

**Vancouver Downtown Light Rail Alignment  
Steve Burdick's Minority Report  
April 16, 2009**

**Argument for Two-Way LRT and One-Way Auto Traffic on Washington**



The total negative impact to downtown from the couplet is much greater than the total negative impact to Washington in the two-way LRT option; especially when the impacts to Washington are tempered by reducing automobile travel to one northbound lane. Both alternatives have negative impacts, even accounting for the potential upside, but the sum of negative impacts to two streets is greater than the negative impact to one street.

The upside of the LRT impact on development, requires public investment to insure that each station area has a high quality finish and that each is anchored by complementary land uses. Spreading out to a couplet has the dual effect of increasing the base project cost and, more importantly, doubling the cost (and risk of failure) of trying to make station areas and streets that work. It is not easy, and not all station areas will be attractive and successful.

Sound urban development policy and principles support making one street work really well for LRT, and leaving the other for a more traditional, undisturbed urban streetscape.

**ADVERSE IMPACTS**

Light rail impacts a downtown environment block by block; its effects are not uniform. Station blocks and areas and non-station blocks and areas are two completely different things.

1. Overall Adverse Impacts: There are 13 blocks (26 block faces) on the Broadway leg. At least 11 of these blocks will not have a LRT station on them; yet the functionality of all of Broadway will be compromised because automobile use is prohibited on LRT tracks. Parking, drive lane widths and turning movements will all be restricted.

As a result, Broadway will look and feel different, and drivers will be discouraged from using it, especially if bus service also crowds out the constrained capacity. These impacts create a distinct economic disadvantage to the businesses, especially retail businesses, on Broadway.

2. Parking Impacts: In December 2008, the *Main Street District Design Handbook* study was completed by Vancouver citizens, City staff, Harper Hoff Regalis engineering and Crandall Arambula, PC. The purpose of this study was to provide, “a tool created by the citizens, stakeholders and City staff of Vancouver to help implement the Vancouver Main Street Improvement Project and foster downtown retail revitalization.” On page A-6 of that study, the authors conclude,

*“Sufficient numbers of parking spaces to meet demand for estimated amount of future Main Street District retail development; if no new parking structures are built, the deficit would be 300-500 spaces.”*

The most benign couplet alternative eliminates 125 on-street parking spaces; while two-way LRT on Washington with one-way auto traffic eliminates only 58 parking spaces.

Since surface parking lots are a poor parking space replacement strategy in an urban context any replacement of on-street parking should be developed in parking structures. However, the cost to replace on-street parking with structured parking ranges from \$35,000 to \$50,000 per space. Doing the math, the cost to replace parking with the couplet alternative is \$4.4 to \$6.3 million. The cost of the Washington two-way LRT and one-way auto traffic alternative is only \$2.0 to \$2.9 million.

These costs have not been factored into the CRC analysis or presentation to the VWG, yet they should be a critical consideration in our evaluation of what is best for downtown Vancouver. The scarcity of public resources to replace existing parking, let alone the new public parking necessary to “foster downtown retail revitalization”, should be a compelling argument in favor on two-way LRT and one-way auto traffic on Washington.

3. Transit Street Impacts: After tolerating more than 20 years of a bus system based on the 7<sup>th</sup> Street Transit Center that worked well for C-Tran, but was a blight on downtown, we now have a bus system that works well for C-Tran, for the business and property owners in downtown Vancouver, and for the community. All lines primarily use either Evergreen or Broadway. Both streets are well used by buses,

autos and pedestrians. There is no reason to dramatically change this functioning system if a two-way LRT alignment is developed on Washington.

If we choose the couplet alignment, the tracks, buses, and bus stops on Broadway will functionally convert Broadway to a transit only street. Drivers will be discouraged by that transit dominance and will likely choose other routes. To avoid this outcome, it is physically possible to shift the north / south bus routes and bus stops to C Street, but when the CRC project is complete, C Street will be overburdened as the primary access to and from I-5.

Preliminary designs to move transit to C Street already call for eliminating parking on the west side of C Street. If bus routes and stops have to be accommodated on C Street, it is likely that scarce parking on the east side of C Street will also be reduced or eliminated. Adding this bus traffic to C Street is likely to severely impact the turning movements into the 8<sup>th</sup> Street alley. This is the only entry drive to Riverwest's proposed 700 space parking garages. This could result in limiting turns into the 8<sup>th</sup> Street alley to right-in / right-out only. To gain entry into the public and private Riverwest garages, most Vancouver drivers would need to travel south on Broadway, turn left on 8<sup>th</sup> Street, turn left on C Street and turn right into the 8<sup>th</sup> Street alley. This pathway to the parking garages would be so illogical that it would most likely render the parking garages functionally obsolete.

