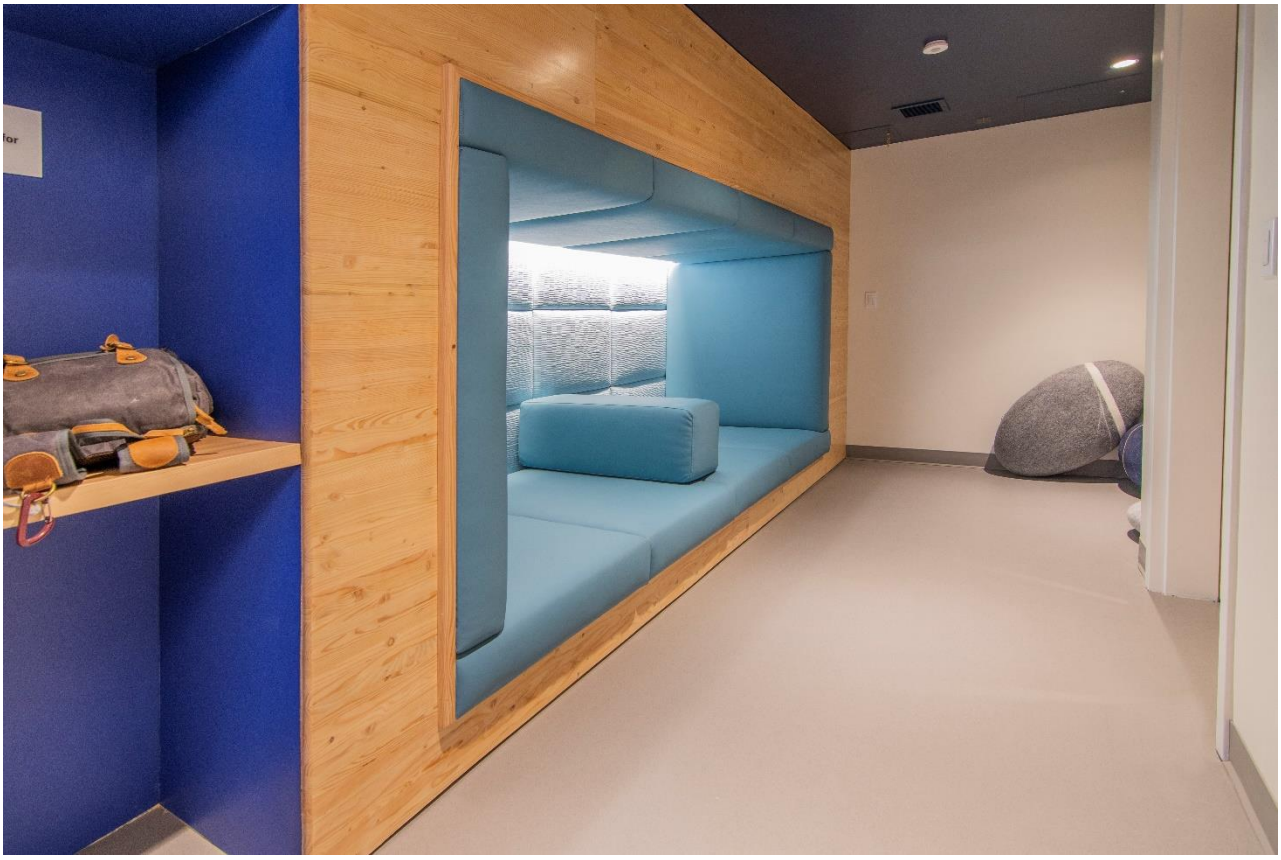
Room as a break space. They were observed sleeping, eating, littering, and being disruptive within the space. The Sensory Room was intended to be used by anyone who needed it but it was not intended as a break room. After understanding the constraints of the janitorial staff, the hours of the Sensory Room were reduced and the space is closed every day from 12:00-4:00 AM to allow for cleaning and resetting of the room. Updated signage stating that the Sensory Room is not an employee break room was added within the space, but there was no decrease in misuse by employees.

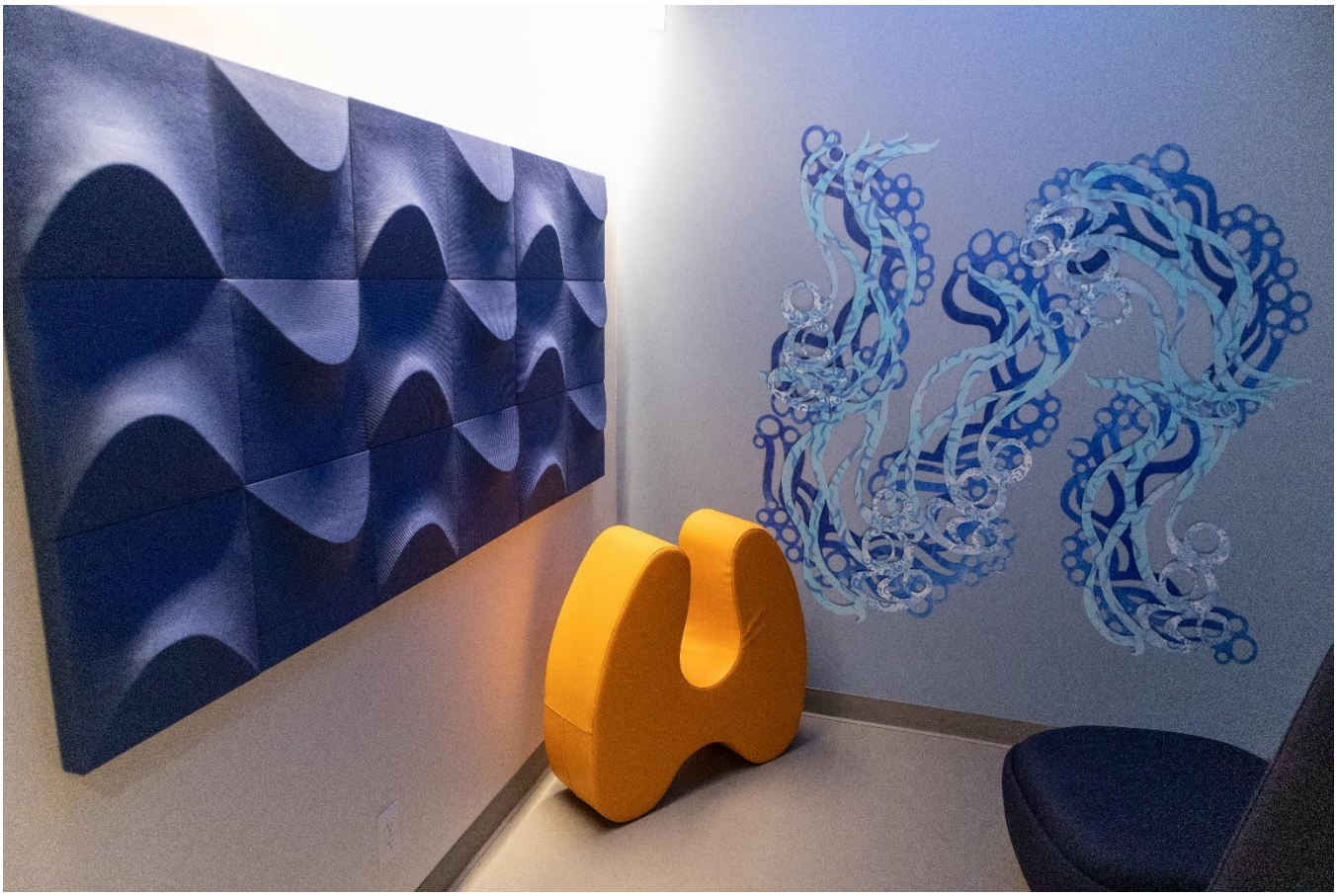
To improve the user experience of the existing sensory room, SEA is installing a security camera to allow for a more secure experience in a space that is by nature of use, closed off from public areas. This will also help deter misuse of the space that has become more prevalent as employees have begun to use the sensory room for breaks and naps.

