

To: MayorAndCouncil
From: Paul Conte <pconte@picante-soft.com>
Subject: Another chapter from Twain
Cc:
Bcc:
Attached: C:\Neighborhood\EmX\My analysis\WEEE Criteria 4 photo.jpg;

March 4, 2011

Dear Mayor and City Councilors,

Today's instructive quote from Mark Twain is:

"Get your facts first, and then you can distort them as much as you please."

When LTD presented their comparison of the projected number of residents and employees within range of the two WEEE alignments, they may have been heeding Twain's advice.

While the LTD figures make it appear the two alignments are near equal in residents, that result is likely to be a distortion based on how LTD selected and used the data.

To recap:

In their "West Eugene EmX Extension Project - Alternatives Analysis Report - October 2010" document, LTD provided these figures:

2031 Population within One-Half mile of BRT Stations (Figures 9.17 & 9.18)

W 6th/7th: 21,007 = 14,029 + 6,978

W 11th/13th: 20,386 = 13,380 + 7,006

2031 Employment within One-Half mile of BRT Stations (Figures 9.19 & 9.20)

W 6th/7th: 30,479 = 20,475 + 10,004

W 11th/13th: 28,582 = 18,845 + 9,737

(Note that the accompanying text stated that LTD used "The total population [employment] within one-half mile of each alignment alternative," which is somewhat inconsistent with the figure captions, which reference "stations".)

In their February 23 presentation, LTD provided the following figures. (I've estimated from the bar charts):

2031 Corridor Population (Slide 21)

W 6th/7th: 23,000

W 11th/13th: 24,000

2031 Corridor Employment (Slide 22)

W 6th/7th: 32,000

W 11th/13th: 27,000

The first thing to notice is that the W. 6th/7th Ave alignment has a large advantage (18.5%) over the W. 11th/13th Ave. alignment in the number of employees who might be served. Intuitively though, this

difference seems smaller than one might expect given that the W. 6th/7th Ave. alignment runs right through a corridor that is intensely developed with businesses, while the W. 11th/13th Ave. alignment passes by very few businesses.

(On a related note, the City Manager's "Envision Eugene Draft Recommendations", released today, shows the W. 6th/7th Ave. alignment as a "Core Commercial Area", whereas the W. 11th/13th is not designated that way.)

What's even more surprising is that the latest LTD figures show more residents within the range of the W. 11th/13th Ave. alignment than the W. 6th/7th Ave. alignment. This just doesn't make sense given the many apartments that line W. 6th, 7th and 8th Aves.

Aha! But when you look more closely, you realize that using a half-mile range, rather than the more standard quarter-mile range for transit-oriented development, the "corridor" around the W. 11th/13th Ave. alignment encompasses most of the businesses and apartments along W. 6th and 7th Aves. and all of the apartments along W. 8th Ave., as well.

The attached map and aerial photo is a very crude draft of how the encompassed areas may be delineated. (LTD hasn't provided enough information to know exactly how this map should be drawn.) Residents and employees in the yellow-shaded area are included in both alignments counts. Thus, LTD's approach represents the meaningful difference between the two alignments as the green-shaded area from W. 5th Ave. north for the W. 6th/7th Ave. alignment versus the pink-shaded, trapezoidal area from W. 12th Ave. south for the W. 11th/13th Ave. alignment.

Looking at this map, LTD's figures seem less surprising.

But has LTD used a reasonable approach to comparing the two alignments?

First, as noted, LTD has used twice the range often used in describing the extent of "TOD," "nodal development," and "mixed-use centers".

Second, it's highly dubious that people are going to get out of their cars to ride EmX along W. 13th Ave. in order to reach a business destination on W. 7th Ave. Similarly, few apartment dwellers who live on W. 6th, 7th or 8th are likely to walk to W. 13th Ave. to catch EmX. getting riders to come to or from EmX on W. 13th Ave. would be especially unlikely since, with the W. 13th EmX alignment, LTD plans to continue running regular bus service on W. 8th Ave., and that route is bound to capture the majority of transit riders travelling to or from the areas from W. 6th to W. 8th Ave.

So, on the face of it, LTD appears to have distorted the comparison of the two alignments on these two measures, which are the only "Measures of Effectiveness" (MOEs) that LTD has used for "Criteria 4 -- Increasing Transit Trips" in their "Alternatives Assessment."

Although LTD needs to provide a credible comparison before Council can know the answer for certain, it's likely that using more reasonable ranges for this analysis would show the W. 6th/7th Ave. alignment to be far superior to W. 11th/13th in both MOEs

One final point needs to be covered. LTD may respond to my statement that regular bus service will still run on W. 8th Ave. by saying: "By 2031, we'll have removed that service." Exactly, and when will regular bus service on W. 8th Ave. be removed? At the moment EmX is running on W. 6th and 7th! And at that point even fewer riders from the expansive area in LTD's "corridor" for the W. 11th/13th Ave. alignment will choose WEEE EmX over EmX on W. 6th/7th Ave.

Anyway you slice it, the W. 6th/7th Ave. alignment would serve more residents and employees in 2031.

As Twain also noted: *"Facts are stubborn, but statistics are more pliable."*

And the facts support the W. 6th/7th Ave. alignment, even though LTD's statistics may lead some to think otherwise.

-- Paul Conte