4. Automobile Capacity, Access, and Circulation: The core of downtown has 5 north south streets—Columbia, Washington, Main, Broadway, and C.

Once the CRC project is complete and the Vancouver Waterfront is developed, Columbia, in addition to its central function as a through arterial will serve as access to SR14 and the newly developed Vancouver Waterfront.

Washington will not serve I-5, but can serve SR14 westbound traffic with one northbound lane that would complement the opposing southbound to eastbound movement available from Main Street to SR14. Under either alignment alternative, Washington will have reduced automobile capacity because of light rail.

Main Street is the designated retail core for downtown and will also serve through traffic with a new connection to SR14 and Columbia Way on the waterfront.

C Street will be overburdened with traffic to and from I-5 and with service to several large developments, including Riverwest and the public library.

Broadway Street is the only street that does not, at this time, have a designated function, aside from serving general traffic and CTRAN. But, consider the location—it is between Main, the primary retail street, and C, the primary freeway access street in lower downtown. If there is anywhere in downtown where the City will need additional flexibility for automobile circulation, it is on Broadway—to help absorb

some of the demand for circulation around Main and C. Putting light rail on Broadway would rob lower downtown of that essential circulation function.

5. Construction Impacts: From Washington / 7<sup>th</sup> to Broadway / McLoughlin, more than twice as many properties and businesses are adversely affected by construction. The argument that this impact is offset because construction will take twice as long on Washington is specious.

Whether one set of tracks or two sets of tracks are installed on Washington, the same amount of sidewalks are reconstructed, the same number of street light / LRT overhead cable structure is installed, two side by side track sets can be laid at the same time. Since construction will most likely tear up the whole street from property line to property line, the actual paving period will be of short duration and the number of lanes to pave will have minimal impact on the length of construction.

There are 26 block faces on both the Washington leg and the Broadway leg of the two alternatives. On the Broadway leg there are about 22 block faces that are developed and have active buildings on them. On the Washington leg there are about 15 block faces that are developed and have active buildings on them. In addition, one occupied block face on Washington is the east side of St. James church. So, there are 8 more block faces with active businesses that will be adversely impacted by construction on the Broadway leg than on the Washington leg.

### MITIGATING CONSIDERATIONS

There are positive impacts from light rail as well, although there are important caveats that have to be considered alongside the purported positives.

1. The Shopping Light Rail Patron:

It is assumed that people riding LRT will get off at stations and then walk along the Broadway alignment and be enticed to shop along the way.

However, consider the segment of the Broadway alignment between Washington / 7<sup>th</sup> and Broadway / 9<sup>th</sup> that will be served by the 5<sup>th</sup> Street station. The logical routes for riders whose origins or destinations will be the waterfront development, the Hilton Hotel & Conference Center, the Columbian building, Vancouvercenter, Esther Short Park, Esther Short Commons, and City offices at 6<sup>th</sup> and Esther will take them away from Broadway and 7<sup>th</sup>, not along that route.

The logical routes for riders whose origins or destinations are the West Coast Bank building, the Frontier building, the Heritage building or Smith Tower are along 5<sup>th</sup> or 6<sup>th</sup>.

Only those riders whose origins or destinations are the Murdock Executive Plaza, Bank of America or the Lewis & Clark Apartments are likely to take zig zag paths using portions 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, Washington, Main and Broadway.

*So, the properties on 7<sup>th</sup> (Heritage Way) and Broadway up to 9<sup>th</sup> are being asked to give up a fully functioning street for exposure to a small segment of the riders using one of the five downtown stations.*

This is a losing long term economic trade-off.

2. The LRT Patron Turned Shopper:

The second assumption is that people riding LRT on 7<sup>th</sup> and Broadway will observe the businesses along the way and be enticed to visit the businesses that they observe even though the business may be one to six blocks from a station.

Vancouver's experience with the 7<sup>th</sup> Street Transit Center resoundingly defeats that argument. When the card rooms were shut down in the lower Main area in 1979, the 7<sup>th</sup> Street Transit Center was conceived and proponents theorized that the 7,500 riders passing through the Center every day would spend money around the Center and along the bus routes. It didn't happen. The businesses that operated on the Center consisted of a sub-shop that did OK, a pawn shop that does well, a convenience store primarily known for the magazines and fortified beer and wine that it sold, a bar / club that changed hands often, the Eagles Club and office space that was often more vacant than occupied.