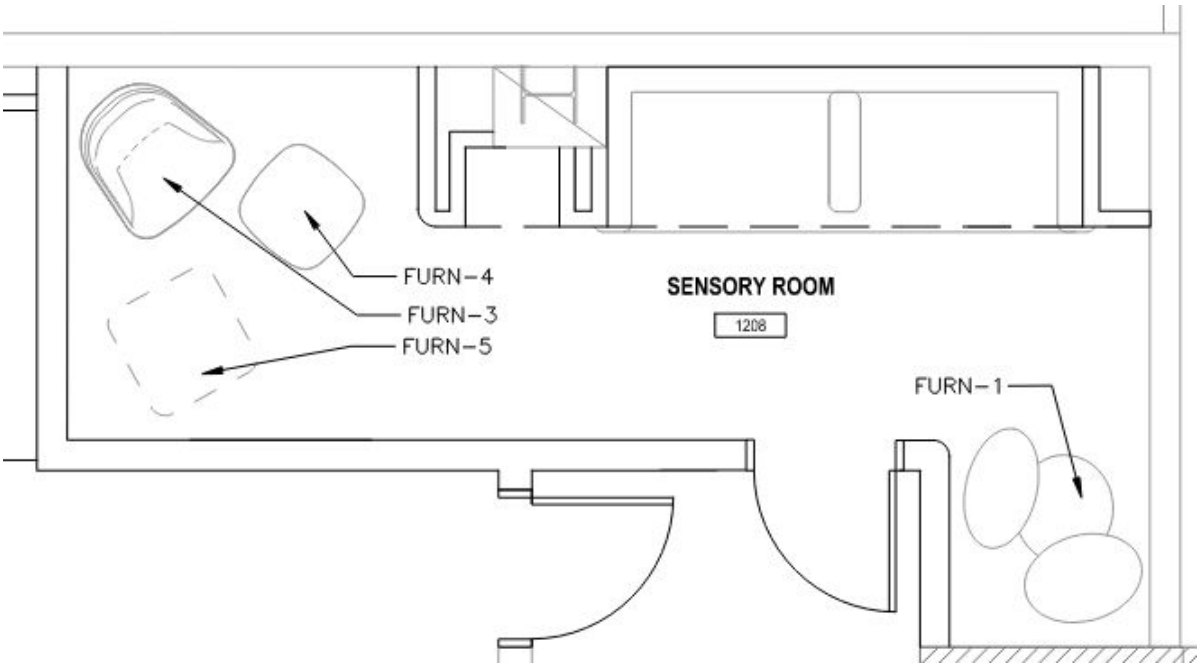
Implementation of a system that requires passengers to call for an access code to gain entry to the Sensory Room will be pilot tested in Q2 2024. If the pilot test is successful, it will become a part of SEA sensory room design standards.

Pictures and References


C4
1208
TR
SENSORY ROOM



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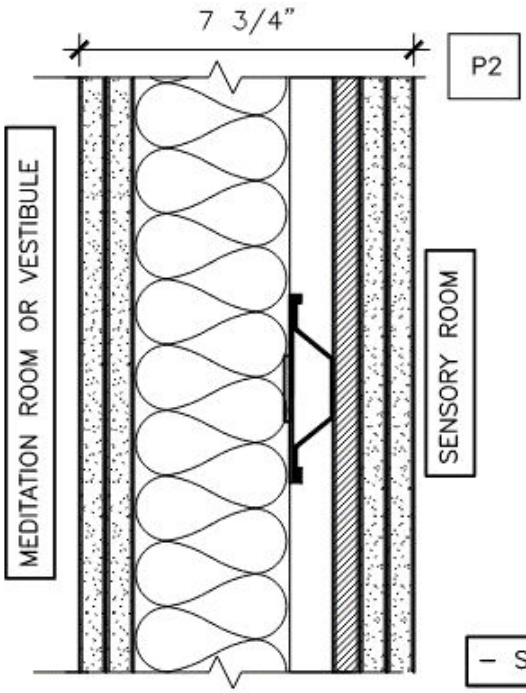
FURN-5
SENSORY ROOM
1208
FURN-1



