



## **Analyzing Suburban Transit Oriented Development**

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The car has been slowly killing the American city for the past 60+ years. Many events and decisions, both with and without good intentions, have created dead zones throughout metropolitan areas all across the country. Realistic suggestions are slow to be proposed, accepted and adopted in America, where Manifest Destiny has turned into Manifest Sprawl in a desire for cheap land and an acceptance of an automobile monopoly. Light rail public transit systems have been promoted as focusing agents for the developmental sprawl that has blighted the once proud and altruistic vision of the suburb.

Proponents of transit oriented development have emphasized the need to create environments around public mass transportation stations that promote community and make places that are pedestrian friendly as a way to combat sprawl. Many books have looked at transit oriented development projects from an urban design and planning perspective, but little attention has been given to understanding existing developments from the user's perspective. Does transit oriented development actually create a livable environment that people consider successful? To answer this question, I've surveyed people at the Round at Beaverton Central and Orenco Station, two transit oriented developments in the Portland, Oregon metropolitan area to find out user opinions about the successes and failures of each project. In terms of my survey's methodology, people at each location were asked questions on two separate occasions: once during a weekday afternoon and once on a Saturday evening, in an attempt to survey a wider range of users. On each occasion, I surveyed 10 users at each development for a total of 40 people. Although this is a small amount of each development's total user set, by surveying on two separate occasions I believe the results are fairly well balanced in terms of user likes and dislikes.

Although the conclusions for each location are similar, the history and scale of the developments are quite different. The Round at Beaverton Central is located in Beaverton approximately nine miles west of Portland's city center. Taking the MAX (the Metropolitan Area Express is the light rail transit system in the Portland area), the travel time from the Round to Pioneer Courthouse Square in downtown Portland is 24 minutes according to Tri-Met's online

train schedules. The project's conceptual timeline dates back to 1979 when Beaverton leaders initially proposed an unrealized eight story mixed use development at the site that would include City Hall and the city's library (Anderson). After the city approved plans for development in 1997, the developer went bankrupt and the project stalled. A new developer, Dorn-Platz, was picked and buildings on the site began opening in 2003. The development includes 65 condominiums, ground floor retail, office space, and two parking structures for a total of 637,788 square feet once all the buildings are completed, according to the developer's website. The second developer proceeded to default on two agreements with the city regarding the project's completion date. Currently only four of the eight proposed buildings in the mixed use development are complete and tenant space and condos are still available within the completed buildings. Four lots remain empty, one of which has foundations poured and reinforcing steel exposed with caution tape highlighting the perimeter of the buildings beginnings, which has been untouched for over a year.



Figure 1: The Round site plan (Dorn-Platz). Completed buildings shown in red. Site with foundations left exposed in pink. Empty lots shown in white.



Figure 2: This aerial satellite image (Google Earth) shows the Round in a sea of parking lots. A white circle is centered at the train stop with an eighth mile radius for scale.

Despite the project's stalled status and its troubled history, which also includes a lawsuit for alleged construction defects, users gave the built work high marks. On average, people rated the Round as four out of five stars (on a one to five scale; five being the highest). When asked to name three aspects of the project that they like, people at the development included things that can be best categorized as transit, use/activities, and appearance. Shown on the following page are their likes and dislikes. The larger the text, the more common the response; for example, when asked what people liked most about the area, "it looks nice" was the answer nine times. As you can interpret from the responses in Figures 3 and 4, people typically had an easier time verbalizing their dislikes in regard to specific issues.

What are a few things you like most about the immediate area?

**it looks nice**  
**all the activities (food, gym, etc.)**  
 the people  
 it's suburban - it's close to portland, but it's chill      the shape  
 it's close to work  
**the landscaping**  
 I don't have to drive here  
**the convenience of the train**

Figure 3: A graphic interpretation of user responses regarding things they liked about the Round at Beaverton Central. The more often a phrase was repeated, the larger the text.

What are a few things you dislike most about the immediate area?

**it's not finished**  
**there's no coffee shop anymore**  
 there should be more to do around it  
 there could be more to bike on      nothing's wrong with it  
 it could be more sustainable  
**the architectural aesthetic**  
 the parking garage spaces are too close together  
**there's not enough cover from the weather**

Figure 4: A graphic interpretation of user responses regarding things they disliked about the Round at Beaverton Central. The more often a phrase was repeated, the larger the text.





Figure 5: A photo of the Round at Beaverton Central, looking south.

