Request to post the comments made by Ralph Armenta and Jack Castleberry at the 5/22/14 Broadway CTF meeting during the Call to the Audience.
occur. It’s like we are all in Harry Potter land and it’s like we have to seriously think about what is required to make places? And that is where (and this will be my last statement) when Mr. Finrock was talking about the NIMBYs up in the County. I was working at the County at the time, there’s a big difference between what occurred in the County and what people are talking about on Broadway and that issue is (this is my last sentence) that in the County they didn’t want any commercial anywhere near them within miles, but what we are talking about is that we want more commercial. So it’s a big difference, so let’s talk about apples and apples. Thank you.”

Ralph Armenta

“I’m Ralph Armenta, and I am a member of First Assembly and I have been there for fifty three years and we (or rather I) have been hearing rumors that we are trying to sell First Assembly. Please don’t believe it. First Assembly has never been up for sale and it never will be up for sale. Furthermore, the members there (I have got close to 300 signatures of members and non-members) will absolutely not allow any one person to try to sell the church. This is what I have been hearing, so it’s not going to happen. I just wanted to clear, and put to rest that rumor that is going around. So it’s not going to happen, our church is going to stay there. Thank you.”

Margot Garcia

“I too will be very short. My main thing is that when I was studying the maps, I looked and noticed that there were lines going down past the intersections where various streets came onto Broadway and I saw that the median went right past them. I thought at first, this was a mistake and then when I started asking members of the design team I learned that it is not a mistake. There is an intention of which those maps (I have put pink stickies up there) for you to see that you will not be coming out of those residents to make a left hand turn. And you will not be able to make a left hand turn into those. I thought it was really surprising that it was a pretty important piece of engineering and planning as it impacts the neighborhoods, and that has never been stated in front of you when all of these presentations have been made. So, please look at the maps very carefully. Again, we point out (as was handed out to you) in front of historic areas, Rincon Heights, is on the National Register of Historic Places as a neighborhood it does not have to have a median in front of it if it will impact those historic residences. That is in the City code at this time. Thank you.”

Julian Scheder Black

Robert Hadel

“Yes, Hello, I am Robert, from the Miles neighborhood. Just recently we did decide as a neighborhood not to allow widening on the south side of the road, as our stance. One issue we have with that is that it doesn’t necessarily leave a lot of room for dialogue with the neighborhood across the street; we definitely don’t want to have that position as saying “not for us”, but putting it all on them. We definitely want to have an open dialogue with our Rincon Heights, I know Colby is
I can’t go to the U of A for lunch because it’s just impractical and we have got all those great restaurants downtown. So if I don’t want to go to the hospital the streetcar doesn’t go anywhere for me. If it went out here to Broadway or to Craycroft or Country Club then I could drive my car down and park and ride. I could get on the streetcar and ride downtown. If I didn’t want to go to I-10; but that was the vision.

The other thing that I want to share with you just from my professional side is that I am the guy that goes knocking on the door saying Mr. and Mrs. Homeowner we would like to build a road in front of your house and I need to buy as much property as I can get from you to get this 150 foot roadway in. I get greeted two ways, I am either sign and agree and I am putting grandma on the street, or I am a publisher clearing house with a check so big that these people can’t believe they can finally sell their house and move forward. Even those that won’t go, sometimes when they see the incentive to go then they go, “You know we have been here a long time. The house is old, the pipes are rotten. I can’t really afford to bring it up to the standards to stay here and live in it. So thank goodness, you came because nobody else wants to buy the house on Broadway.” So the project is a little tough but I will tell you this as a stakeholder, all of the county was a stakeholder in the RTA. We all voted for our pet projects and we voted for everybody else’s pet projects. This was somebody’s pet project at the time. So thank you very much and I hope that you keep it real.”

Jack Casselberry

“Hi, my name is Jack Casselberry I am here representing the congregation of First Assembly of God. Now for the last (well since 1987) it’s been on and off again about whether we are going to take that church out. You understand it’s just a block west of Campbell, ok, on the north side. It’s right up on the street (almost) there is a sidewalk and then us. My concern is that some emails have come to my attention that a pastor now is representing the fact that they are willing to let our church go. Ok, and that we are willing to relocate. Well this has never been put before the congregation. We have fought for this for thirty years almost and I have another member with three hundred signatures and the church cannot be sold without the vote of the congregation and the district (assemblies of God) has a lien on the property. Ok, and it was considered a vision by God that we would be at the crossroads to downtown to service the needs of a growing community even to the point of a vision that it would vastly impact and be much larger (and this was back in 1950).

So I am here to reiterate the fact that we respect and honor anything that you people come up with as far as a corridor; as long as you make a little effort or something to not take out that church! And it would be very small, relocation, and the street would only have to go a little ways over. If you were to go to six lanes. And it’s already been addressed and concerned the obvious bottleneck that you have when you go downtown and the fact that they spent money on three lanes going through downtown, then they squeezed it back up. I’m just wondering why
they didn’t put the hitching post for the horses up. But, never the less it is our concern to service this community and stay where we are at and we humbly ask you to please let the church stay. There are different properties that may come available that we understand that are city owned that we could buy for additional parking that may be even open for community use. Thank you.”