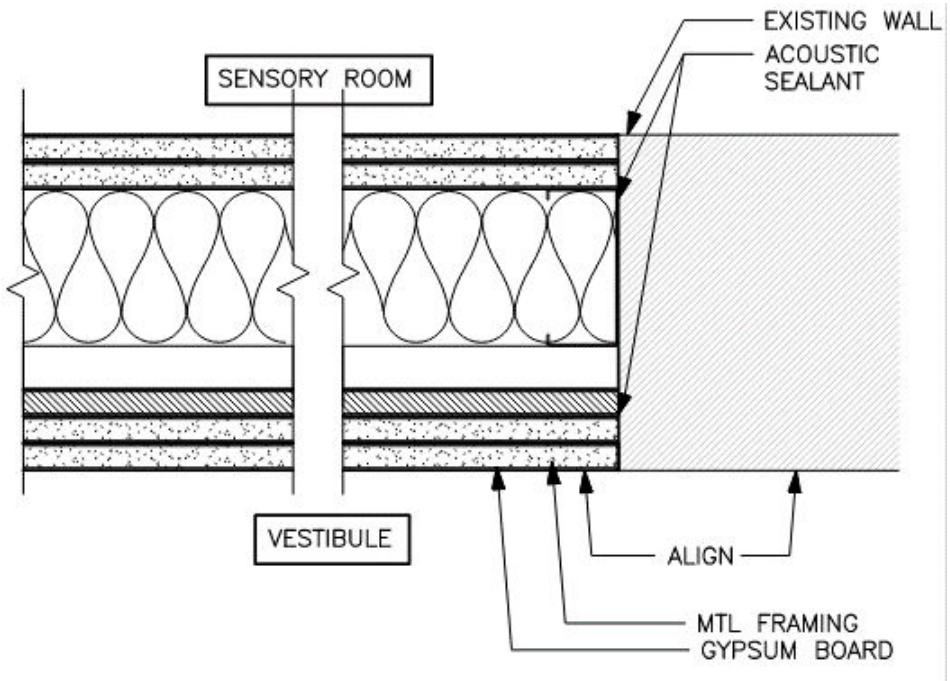
- (2) LAYERS 5/8" GYP BD. (TO STRUCTURE ABV)
- 3-5/8" 20 GAUGE MTL STUDS @ 16" OC
- FULL STUD CAVITY SOUND ATTENUATION BATT INSULATION
- 1" AIR GAP WITH RC-1 CHANNEL OR EQUIVALENT ONE SIDE, 24" OC (INSTALL PER MFR INSTRUCTIONS
- (1) LAYER $\frac{1}{2}$" SHEATHING
- (2) LAYER $\frac{5}{8}$" GYPSUM BD
- FACE LAYER JOINTS FINISHED. (TO STRUCTURE ABV)
- PROVIDE ACOUSTICAL SEALANT AT BOTTOM AND TOP OF WALL
- ATTACH TOP OF WALL TO EXISTING CEILING FRAMING

– STC 60+ RATED WALL

WALL TYPE

WALL SECTION P2
SCALE: 3" = 1'-0"

8
A5.01



INTERIOR DETAIL

INFILL WALL AT VESTIBULE
SCALE: 3" = 1'-0"

11
A5.01

Appendix

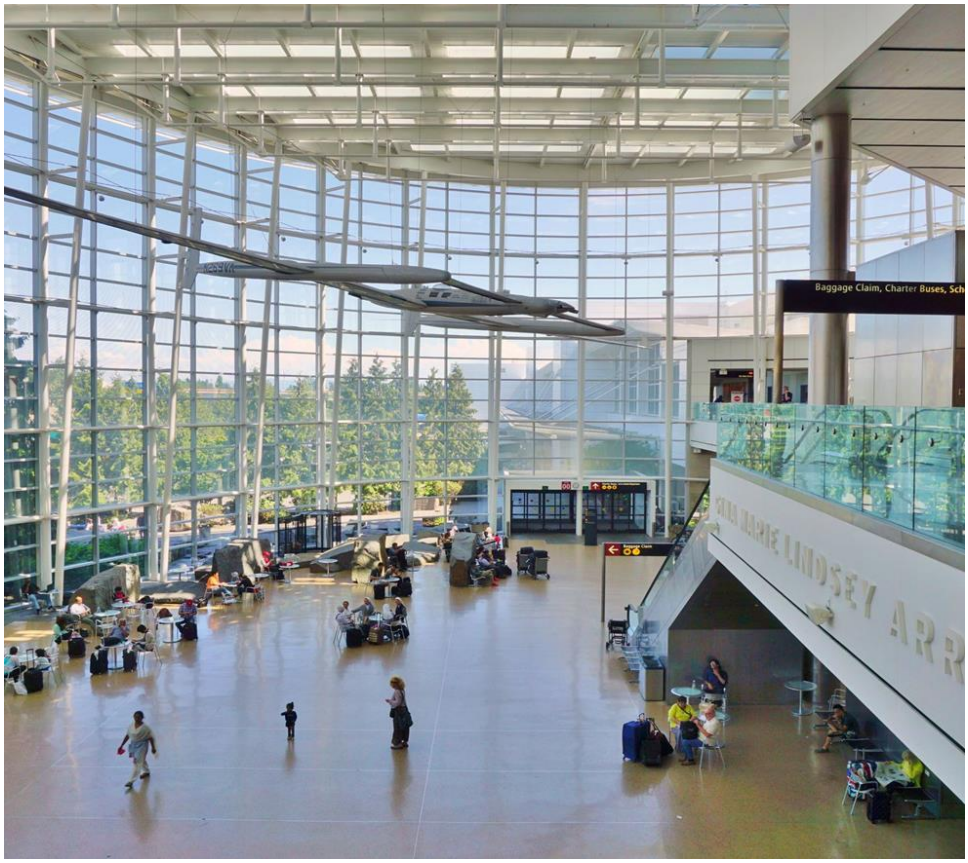
https://www.portseattle.org/sea-tac/accessibility-at-sea-tac-airport

https://www.portseattle.org/services-amenities/sensory-room

https://www.portseattle.org/blog/quiet-oasis-stimulating-environment

https://www.portseattle.org/news/sea-tac-airport-expands-services-make-travel-more-accessible

https://www.portseattle.org/sites/default/files/2019-06/ODOFinalReport_pdf_7Mar18.pdf



Making SEA Airport More Accessible to Neurodivergent Passengers

By Aviation Cohort Interns

Abstract

The task at hand for the Raisbeck Aviation High School Intern Cohort was to research and develop physical amenities at Seattle Tacoma International Airport (SEATAC Airport) for passengers who have invisible disabilities or who are neurodivergent. The findings of this research will help SEA support passengers with invisible disabilities, or passengers who are neurodivergent. A person who is neurodivergent differs in mental or neurological functions from a person who is neurotypical. The research itself will help spread awareness about neurodivergence and provide information on how to accommodate all passengers at SEA airport. SEA is at the forefront of creating new ideas and innovations all within the new perspective of how to support all communities and different groups of people. Furthermore, the research itself will contribute to upholding the RAISE values that SEA Airport strives to achieve for all Port Employees and passengers. The development of physical accommodations through

this research will benefit the greater neurodivergent community and help SEA airport achieve its century goals in terms of making the airport as accessible as possible.

