BRT Station Designs
Design Renderings-January 2024

Design Comments
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General Comments-Overall Design Goals

The proposed station design addresses several design goals to which concept alternatives were evaluated against during the design process.

- **Establish a clear identity**. Create a memorable, contemporary-focused design, responsive to the local context in terms of materials, form, and compatibility with a variety of existing (and future) architectural styles.

- **Provide design consistency with adaptability**. Provide a recognizable and consistent overall form that can be adapted to allow tailoring the station design to fit within the diverse contexts along the corridor (downtown, commercial arterials, residential areas, etc.) that entail varying architectural scales of buildings, material usage, forms, historical significance, and differing site-specific conditions including constricted available footprint, topography, pedestrian access and flow, micro-climate condition, and adjoining site configuration.

- **Ensure customer comfort, safety, and convenience**: Consider and accommodate the full experience and needs of the user: accessibility to the platform , visibility from adjoining pedestrian routes, visibility of approaching buses while on the platform, visibility of the approaching station from inside the bus, protection from the elements, adequate lighting, availability of transit messages and information, options for comfortable seating while waiting, human scale materials and design, and clearly-marked station identity.

The following comments assess how the proposed station design addresses each of the design goals.

Establish a clear identity

1. The proposed design clearly articulates a form that makes a virtue out of the fundamental sheltering and structural components of the design program. The basic architectural expression is that of a generous horizontal roof plane, intersected and balanced visually by vertical supports with differing cross-sectional dimensions. One of the vertical elements penetrates beyond the roof plane and effectively acts as a small "tower" to give the station an enhanced visual presence as one approaches by foot, bike, or bus.

2. Slender structural steel "fins" are articulated as ribs on the underside of the canopy, giving some visual interest to this surface.

3. Seating is incorporated to create a horizontal "base" to the station form, as either a brick or stone seating wall (topped by a manufactured wood seating surface) or, depending on location, in the form of a large proportionally appropriate horizontal free-standing bench.

4. Glass panels are placed in between the steel structural columns, behind the benches, with a singular large opening to allow pedestrian access from the rear. The glass panels do not intersect with the taller tower-like pier, allowing it to have an appropriate free-standing identity, enhancing its verticality.

Provide design consistency with adaptability

5. The station is designed with a "kit of parts" approach, to allow for a consistent, recognizable design form and expression, that can be adjusted to best fit, through variations in material usage, with a particular context along the BRT corridor.

6. The variation of material will occur on the vertical piers, and on the horizontal seating wall. The basic palette for these surfaces is either a reddish-brown brick, or stone, reminiscent of the "Chapel Hill Stone"

walls found throughout the downtown, the University, and in the historic neighborhoods. In some locations, the vertical piers would be clad with brick, with the seating wall clad in stone (capped by a horizontal manufactured wood bench slab). In other station locations, it may make sense to reverse this usage, with stone on the piers and brick for the seat wall.

7. In addition, there is an option to utilize metal panels on the vertical piers, which may be an appropriate design response in areas along the corridor that have a more contemporary architectural expression.

8. Consistent in all stations is the materiality of the roof structure. The edge of the roof plane is capped by a simple metal banding, with the underside clad in a warm-colored manufactured wood product, articulated by slender tapering steel structural support fins.

9. Some stations may include additional site features (retaining walls, seat walls, planters) that offer additional opportunities to tie the station design in with contextual conditions.

Ensure customer comfort, safety, and convenience.

10. The overall form of the station is designed to provide protection from the elements to ensure a comfortable and safe wait at the platform.

11. The large, sheltering roof provides ample coverage over the seating/waiting areas (per public input, the roof form was enlarged during the design process to provide more coverage) for both rain and sun protection.

12. The vertical glass panels provide wind protection. At one point in the design process, having more glass was considered but was not recommended by the team, to ensure adequate pedestrian access from behind and around the side of the structure. Another concern, related to a sense of security, was to not "wall off" the platform with a longer, continuous surface of vertical glass.

13. The provision of glass walls and the overall open nature of the structure enhances visibility both from and into the station, an important concern for reinforcing the user's sense of security and the perceived adequacy of surveillance opportunities.

14. The tower-like vertical support element is intended to help improve the visibility of the station as one views it from inside an approaching bus.

15. The vertical elements are also the locations of architecturally integrated signage systems for communicating transit, and potentially, community information.

16. Station identity signage is incorporated into a horizontal band across the top of the glass walls. The band is colored "Carolina Blue" in recognition of the University.

17. Two options for lighting have been studied; either by canister downlighting from the underside of the roof, or in the form of LED strip lighting incorporated along the inside perimeter on sides of the roof plane structure. Either option is projected to provide the desired level and quality of illumination. The overall lighting strategy is to bounce light off surfaces resulting in a warm, non-glare, evenly distributed light pattern.

Summary Comments

The chief virtue of the design is in the direct expression of the station support and enclosure elements in simple rectangular forms. The team considered flashier and more complex design alternatives, but in the end, felt this concept provided a kind of timeless and refined architectural expression. The proposed materials, suggesting natural textures, and warm colors, relate the stations to the material palette found throughout the downtown and historic neighborhoods. The result is a composed and balanced structure, that has a contemporary expression but because of the simple and straightforward geometries and material selections, should fit comfortably in a variety of contexts along the corridor, either more traditional, or contemporary, while attaining high levels of user comfort.