The Orenco Station development is much larger, and probably more well recognized, than the Round at Beaverton Central. Orenco Station is a development that stretches over 200 acres located in Hillsboro, Oregon approximately 14 miles west of Portland’s city center, and according to Tri-Met’s website, 39 minutes away from downtown Portland by train. Project construction began in 1997, with a large percentage of the buildings completed in the first few years. Although the project flowed much more smoothly than the Round, it still wasn’t without its own issues. The developer didn’t have any precedents for this size and type of development, so in order to offset the assumed project risk, a standard auto-oriented big box commercial development was built at the fringe of the site. Vacant lots immediately north of the train station scar the transit user’s first impression of the otherwise pedestrian friendly development. According to Cheryl Weber’s “Riding the Rails,”

“To help mitigate the risk [of large mixed-use development], PacTrust [one of the project developers] ... sold off a large multifamily site, a key parcel between the rail station and the six-acre Town Center; a mix of retail, office, and residential

space the developer still owns. "In hindsight, that was a strategic mistake," Mike Mehaffy, Orenco's project manager says... "We lost the ability to control the timing of development. A large portion of the site remains unbuilt today."

Despite the project's hiccups, the development has won multiple awards, including the Ahwahnee Livable Community Award, 'Master Planned Community of the Year,' and the State of Oregon Governor's Livability Award (Fletcher Farr Ayotte). Many of the successes can be traced back to the design team's precedent analysis of older streetcar suburbs, the developer's initial marketing surveys about unit types, and consumer focus group reviews (National Association of Home Builders). Although the project has a density of around 18-20 dwelling units per acre, the project team met with City of Hillsboro planners to determine appropriate zoning ordinances and guidelines to maximize the pedestrian feel of the project and minimize the invasion of privacy that often comes with higher densities (Mehaffy). Some of the modifications included narrow (20 foot wide) streets, 19 foot maximum building setbacks, side yard easements, live/work dwellings, back alley garages, and in the town center, buildings were "required to line the streets, with parking in the rear" (Mehaffy). All of these decisions led to a more pedestrian environment and positive reactions from users.

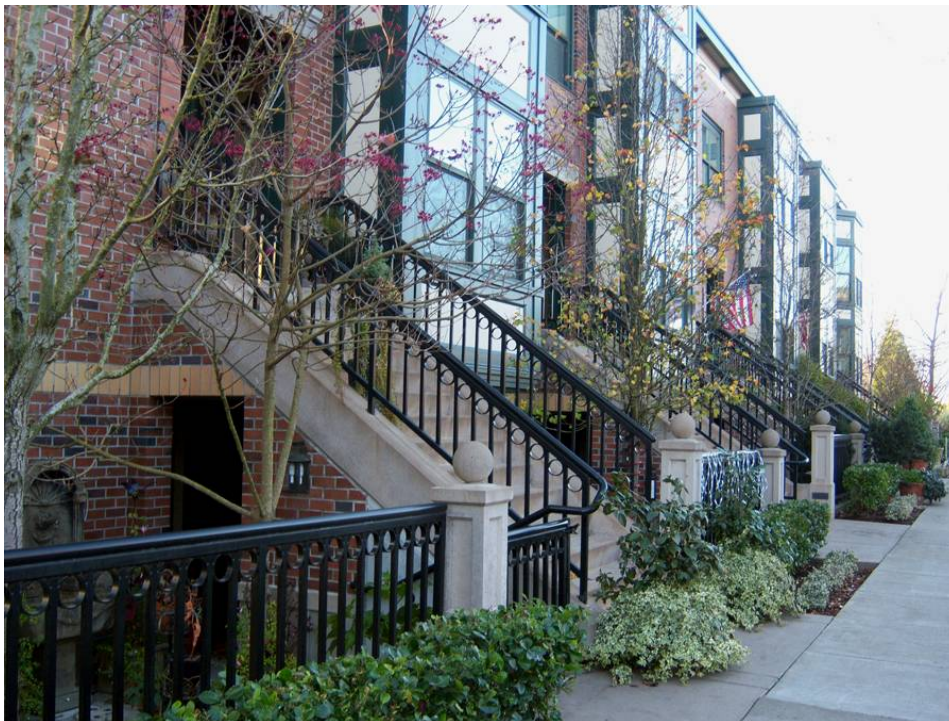


Figure 6: A photo of live/work residential units at Orenco Station on the main pedestrian axis just north of the town center.





Figure 7: The site plan shows a quick overview of the development (Mehaffy).



Figure 8: This aerial satellite image (Google Earth) shows Orenco Station. A white circle is centered at the train stop with an eighth mile radius for scale.

Interpreting the results of the Orenco Station survey responses, many of the comments were very similar to those from the Round. People were positive about the development and it showed in the 3.8 rating that it earned from users. Once again the shopping and activities in the development drew some of the highest marks. In this case, “the community” and “the people,” which I interpreted as the same response, was the most common answer. As you can see in Figure 9, users also enjoy the wide variety of pedestrian activities.

What are a few things you like most about the immediate area?



Figure 9: A graphic interpretation of user responses regarding things they liked about Orenco Station. The more often a phrase was repeated, the larger the text.

What are a few things you dislike most about the immediate area?