Introduction

Like many other institutions in society, airports are not known to be very accessible for all people. Airports are loud, chaotic, sprawling networks of gates, trains, concourses, baggage claims, buildings and TSA checkpoints. For neurodiverse travelers and travelers with invisible disabilities, the airport experience and environment may be particularly stressful and overwhelming. It has only been in recent years that airports have taken efforts to make their facilities more neurodiversity-friendly and add amenities to make airports more accessible for travelers of all abilities. As such, the Aviation cohort of high school interns spent the duration of their project to research, design, and write a report outlining potential options to satisfy the driving question of “how can we create more inclusive spaces and amenities for neurodivergent travelers at SEA Airport?” with a focus on built environments. Over the last 12 weeks, the intern group has researched, brainstormed and toured SEA Airport in order to create our final deliverable. Included in this report is our research regarding neurodivergence and built environments, as well as our proposed project ideas for SEA Airport.

Information on Neurodivergence and SEA Accommodations

What is Neurodivergence

The general definition of neurodivergence is the differing in mental or neurological functions from what is considered by society to be “normal.” A more respectful way to refer to non-neurodivergent people is neurotypical. This term is most often used to refer to autistic spectrum disorders but can also refer to many other medical conditions. Although neurodivergent/neurodivergence isn’t a medical term, it is still widely used, and much more accepted, alternative to using descriptors like “normal” and “abnormal.” This is important as there is no single definition of a “normal” human brain (i.e. all human brains function differently). People with neurodivergence often have different strengths and challenges as compared to people who are neurotypical, or those whose brains don’t have these differences. These possible differences can include, but are not limited to, medical disorders, learning disabilities and neurological conditions.

Common types of neurodivergence include:

- ADHD
- Autism
- Apraxia
- Aspergers Syndrome
- Down Syndrome
- Dyslexia
- Dyspraxia
- Dyscalculia
- Epilepsy
- OCD
- Tourette Syndrome

Key Terminology / Inclusive Language

When discussing neurodiversity, it is key to use inclusive language. Some major guidelines for using inclusive language are:

- Using people first language. For instance, instead of referring to someone as an “autistic person”, to use people first language, they would use the phrase “a person with autism.” Though, it is important to note that preferences for the use of condition vs. people first language varies by person to person.

- Using language like “neurotypical” or “neurodivergent” instead of “normal person” or “abnormal person.”

- When discussing the idea of neurodiversity, language should be using the idea of neurodiversity as being different not deficits

- Throughout this project there is an idea of a built environment, which is a key term meaning buildings have a design that empower people through features that make it accessible

Different Common Invisible Disabilities

Neurodivergent people tend to find some things very easy and other things incredibly hard. This usually leads to an inconsistent performance at school or work. Often people will think that neurodiversity is not that common in the population. However, according to Genius within, 90% of the population with disabilities are invisible, and about 20% of the population is neurodivergent.

- 5% of the population have ADHD
- 1-2% of the population is Autistic
- 10% of the population are dyslexic
- 5% of the population are dyspraxic
- 1-2% of the population have Tourette Syndrome
- 14% of the population have mental health needs
- 5% of the population have an acquired brain injury

It is important to note that no two brains work alike, and everyone’s experiences of neurodivergence are different.

Traveling Experience for Neurodivergent

Neurodivergent passengers might require additional assistance due to how airports can be stressful. Individuals with autism can have a particularly hard time when bombarded with bright lights, loud sounds, strong smells, and other sensory inputs while at an airport, which can make a travel experience difficult and frightening. Neurodivergent passengers have a particularly hard time with staff as well, with several documented stories online of untrained staff treating passengers harshly.

In line with the Port of Seattle’s Century Objective of continuously improving the customer experience (Century Goal 2, Objective 3) at SEA Airport, customers include individuals with invisible disabilities. Therefore, it is important to make SEA Airport as accessible to everyone as possible. Airports are already required to make themselves accessible for people with

disabilities due to federal standards in the Americans with Disabilities Act, and SEA Airport has already pursued several different means of providing accessibility through the Sunflower lanyard program, auditory assistance program, wheelchair accessible taxi program, curb revamping, and an application so that individuals can have an easier time navigating the airport.

Although SEA has made the Sunflower lanyard program to specifically aid passengers with invisible disabilities in traveling through the airport, SEA Airport lacks physical accommodations. That is, SEA Airport has only one sensory room for all neurodivergent travelers who may need the amenity. Aside from the necessary employee training, physical accommodations can be implemented in SEA airport to aid neurodivergent passengers.

Built environments with neurodivergence in mind

Airports are a stressful place for everyone involved. It's important for architects and designers to recognize this fact and attempt to mitigate it through various means. First and foremost, giving passengers the ability to have access to a quiet zone or pod to minimize sensory overload is on the top of the list. Our environment should be using lighting consisting of warm colors, with a fairly low luminosity. Secondarily, having consistent signage and instructions will be critical - simple graphics and easy to read fonts (or possibly no text at all). Collaborating with stakeholders throughout the design and creation process will also lend new perspectives into the matter.

Brainstorming Process

Considering that we were looking for physical amenities that could be added, initial research was conducted with a focus on what neurodivergence is and potential accommodations.

For the research on neurodivergence different articles and reports were looked at to get a general understanding of the topic and how neurodivergent individuals' function. Language and terminology on neurodivergence were also looked into to ensure that the report would be accommodating of the necessary language.

Different types of common neurodivergence were looked into such as autism and information were gathered on how different public facilities create accommodations for these individuals. Two of the main ideas that we identified were the creation of quiet spaces and the implementation of greenery to help individuals calm down. The accommodations that SEA had already implemented were looked into such as the sensory room, where the cohort took a tour of the room and did research on the design process for why the room was built as is. The airport itself had also done extensive remodeling to the curbs outside of the airport, to make it more wheelchair accessible. Other airports such as Singapore Changi Airport were looked into because of their extensive greenery or gardens, where gardens stretched for multiple floors and waterfalls were included. The public transportation sector was also an area that was researched, where the methods of how different public transportation accommodates for neurodivergent passengers was looked into.

From our research, three main ideas were generated. Our first idea was an animal-themed stop for individuals who were stressed out, similar to a cat café. This idea was quickly scrapped as the logistics behind maintaining an animal-themed café, combined with the liability issues if anything were to happen, were too complicated. The second idea was to create portable, quiet

pods that would be scattered throughout the airport, taking inspiration from already existing designs. Our third idea was to implement more greenery throughout the airport, as we saw it had a calming effect.

