

MEMORANDUM

To: Action Initiative 5 "Downtown Circulator" Working Group
From: Greg Fisk
Subject: Framing the Issue / Terms of Reference
Date: February 26, 2012

At the last meeting of the group in January we committed to having a first work product within 2 months, and I took on the task of drafting a memo which would include the following items:

1. revisit and move circulator plan forward
2. define street car alternative
3. define bus alternative

I had hoped to get something to folks within a month, but here we are a least a couple of weeks past the two month time frame. So, first, my apologies.

So, this memo is a first attempt at framing the issues and providing terms of reference for further work on the downtown circulator concept.

The circulator idea has been around for a long time and the CBJ actually had a functioning, if short-lived bus-based circulator in 1985. Rather than rehash that history, and a great deal of subsequent analysis I would refer everybody to the 2008 Capital Transit Development Plan (TDP), by Moore & associates, on the CBJ website at <http://www.juneau.org/capitaltransit/pdfs/adopted2.pdf> . An entire section of that plan, titled "Downtown Shuttle Feasibility Study", begins on page 169. Though I'm sure that most of us are familiar with that work, I'd recommend that everyone give that at least a quick re-read. I'd also like to reference the related 2009 work by the Downtown Business Association (DBA) titled "Downtown Circulator Shuttle Feasibility Study" also done by Moore & Associates.

Thus far all efforts regarding a downtown circulator have focused on a bus-based system. While there is much valuable information to be gleaned from the 1985 experience and from the Moore & Associates analysis, there are significant gaps in analysis as well. The most significant such gap is in defining the purposes of a circulator. Under the heading "Purpose" (pg. 170) Moore cites three principal goals

- "Improve community mobility"
- "Promote downtown as a commercial and retail destination"
- "Mitigate downtown traffic congestion for residents, persons employed in the downtown area, and visitors to Juneau"

With the possible side effect of "...reduce(d) reliance on personal vehicles in the downtown area."

These are certainly laudable goals, and reduced use of personal vehicles in downtown would be a very positive additional benefit. However, from our overarching perspective of Downtown Economic Revitalization the TDP analysis is too limitative. I submit that, from our perspective, the fundamental purpose of a downtown circulator should be to foster and shape more robust economic development in downtown.

Fortunately, there has been a great deal of thought given to the idea – now known as Transit Oriented Development – and we have numerous excellent examples of demonstrating how this can be accomplished and quantifying economic outcomes. Moreover, in working toward the broader development objective the more limited goals of the older downtown circulator will be accomplished as well. So, it is not an "either..., or..." situation.

So, in the TDP, Moore's recommended circulator proposal

- Focused mainly on local passenger transport linking with Capital Transit lines;
- Did not focus on area economic development or on transport of visitors

A new approach might emphasize

- A Downtown Circulator viewed as a shaper of overall economic development / redevelopment
- Service to both visitor and local traffic in the downtown area
- Establishing linkages between key existing and planned visitor, work , entertainment and residential venues
- Circulator transit as a pedestrian extended (not as competition with pedestrian oriented projects)



As noted, past Circulator efforts have focused solely on buses. However, the 1985 Circulator was dependent on non-local operational grant funding, and was not self-sustaining when the grant ended. The TDP had a cursory discussion of electric "over head wire" trolley buses (pg 127) but quickly dismissed them as not cost effective. The idea of a true tracked streetcar was not examined. Since the presumably less expensive bus system could not be maintained without unaffordable subsidy, and since tracked systems are even more expensive than electric trolley buses, wouldn't past experience and the findings of the TDP rule out a true streetcar *a priori*? The answer is, I think, "no" on a number of grounds. At this point I would refer everyone to the attachment "Why Streetcars" for an overview on the subject of streetcars. The document is primarily oriented to the Portland experience but provides a lot of useful background.

Some things to consider from the outset:

- Operational costs of a true streetcar are quite comparable to those of a bus system operating over the same route. [Personnel costs are very similar.]

Energy costs can actually be less.¹ Equipment life is much longer and maintenance costs are similar. Route maintenance is basically street maintenance, which we have anyway, plus an increment for track cleaning and upkeep.]