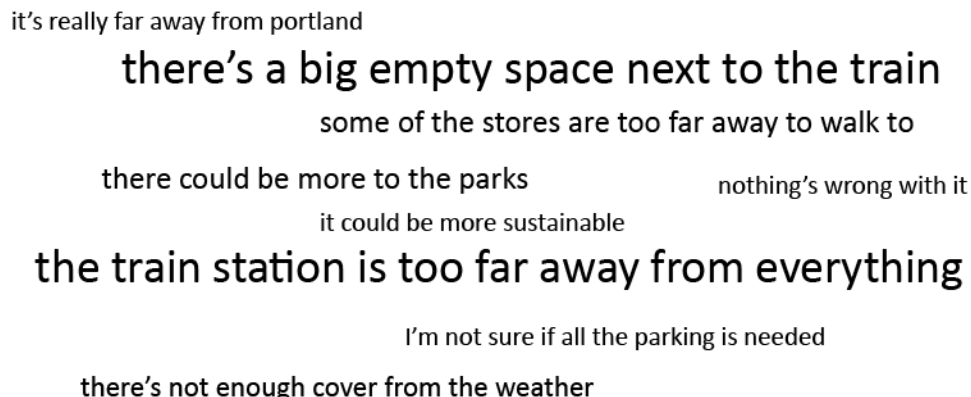


Figure 10: A graphic interpretation of user responses regarding things they disliked about Orenco Station. The more often a phrase was repeated, the larger the text.



Figure 10 highlights a difference between the Round and Orenco Station: the train is at the southern end of Orenco's new development, a quarter-mile away from the center of the development, and half-mile away from the northern edge of the project. The responses suggest that some people have reached the limit of their pedestrian range. As referenced in *Developing Around Transit*, Peter Calthorpe's transit village urban design strategy defines the core as a quarter-mile radius from the transit stop while a "secondary area occupies the remaining area out to a half mile from the station" (58). Although the transit stop is suggested to be in the heart of the core, around which density tapers down, the stop at Orenco Station is pulled away from the town center. The center instead lies at the intersection of a local arterial street and the more pedestrian friendly North-South axis of the project. According to a study by Bruce Podobnik, 74.9% of residents always use their private automobile for their daily commute (9). Despite the implied causality of the distance to the train station, Podobnik suggests that a greater deterrent could be on the other end of the commute, where the distance from the train station to the workplace could be potentially much farther depending on the place of work (13). On the bright side, his data shows that 69% of Orenco residents are using mass transit more now than in their previous neighborhood (9).

My Orenco Station user survey findings support Podobnik's resident surveys, which were published in 2002. Many of the resident's likes and dislikes still hold true. Favorable responses to his survey included: design of community, greenspaces/parks, orientation of community, town center, alley parking/garages, design of homes, pedestrian friendly, and close to mass transit, to list the most common replies (6).

Interestingly, two other questions in his surveys were directly related to the project's community aspects. "Is there more or less a sense of community here, as compared to where you lived before?" 78% of the respondents said there was more of a sense of a community at Orenco, while 15% said it was the same, and 7% said there was less. When asked if household members participated in formal or informal community groups, 40% of the households said that they did participate in community groups, compared to 30% in other neighborhoods around the Portland metropolitan area (4). Once again Podobnik stresses that Orenco Station isn't necessarily the result of physical determinism, and that "other survey questions reveal very clearly that the people who moved into Orenco Station were often doing so because they wanted to live in a

high-density, socially-interactive community” (5). In reality though, either through planning and urban design, or through marketing and self-fulfilling prophecy, the project has become a place where people are more likely to join community groups than other places around Portland according to Podobnik’s results.

So once again the question is posed: Does transit oriented development actually create a livable environment that people consider successful? Based on this research in this paper, the answer is a very confident yes. Despite setbacks at both projects, people still rate each project positively. Responses from the Round at Beaverton Central and Orenco Station were both fairly similar despite their scale differences. Both were viewed in a good light: when asked to rate the immediate area, on average people rated the Round as four out of five stars while Orenco came in slightly lower at 3.8 (on a one to five scale; five being the highest). Although people expressed dislikes about each location, the primary focus was on filling in the empty lots. Essentially, users just wanted the projects completed so that they could benefit from a larger critical mass, including more amenities and conveniences. At Orenco Station, the most common irresolvable dislike is the distance to the train for some of the users. At the Round at Beaverton Central, assuming the development will eventually be finished (which is a very big if currently), the next most pressing issues for users are the architectural aesthetic and the desire for more protection from the weather while waiting on the train. Although important, these two critiques are hardly issues that turn the development into a failure, according to user ratings. In order for the Round to become a true transit oriented development, the project’s surroundings need to increase in density as well. The project is currently sitting in a sea of asphalt parking lots and more typical suburban low density development.

When considering the things that users liked about each project (the sense of community, the wide variety of activities, the urban design elements, etc...), it appears that people enjoy these developments. While acknowledging that transit oriented developments might not be for all, the survey results support the claim that when done well, these types of developments are well perceived. Understanding these developments as a series of livable, pedestrian oriented environments on the MAX line in Portland creates a strong argument for transit oriented development as a sustainable, efficient form of growth that users enjoy.

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