Thorough research was conducted on the remaining two ideas, those being quiet pods and greenery, and using the information gained we proceeded with these ideas and began to figure out the different logistics of how they could be implemented throughout the airport. More information on the research is located in the respective sections. While exploring the ideas, stakeholder meetings were conducted with different individuals to get feedback on our ideas. Multiple meetings were conducted with individuals such as Heather Karch, AV F&I Architecture Manager; Candace Field, Field Facilities Accessibility Program Manager; and Chelsea Rodriguez, Airport Volunteer & Accessibility Program Manager. Feedback was also obtained from neurodivergent individuals apart of the Port of Seattle accessibility advisory committee. Taking all of this information into account, different parts of the two ideas were further explored, and from there the final report was written.

Quiet Pods

Research Process

The Quiet Pod solution originally came from brainstorming solutions to have more sensory rooms present throughout the airport. The idea behind the sensory rooms is to create a space where neurodivergent individuals can calm down and get away from the stressful airport environment. The interns conducted research about different ways neurodivergent individuals can have an easier time going through the stressful airport experience, and most solutions were to find quiet areas. SEA airport already implemented one sensory room in the A concourse and has two more planned for construction for other locations around the airport, but the construction of these sensory rooms would likely not be for several months, if not years. The Quiet Pods will be a temporary yet effective solution to this lack of availability issue by distributing smaller, portable, versions of the sensory room in accessible locations throughout the airport.

Design and Placement Process

When starting the design process of the Quiet Pods, we looked to the official design standards outlined in the Port of Seattle Architecture Design Guidelines and Standards document for the 2024 year. The document outlined the different guidelines that were taken into consideration when SEA Airport implemented the modular nursery pods, interfaith prayer rooms, and the sensory room. Inspiration for this idea was mainly from the existing Mamava pods and their round, portable, modular design, as we saw it would best fit in with the other modular designs scattered throughout the airport.

In terms of the color palate, the current sensory room goes for a biophilic design using a calming color palate focused more on blues. Similarly, the Quiet Pods would also incorporate a calming color palate using one shade of blue for the walls and then a darker shade for the ceiling. Research indicates that these colors are cited quite often and are especially helpful for children and getting them to calm down (PRAPOORNA). The inside of the pod, especially the furniture, will be made out of durable materials including lasting wood for the table and durable leather or other fabrics for the chairs (YorkshireFabrics).

To ensure portability, lockable wheels are to be installed on the bottom of the Quiet Pods low to the ground, to ensure that wheelchair users can still access to the Pod and that the pod itself is portable. If the pod with the wheels installed is too high off of the ground to be accessible to wheelchair users, a small ramp can also be added to the door. In terms of the size, the pod is designed roughly to be 10ft long, 5.5ft deep, and 8ft tall.

Art will also be incorporated inside of the quiet pods with a focus on intractability, different tactile features, and visual appeal. The current sensory room has an art piece on the which has different layers and textures a person drags their hand over the wall. Research indicates that different features akin to what is in the sensory room are liked by children with autism (APM). The integration of the art itself can also be done in partnership with the Port of Seattle Art committee who have connections with individuals locally and globally that could contribute art to the Quiet Pods. It also may be advantageous to find artists who are neurodivergent themselves to create art for the Quiet Pods, since they could bring their own perspective and experience to their art contribution to the Pod.

Due to the spatial limitations of the room, only three pieces of furniture can likely fit in the space.

The current proposed idea we have for the interior furniture of the room are as follows. One will be a table that adheres to the Port of Seattle and ADA guidelines, and then further additions of a basic chair and then potentially a more unconventional chair. The room underneath the table will provide ample storage space for suitcases or other personal belongings that will stay within the line of sight of the pod user.

Acoustic panels will also be implemented into the walls to minimize sound entering and exiting the Pod from the outer environment. One potential panel type that could be used are PET Polyester Acoustic Panels, which are made from a safe plastic that have a felt surface finish. This will increase the STC or sound transmission class to levels where loud sounds outside of the pod will barely be heard on the inside. Different sounds could also be played through the speakers inside the Pods, allowing for the Pod user to listen to natural sounds like rainwater or waves.

For the lighting style that will be implemented inside the Pod, adjustable ceiling light bars that have settings for circadian lighting, along with other lighting colors could be changed to the preference of the user. Circadian lighting reduces the effect of general lighting on the human internal circadian system which allows for people to be more adapted to the day-night cycle. Research suggests that darker environments can have a more calming effect on individuals with invisible disabilities, so including an adjustable lighting system inside the pods is a necessary component (ThreaSpecs). A color wheel or similar buttons inside of the Pod would allow for the lighting to be adjusted to the pod user's preferences

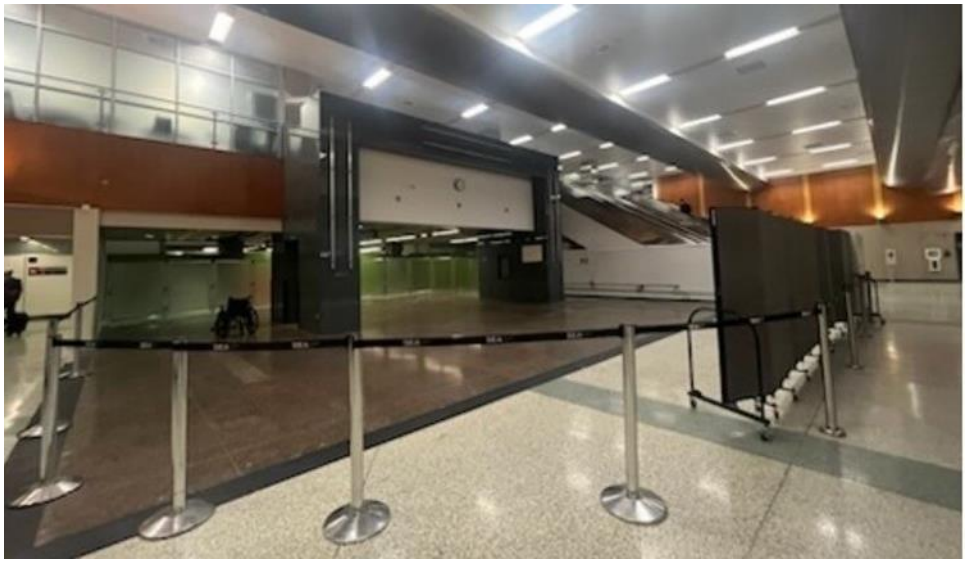
To prevent misuse, some precautions such as creating a system to manage the quiet pod use or implementing cameras inside of the pods may be included in the design. It is necessary for some monitoring component to be implemented inside of the pod to ensure that the pods are being used for their intended use, more information is located in the risk management section. If any emergency require access inside of the pods, they could hit the auto unlock button hidden behind a panel on the side of the pod that only emergency services would know about.

