U.S. Department of Transportation
BEAUTIFYING TRANSPORTATION INFRASTRUCTURE COUNCIL

Council Notes for Task 26-01: Expanding the Principles for Beautiful Transportation

U.S. Department of Transportation (DOT) asks the Beautifying Transportation Infrastructure Council (BTIC or Council) to discuss the principles that guide beautiful transportation projects and provide examples and best practices of beautiful design that extend across the Nation and include rural and urban projects and project components. DOT asks that these examples and best practices span all modes of transportation, including highway, rail, transit, maritime, and aviation facilities and infrastructure. These examples and best practices should include principles like harmony with landscapes, use of local materials, biophilic design, minimization of signage, and public art integration.

Beautifying Transportation Principles

The Council listed its initial principles for guiding beautifying transportation infrastructure:

1. Uplift and inspire travelers.
2. Harmonize with surrounding landscapes.
3. Complement local architectural heritage.
4. Incorporate art and design features.
5. Harness form to advance function.

Principle 1: Uplift and inspire travelers

- Transportation infrastructure can act as an aesthetically pleasing gateway while also providing information that lets travelers know details about the place they will be visiting or passing through.
- Local connections can be incorporated into the facility's architecture.
- Traveler experience can be enhanced and more than just about getting from point A to B.
- Traveling can be stressful, but architecture can be designed to help calm travelers.
- Beauty in landscapes and infrastructure can be calming.
- Landscape can be a component of traffic calming by providing scenic opportunities to pull off the road while enhancing safety.

Principle 2: Harmonize with surrounding landscapes

- Landscape can inform the design and artistic component of infrastructure to achieve a connection with the environment, such as rural, urban, etc.
- Materials can reflect the aesthetics and ecological needs of the surrounding area so that the infrastructure does not detract from or harm those surroundings.
- Lighting can effectively showcase facilities, assist way finding, and customize experiences that celebrate the history and culture of a place. It can be cost effective, but maintenance is essential so to ensure initial achievement is not diminished over time.
- When adding to a facility, it's important to consider the history of the original structure.
- The use of materials, such as stone and steel, to influence infrastructure design has evolved over time.
- Maritime areas, like ports, have unique potential to complement or contrast built facilities with water features.

Principle 3: Complement local architectural heritage

- Taking advantage of opportunities to celebrate local history and visual beauty can enhance people's connection to place. Airports do this well when incorporating regional history, culture, art and local businesses into terminal design.

Principle 4: Incorporate art and design features

- It is important to consider historical and classical architecture and how to incorporate them into new infrastructure.

Principle 5: Harness form to advance function

- Safety should not be compromised for aesthetics.
- Use of materials that harmonize with the surrounding area is most important in the visible finishings. Using other materials beneath the surface can allow for more flexibility in function while also potentially keeping costs in check.
- Frequent visual distractions along roads can negatively impact safety.
- Including art as a line item in initial planning helps ensure that aesthetics is not an afterthought.
- Standardizing some designs may help to incorporate aesthetics while keeping costs down.

Examples Noted by the Council

- Washington Parkway's design, in particular its bridges and landscape, feels natural to DC and has a sense of belonging.
- Singapore Changi Airport uses water features and vegetation to give a natural feel that is calming for travelers.
- The 30th Street Station in Philadelphia incorporates classical design.
- Palm Beach airport uses seashells and other local natural materials.
- The Golden Gate Bridge does not fully harmonize with the environment but contrasts with it in a way that successfully adds to the vista.

Noteworthy Practices Identified by the Council

- Aesthetic master plans set an intentional unified theme throughout a corridor. This practice can help control costs by letting contractors design and build at scale.
- Inexpensive additions to transportation facilities, like LED lighting under a bridge, can enhance the aesthetic experience and bring pride to a place.
- The National Park Service (NPS) has guidelines for transportation aesthetics that are implemented at all parks.
- Public engagement offers an opportunity to obtain and incorporate local feedback.

Council Recommendations

- DOT should identify research needs on aesthetic infrastructure, including possibly on biophilic design.
- Consider ways to encourage standardizing of aesthetic design guidelines.

Suggested Information Requests and Presentation Topics

- Council members should share examples of existing facilities.
- Are there states, countries that have design principles? What are they? (i.e. Ohio rest center design standards)
- Identify speakers, possibly DOT, transit authorities or NPS. Council mentioned Sir John Hayes, former Minister of Transportation in Britain, as an example of a speaker to consider. Sir John Hayes focused his career on beautifying transportation infrastructure and has given a famous speech, The Way to Beauty, that speaks to a similar goal that the Council aims to achieve. Council also suggested discussing art and literature that celebrates the aesthetics of infrastructure. An example mentioned during the discussion included a poem titled “Pennsylvania Station,” by Langston Hughes.