Just because the transit mode changes from bus to a LRT does not mean that the rider profile will change dramatically. There is no reason based on experience in Vancouver that these transit riders will energize downtown businesses along a LRT route anymore in the future than they did from 1982 to 2007 along Main Street and the 7<sup>th</sup> Street Transit Center. Furthermore, there is no expert analysis to indicate that the businesses on the 22 block faces on the Broadway leg that don't have a LRT station should expect positive economic impacts or increased property values.

3. Induced Development:

Immediately adjacent to the Washington leg are 11 blocks that, because they are mostly vacant or occupied by low value buildings, have good redevelopment potential. Along the Broadway leg there are only 5 or 6.

Blocks that have the most transit oriented development potential are those close to two-way LRT stations where the distance that riders must walk to and from the station is short. The Washington leg has about 5 sites that meet this criterion if two-way LRT is constructed on Washington. The Broadway leg has none.

*The couplet alignment compromises the transit oriented development viability of the sites on Washington and leaves the downtown without any sites with high transit oriented development potential.*

#### 4. Supportive Development:

Beyond transit oriented development, there are potential development sites in downtown Vancouver that can support LRT viability through increased ridership and support downtown vitality through increased buying power. These are sites with higher density residential and offices development potential. Most of those opportunities are located west of Washington Street including:

- Block 10 between Vancouvercenter and Riverview Tower
- The two blocks immediately north of Heritage Place
- The Wolfe block immediately west of Java House
- The County owned block immediately west of Heritage Place
- The Angelo owned properties between 8<sup>th</sup>, Evergreen, Franklin and Harney
- The old Columbian property south of 8<sup>th</sup> and west of Esther Short Commons

A couplet alignment would require people living or working in these future developments to walk at least an additional two blocks to reach a station on Broadway. A 2002 C-Tran survey of their riders who walk to a bus stop showed that 41% of those riders walked one block or less and an additional 46% walked 2 to 5 blocks. The additional minimal walking distance of two blocks would put most of the blocks listed above sufficiently distant from LRT boarding on either a “to” or “from” trip that, based on the actual ridership survey, only a small percentage of potential transit riders would choose to actually use the LRT system.

Because of the I-5 freeway, the blocks where supportive development is most likely to occur east of the Broadway leg face onto C Street – the Academy site and Riverwest at Evergreen Boulevard and C Street. Depending on the location of the mid-leg station on Washington, the people in these future developments would need to walk 3 to 4 blocks and they would potentially have multiple C-Tran bus routes connecting that station to Evergreen and C Street. Potential ridership from these two large sites would not be nearly as compromised by access to a two-way station on Washington as the potential ridership from the multiple sites west of Washington would be compromised by the couplet alternative.

The Fort Vancouver Main Library will be constructed at this intersection and their location is now exceptionally well served by the existing bus routes on Evergreen and on Broadway. While this library branch anticipates an eventual annual patronage of about 700,000 people, it is logical that they will almost all arrive by means other than LRT. There will be 200 free parking spaces at this branch. So, it is not logical that anyone from Clark County would choose to park & ride and then take LRT. Multiple bus routes stop either at the library’s intersection or one block away at Broadway and Evergreen and those routes serve bus stops spread throughout Vancouver and Clark

County. So, it is not likely that these library patrons would choose to transfer from a bus to any of the downtown LRT stations.

### **SUMMARY AND CONCLUSION**

The VWG evaluation applied a “shades of grey” measurement tool that teased out many of these issues. It represented varying degrees of positive impact of the two options, but failed to adequately account for the potential negative impacts. Positive and negative impacts occur block by block, property by property. The so-called “couplet or two-way decision” is an inappropriate and unintentionally deceptive simplification of urban economic development dynamics.

As I have outlined above, and stress to the group in the most urgent way, the challenges presented with the couplet alternative are many, many times greater than making light rail a success on Washington Street.

Finally, the two-way on Washington alignment would cost significantly less than the couplet alignment. Given recent comments from Rep. Brian Baird and Sen. Patty Murray, cost is a very significant issue—as it should always be with public investments. If cost savings can be obtained by the less costly alternative, then some of the savings could potentially be used to provide higher quality materials and more friendly environments along the Washington route.