To simplify the user experience and make the experience more predictable for all users, travelers being able to pre-book the room through the Fly SEA app would be the most effective

way to ensure that potential Pod users can make their experience more planned out ahead of time.

As for the potential locations where the Quiet Pods could go, our team explored many sections of the airport and found a few areas where the Pods could be placed. These are locations with plenty of extra space that were still close to areas traffic flow, allowing for more passengers to see that the pods exist. They also do not conflict with current SEA construction projects. Images of these locations are shown below.

Exit of S gate train and up one escalator to the left



Exit of S gate train and to the left, old international arrivals.

Below are renders of some concept designs that could be further explored.

Isometric view of a potential design

Internal view from a chair perspective

Full view with walls and door implemented

Budget

Our idea was implementation of Quiet Pods. Inspired from the current support of the Nursery Pods created by the company Mamava, that are scattered around SeaTac Airport, we wanted to develop a physical space that is accessible to passengers throughout the airport and build of the idea of the current sensory room at SeaTac Airport.

Budgeting is a difficult task for this project, it's hard to find concrete costs. Perhaps contracting or making our own is a better proposition. Assuming the port makes their own kind of quiet pod we could get the cost down by making at least 8 with economies of scale. We would be creating a similar product to Mamava, with us using the same materials and tools which lowers the cost all around. We estimate that our product could be assembled in under 4 hours with 2 people.

Interior design will vary from pod to pod, thus changing cost. Cost of chairs varies widely. Currently the port buys seating from “encore”. IKEA may be a better source of seating and interior design inside of the new pods. As for ancillary and interior costs, we may be able to save money by providing our own seating. The XL comes with built-in seating. This seating isn’t the most comfortable, however. The port may be able to provide its own seating in the form of beanbags or perhaps rocking chairs.

Addressing Pros/Cons & Risk Management

Pros

The pros of the implementation of these Quiet Pods at SeaTac Airport hit these major key points of how these Quiet Pods will support Neurodivergent passengers here are SeaTac Airport.

- Improves overall accessibility
- Providing a safe space for passengers to manage:
  1. Sensory overload
  2. Improve focus
  3. Reduce stress
  4. Reduce restlessness

Cons

One of the main concerns with the implementation of the Quiet Pods is with trying to prevent potential misuse of the space. Currently, based on the results of the feedback form for the Sensory Rooms and discussion with stakeholders, there have been multiple instances of misuse of the current sensory room at SEA Airport. Examples of misuse include travelers (and airport employees) using the room to sleep, cause disruptions, use as a break room, or otherwise not use the sensory room for its intended purposes. Based on this and the Quiet Pods being smaller versions of the sensory room, we have determined that an implementation of the Quiet Pod idea would result in similar issues.

Another concern of the Quiet Pod, based on the feedback from the sensory room sensory room would be the maintaining and cleaning of the pods. Based on our time walking through the sensory room and the interfaith prayer room, we noticed that there were amounts of trash left in the rooms, and thus find it likely that implementing Quiet Pods will also run into this same issue.

Risk Mitigation

In order to mitigate these potential risks, we have come up with a few ideas:

- Placing Quiet Pods in areas that have foot traffic
  - Placing the Quiet Pods in areas of the airport that are not secluded (but not necessarily in high traffic areas) will help to discourage travelers and employees that do not need the services of the Quiet Pods from using them.
  - Issues that may arise such as noise (as it would be near foot traffic and airport wide sound systems) will ideally be lessened because of the noise cancelling designs features of Pods.

- Frequent cleaning and limiting the usage hours of the Quiet Pods:
  - Having clean spaces are essential l for the safety and comfort for our passengers at SeaTac Airport. Feedback from the current Sensory Room at the airport often references amounts of trash or other states of not being clean with the current sensory room. Cleaning hours being 12:00 AM – 4:00 AM to ensure the cleanse of the Quiet Pod will be prepared for the following passengers.

- Including cameras:
  - This would be to further help prevent people from misusing the Pods. By add cameras in the Quiet Pods, we are able to hold fellow SEA Port employees accountable for possible misuse, protecting passengers, and preventing any abuse in the Quiet Pods.
  - Having security to be able to have access to when the rooms are in use. Alerting police and medical personnel to be able to enter the room whenever if an incident occurs.
  - Concerns of the additive of camera that it may make passengers feel uncomfortable that there is surveillance in a space that is private and secluded. The passengers may feel like as if they are being ‘watched’.

- QR code or/and Sunflower badge integration:
  - Another potential idea to prevent bad actors from using the Quiet Pods would be implement a system needed in order to access the Pods. We have come up with two potential ideas of what this may look like. The first is to include a QR code to scan in order to open the Pod. The second is to have a system that requires a Pod user to scan a badge in order to access the Pods. This latter option may provide an opportunity to integrate access to the Pods with the existing Sunflower Program badges. This integration of the QR code or Sunflower badge will help support SEA employees in assistance of passengers who need the Quiet Pods. As well for passengers who need the Quiet Pods to be able to have the privilege to be able to use these spaces instead of individuals who may mistreat it.
  - The Port is already planning to implement a cipher-based lock on the door of the sensory room, so implementing the same lock and same call in to get the code system in the quiet pods would be beneficial.
  - With the implementation of the SEA app, passengers will be able to request time slots to be able to see the available times that they are able to access the Quiet Pod, future times when the Quiet Pod is available, or being able to see the other times of availability of all the Quiet Pods in the SEA airport are vacant or next available.
  - A concern with the QR code and Sunflower Badge scanner is that the building off the Sunflower Lanyard, which is free with no questions asked to any passenger who may ask to use it, all passengers that get access to the Sunflower Lanyard can use the

Quiet Pods. This may lead to bad actors taking advantage of the Quiet Pods luxury of space for misuse. This may lead to questions of if a certain passenger truly needs the room? (biases based on looks of a passenger).
    - Risk management would be having frequent checks by security of the cameras for possible misuse of the rooms, if suspicion occurred.

Partnership

Partnering with other Port Employees such as the Art Committee and the Custodial Port Employees to ensure of safe space.

Art Committee

- In partnership with Art Committee at SEA, we can allow for artist to explore and create designs for the exterior and the interior of the Quiet Pod to bring the stresses of traveling down and have passengers focus on something that isn't the stressfulness of the airport.