- Ridership on true streetcars is substantially higher than for buses [This has been well demonstrated by numerous studies, and the effects here are likely to be much more pronounced, particularly during the tourism season. Unlike buses, streetcars are visitor attractions in and of themselves. The great success of the San Francisco Muni "F Line" streetcar – not a cable car – being a very strong example.]
- The development impact of streetcars is huge – buses not even being anywhere near on comparable. [The enormous investment multiples of transit oriented development has been well documented, but seeing is believing. The clearest example of this that I have personally experienced is residential and commercial development that has taken place along the Sound Transit line from SeaTac to downtown Seattle. The area along Rainer Avenue / MLK Blvd. was very run down for decades, but has experienced remarkable – transformative - investment since the fixed guide way transit system has become operational.]
- Combining its visitor and year-round residents / downtown worker bases, Juneau has the necessary ridership potential to support a Downtown Circulator Streetcar. [Small-city streetcar systems operate successfully on fairly modest ridership bases. Little Rock, Arkansas averages around 15,000 riders per month - heavily weighted to weekends - or about 180,000 riders per year. No others have our highly concentrated visitor pool of potential riders

The question "Should we have a Juneau streetcar?" thus basically comes down to questions of

1. The effectiveness of buses versus streetcars in meeting development and transportation goals;
2. The operational sustainability of buses versus streetcars; and
3. Capital cost affordability.

Question 1 gets answered resoundingly in favor of a streetcar system. The answer to question 2 seems to be "a wash" cost-wise, with the potential for offsetting revenue much greater for a streetcar. Thus, the central issue is upfront affordability.

I think it is fair to say that if we could afford one, and if it could be operated for comparable cost, almost everyone would prefer a true streetcar over a bus system. But, what about capital cost? How much system do we need, what is the installed cost per mile, and what is the source of funds?

Route Ideas: The idea that initially got my attentions was a route from Miner's Cove up Franklin St. to 4th St. Left on 4th to Main. Left on Main to the Transit Center (connections to / from conventional buses), and left again at Marine Way /Egan reconnecting with Franklin St. segment southbound. This is about 1.7 miles. This

¹ This could certainly prove true in Juneau with relatively inexpensive electricity, the rising cost of diesel, and the advent of new capacitor drives and regenerative braking which can reduce electric inputs by 80+%

would service the highest density of visitor traffic. However, the advent of the Willoughby Street Plan, coupled with learning more about the general development stimulation potential of streetcars, has convinced me that a system should be extended through the District to the Federal Building, adding .6 track miles if single tracked, 1.2 miles if double tracked. Such a system would inter-connect the chief traffic generating sites (3 of the 4 cruise docks), with the Legislative campus, historic uptown retail / residential core, the new Transit Center, most major government office buildings, and the area we are principally interested in seeing redevelop in mixed use – the Willoughby District. It closely corresponds to the old Downtown Circulator route.



Art Deco PPC car in San Francisco (note track in street)

Cost: At about 3 track miles, and using the “low cost design approach” used by most small systems we would be looking at \$30 to \$45 million. The variability depends on a number of factors; including type of cars used, track bed requirements, etc.

Funding Sources: I think our principal source of funding should be State cruise ship taxes. I think we can largely avoid dependence on federal grant funds.

Juneau is essentially guaranteed some \$4.5 to \$5 million per year from State cruise industry taxes at \$5 per person. Those funds are in addition to local tax collections. They are currently, and properly dedicated to the reconstruction of the CB’s dock infrastructure. However, visitor passenger transportation is an entirely legitimate use of those funds, and they could be used to pay the bond funding for a streetcar as well as the docks themselves. There is no doubt that such use would be opposed by the cruise industry, which would rather see the State tax go away entirely. The industry will also argue that they already provide all necessary bus service to move passengers to various venues (including most of the 80,000 visitors to the current State Museum annually). I think it will be impossible to entirely allay industry objections, but there are certainly countervailing arguments, including:

- Improving the overall visitor experience in Juneau;
- Adding interest and diversification of the tourist oriented retail core;
- Providing improved visitor access to venues of interest that are beyond easy walking distance (most of uptown, sites like St. Nicholas Church, the Legislature, the CBJ and State Museums, eventual Bridge Park and Seawalk, etc.);
- Improved visitor safety through reduced congestion;
- Greater support for cruise-based tourism on the part of residents; and
- Creation of marketable opportunities in pedestrian-based business and in the sale of streetcar access passes themselves.

It should be noted that wherever they exist streetcars are “center stage” marketing tools for the tourism industry.

There are a great number of questions to be answered about any Downtown Circulator system proposal, including – most fundamentally – do we need / want one at all. But, if we answer that in the affirmative, I think we need to examine the range of options available and not limit our thinking.