Custodial

- In partnership with the Custodial Port Employees, we can allow for the passengers who use the Quiet Pods to have a closed environment that is sanitized and safe to use. Having frequent routines of cleaning to make sure the space is clean, safe, and comfortable to be in will be important.

Security

- In partnership with current security measures at the airport, the camera inside the quiet pod can be monitored from the central camera hub. Security can also pass by the area once in a while to ensure that the quiet pod isn't being misused.

Properties and Operations:

- Cooperation with the properties and operations team is essential for ensuring that the potential locations that the quiet pods are placed aren't already reserved. The operations team would also have to be responsible for ensuring that the pod locations stay the same or change according to their plans.

Art & Greenery

This part of the project will explore the integration of art and greenery into spaces around the airport as well as in the Quiet Pods which will be used to help enhance mental health and well-being for those around the airport. The usage of plants, green walls, and art will be ideal in creating a more soothing environment for travelers. Here, we have various types of greenery all of which being considered for their aesthetic appeal and mental health benefits.

Research

How does art/greenery create a positive effect on people's stress and anxiety levels?

Research has shown that art and greenery both provide a number of mental health benefits. People who spend more time around nature and art are shown to have enhanced cognitive functioning and attention as well as lowered levels of stress and anxiety (Przyborski, 2019). Green spaces help people create a sense of well-being, a connection to nature, and belonging, mitigating low moods.

Art has been shown to positively impact people's mood and emotional well-being. It can create feelings of joy and inspiration serving as a form of visual therapy that helps people feel relaxed (Kiely, 2022).

Combining both art and greenery in spaces can amplify those therapeutic benefits. Both of these elements combined help create environments that are not only aesthetically pleasing but also helpful towards relaxation and stress relief. By implementing these ideas around the airport, people can feel more relaxed from the pressures of daily life.

"I like the idea of art at the airport--both visual and musical" – Stakeholder apart of the Port of Seattle Accessibility Committee. One of the stakeholders that we have reached out to has expressed his appreciation for art, in both visual and musical forms. This has led us to believe that by adding art around the airport, we can create a more enriching and vibrant environment that enhances the experiences for travelers at the airport.

Design

Partnership with the art committee and local artists for greenery related art ideas and/or public art is a previously explored idea in different areas of the terminal. These include artificial plants, real plants, animals, art installations, and more. Local artists who understand neurodivergence and life as an autistic person can more easily create calming art pieces that will help more.

Budget

Decorations and the like are a different and harder to quantify expense. Some options for decorations, such as art pieces and plants, can come literally from cheap to thousands of dollars. Currently, potted plants can be commercially bought for as little as $20, while art pieces can come anywhere on the spectrum of different price points. For example, student art from local art colleges is often around the sub- $500 price range and are a great way to support budding local artists.

Alternative digital art was considered, but even barring the already-raised concerns about eye strain and chaotic/unpleasant visuals from some of the interns, high quality displays are prohibitively expensive, much outweighing the costs of local art without the benefits of supporting local economies.

Implementation in the Airport

This is an example implementation of some greenery in a public space.
Similar installations could be created for the airport.

Addressing Pros/Cons & Risk Management

SEA airport can be greatly improved by adding either greenery such as plants, or fake/plastic plants that will reduce maintenance and cost. The airport will become more welcoming and visually appealing. Beyond the aesthetic appeal, this implementation has multiple advantages that improve the passengers experience, as well as the airport overall.

Preserved Moss Walls

Preserved moss walls can be used as an alternative to plant walls, bringing in most of the same benefits without the need of the ongoing maintenance or irrigation. These walls are made from real moss that has been preserved and are eco-friendly as they do not require any ongoing resources to be maintained. Beyond the aesthetic appeal of these moss walls, they also provide acoustic properties, absorbing sound and reducing noise in busy areas such as the airport. Another benefit to the preserved moss walls as they are hypoallergenic and will not attract insects, making them ideal for indoor spaces.

This is an example of how preserved moss walls can be used around the airport.

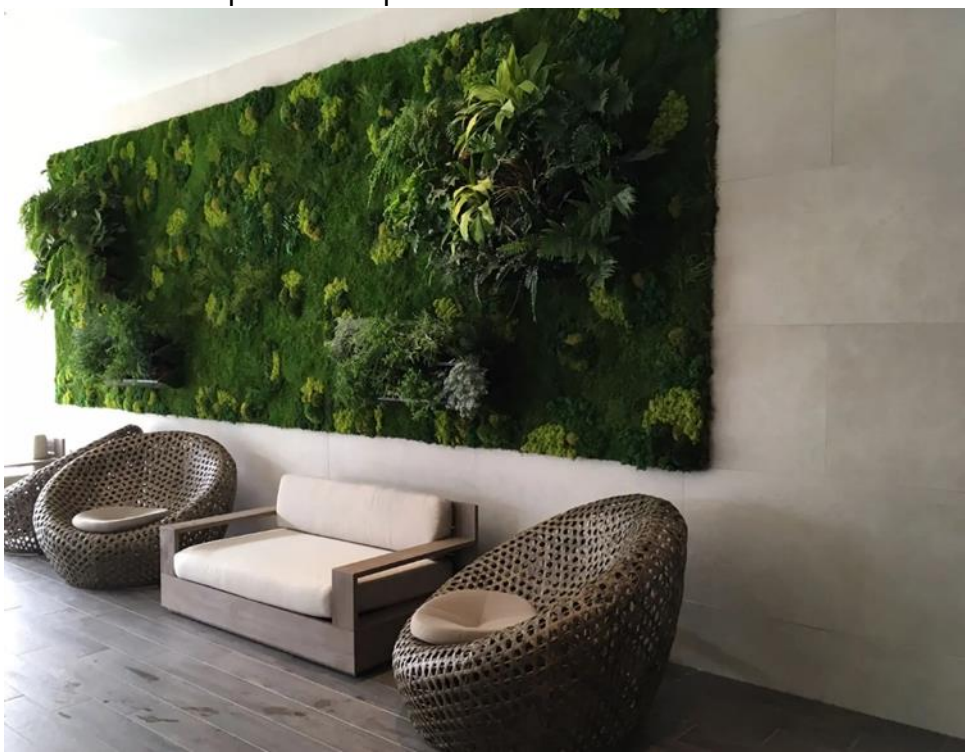


Image from *TrueVert Vertical Gardens*

Preserved moss walls would be separate from the quiet pods and will not be used within them. These preserved moss walls are most likely too delicate to be placed inside the quiet pods where they have a chance to be damaged.

Addressing Pros/Cons

Pros

- Aesthetic: having a visually appealing environment promotes a sense of well-being, and reduced stress levels. Also, we have to ensure that the greenery artwork is well placed, whether it be on the walls or on the ground, so that it harmonizes well with the overall airport design.
- Stress reduction/calming effects: Biophilic designs create healthier indoor spaces because of their shapes that mimic those found in nature such as patterns, shapes, and textures.
- High lifetime: Artificial plants won't be damaged by things like changes in temperature or environments so their lifetime would range from 5-10 years.
- Air quality – reduced carbon footprint (real plants): Plant walls act as natural air filters which absorb carbon dioxide and create oxygen helping reduce the carbon footprint. Research has also shown that plant walls can also be used to reduce some indoor pollutants and can raise relative humidity to healthier and more comfortable levels indoors.
- Noise reduction: Vegetation in walls can help reduce noise levels contributing to a calmer airport environment. This is possible as the plants will absorb and reflect smaller sound waves creating a quieter environment.

Cons

- Maintenance (real plants): Plants require regular upkeep and watering, and also need a constant light source to properly grow. So that leaves us with limited options such as new irrigation systems to be implemented or employees would need to water the plants if in a reachable location.
- “If you’re exploring using live plants you should also speak to our maintenance department, since we’ve had issues with insects and attracting birds into the terminal in the past” - Mandy Xiggores.
- Cost: Working with local artists for this accommodation will require a lot of investing considering they will need to use high-quality artificial plants. Other factors such as material and space will also factor into the cost of the project.

Benefits & Constraints

Benefits: Adding plants to the airport environment not only makes everyone feel better, but it can also have benefits for people who are neurodivergent. Numerous studies showing a positive impact on cortisol levels have indicated that the addition of greenery reduces stress levels. This relaxing effect is especially important for neurodivergent people, as they may have increased sensitivity to stimuli in the environment. The presence of plants helps to reduce stress by creating a more peaceful and natural environment, which relieves passengers from the stress associated with traveling. The goal of this idea is to improve the experience of everyone who uses SEA, including people who are neurodivergent in terms of comfort and happiness in general.

Constraints/risk management: Bringing in real plants could cause unwanted problems, as the airport has experienced issues with them before. This includes dealing with insects, risk of mold and bacteria growth if not carefully maintained. Additional concerns can include the maintenance which can be costly for the Port. However, artificial plants eliminate the need for continuous maintenance, preventing problems the airport faces with real plants. Selecting high-quality artificial greenery reduces money on maintenance over time and maintains a regularly

pleasing environment. This provides a more efficient and sustainable alternative while also improving the airport's aesthetics and avoiding the issues associated with real plants.

With the benefits and constraints in mind overall, greenery has shown that it reduces stress and betters your well-being, especially adding greenery at location such as entrances, escalators, and throughout the concourses.

Potential Locations for Greenery

Ceiling greenery

This is located at SEA Gates D22/D23

Example for ceiling greenery

Transforming columns

The columns throughout the airport

Example of AI-generated terrarium-like columns

Transforming the regular concrete column into a terrarium like structure with glass walls could benefit neurodivergent passengers in the airport environment. The addition of natural elements, such as plants and greenery, creates a calming atmosphere, reducing stress and anxiety commonly experienced by many airport passengers.

Partnership

There are three key partnerships that this project would need carry out

- First, in partnership with the Art Committee, would allow us to explore different concepts for fitting greenery to the airport. One of the main challenges of this project is finding space to add to the airport without crowding areas which, the Art Committee would be able to help us navigate. Overall, this partnership would allow for a more effective way to manage resources.
- Second, partnering with Custodial Port Employees would allow for any mess created to be cleaned up and maintain a clean airport. Any calming effects can be offset by messes

created by plants, so similar to the quiet pods, regular cleaning routines would be necessary.
- Thirdly, a partnership with a company that maintains plants would be required for greenery to be added to the airport. The Port already has partnerships with several of these companies, and expanding relations with them would allow for a far smoother process for adding plants into the airport.

Raise Values / Century Goals

This project relates to four of the RAISE values, respect, integrity stewardship, and excellence, as well as relating to Goals 2, 5, and 6 of the Century Agenda. The project focuses on accessibility which lends itself well to many of the Ports values.

Firstly, this project addresses respect. This project furthers the Port's efforts towards respect by upholding the dignity and value of every person. Addressing issues regarding accessibility allows the Port to bring quality experience to all passengers, which in turn allows the Port to demonstrate respect for neurodivergent travelers. Next, stewardship is addressed. Part of being stewards of SEA Airport is keeping it in a state where it is able to provide a smooth experience for all. If there are issues with accessibility the Port should be obligated to fix it as stewards of the airport. Following that, the project covers excellence. The Port strives to provide the best experience for all passengers and should always be looking for improvements to the airport if there is an opportunity to do so. Lastly, this project covers integrity. A large part of the Port's commitment to integrity is being able to hold ourselves to our values of accommodating neurodivergent passengers as well as trying to be ethical. When striving to be ethical, accessibility is very important because it is unethical to have any design that discriminates against any group, even if the flaw is within regulations.

Moving on to the Century Goals, the first goal that this project relates to is goal two: advance this region as a leading tourism destination and business gateway. If the Port wants to advance this region as a leading tourism destination, they need to improve customer experience. To do this, the Port must address issues of accessibility because when there are failures to accommodate certain groups, then it limits the functionality of other aspects of customer service. Next, this project covers goal five: become a model for equity, diversity, and inclusion. If the Port plans for SEA Airport to become a model for equity, diversity, and inclusion, it must provide accessibility for neurodivergent passengers. If the Port only addresses accessibility issues for some communities, it defeats the purpose of this goal, which this project aims to address. The project also addresses goal six: be a highly effective public agency. The Port cannot become a highly effective public agency if it isn't able to provide great customer experiences for all people at Port facilities. The project allows the Port to be more inclusive as a public agency.

Conclusion

Through the research done by the Aviation Cohort to develop a better understanding of what neurodivergence is led to the creation and brainstorming of physical amenities at SEA Airport to support Neurodivergent passengers when traveling through SEA. This included physical amenities such as the Quiet Pods, which develop an accessible space that can be transported through the airport to support a neurodivergent passenger reduce their stress and anxieties while traveling. It also included physical amenities that surround the idea of Biophilic art

(Greenery and Art) throughout the airport to provide a welcoming and calming environment through nature.

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