Jude Cook

“Jude Cook, Cook and Company Sign Makers, and Sunshine Mile. I am glad I am not on this board, guys. This should be my wife, but couldn’t pull it off today. It’s been a frustrating week for the Sunshine Mile and I feel that it reflects the unknown issues that businesses and property owners will be facing in the future. Specifically right now, I am talking about the Panda property. I initially didn’t really feel that this was that relevant but the more that the conversation has gone, I do think that it has relevance. The neighbors in the Sunshine Mile worked with the city to come up with a plan for the Panda building. My wife, who started the Sunshine Mile, embraced the project, but she felt that it could be utilized as a way to help encourage the area.

The first project she came up with was with an idea with helping people get in this area, so that she could handout flyers about the restaurants, shops and services and to try to enhance the area some. In an effort to be sure that we were following the rules, the City was contacted. The level of hurdles and the cost is prohibited and hence, the intent we agreed to is turning out to be unmanageable. At this point we are going to continue to meet with the City but the reason that I bring this up is because the effect on this project on other properties is going to be huge and from the discussion that I have followed, once things are done (and this ties into what Joseph said and what Rocco brought up) parking is going to be a key issue. Regardless of what you do on this sucker. It’s got to be thought about now and from what I have heard is, you are on your own. The City’s not going to come in and fix this thing for us. They are going to throw it out there, we are going to lose a bunch of properties, and we are not really going to be able to know what we are doing until it’s over with. It’s going to destroy a lot of stuff.

I have got some other random thoughts, then I am done. I keep hearing we are going to take money off the table. Is this thing going to come in at $71 million and if it isn’t, who’s going to put the money on the table to cover the overage? And I have never seen a project come in under budget. Ok, another comment - I am not wild about being a gateway to downtown. And, that is it. Thanks, guys.”

5. Discussion/Endorsement of Materials (Drawings and Information) to be presented at Public Meeting #4, and Possible Meeting Approach

The project team presented proposed details of the upcoming Public Meeting #4 to the Task Force and asked them for their approval and endorsement. The following actions were taken, based on discussion held:
Greg,

Thank you for sending this in. We received it and will provide it to the Citizens Task Force for their consideration.

~Jenn

>>> "Greg Clark" <glark999@earthlink.net> 07/02/14 6:52 AM >>>
Please see attached

---
This email is free from viruses and malware because avast! Antivirus protection is active.
http://www.avast.com
June 23, 2014

To Whom It May Concern:

The Miles Neighborhood Association has resolved that it opposes any alignment proposal for the Broadway Widening Project that encroaches southward from the current south edge of Broadway Boulevard into the Miles Neighborhood. The neighborhood agreed that the City of Tucson, Pima County and the Regional Transportation proposals regarding the project have all planned and approved alignments that expand Broadway to the north. Alignment proposals that bring Broadway Boulevard into the Miles Neighborhood would directly impact the neighborhood and the many schools, businesses, and residences that sit on Broadway. Prior to March, 2014, businesses, schools and residents along the south side of Broadway between Park Avenue and Campbell Boulevard had always been assured that Broadway will not be widened toward the south, and have made responsible business, education, investment, life and neighborhood decisions based on that fact.

Therefore, on May 21, 2014, the Miles Neighborhood Association resolved that:

The Miles Neighborhood Association supports the original planned use of right-of-way for improvement to the north side of Broadway and opposes bringing the right-of-way to the south side.

Thank you very much.

Sincerely,

Robert Hadel
Miles Neighborhood Association Co-Chair

Michael J. Sumner
Miles Neighborhood Association Co-Chair

Mary Anthony
Miles Neighborhood Association Secretary
Jennifer Burdick - Broadway Coalition Response to June 17, 2014 Memo

From: "Garcia, Jose D - (jdgarcia)" <jdgarcia@email.arizona.edu>
To: "Daryl.Cole@tucsnaz.gov" <Daryl.Cole@tucsnaz.gov>, "Jennifer.burdick@tucsonaz.gov" <Jennifer.burdick@tucsonaz.gov>
Date: 6/30/2014 1:33 PM
Subject: Broadway Coalition Response to June 17, 2014 Memo
CC: "Regina.Romero@tucsonaz.gov" <Regina.Romero@tucsonaz.gov>, "Karin.Uhlich@tucsonaz.gov" <Karin.Uhlich@tucsonaz.gov>, "Richard.Fimbres@tucsonaz.gov" <Richard.Fimbres@tucsonaz.gov>, "shirley.scott@tucsonaz.gov" <shirley.scott@tucsonaz.gov>, "Paul.Cunningham@tucsonaz.gov" <Paul.Cunningham@tucsonaz.gov>, Steve Kozachik <votestevek@gmail.com>, "jonathan.rothschild@tucsonaz.gov" <jonathan.rothschild@tucsonaz.gov>
Attachments: 6-19-2014 Responses to Broadway Coalition.pdf; Response to Daryl Cole memo (1).docx; Traffic Charts.pdf

Jennifer,

I have attached a response to the memo from Director Cole to Councilmember Regina Romero. I have also attached the memo about which we are commenting.

JD Garcia
for the Broadway Coalition

Cc: Mayor and Council
Broadway Coalition

Response to Darryl Cole Memorandum to Councilmember Romero dated 6/17/14.

We appreciate the effort put into the writing of the memo; it addresses some very important topics. We hope this is the beginning of a true dialog on some of the issues involved in the Broadway project and allows for a way forward to be found that will help make Tucson a thriving, livable community.

The most disappointing overall aspect of the memo is that there is no discussion of sense of place, nor any overt effort to help the community and merchants in the project corridor maintain Broadway as a destination, nor was there any mention of historic preservation. As is clear to everyone, it is not the number of lanes that matters to being able to maintain a sense-of-place, a destination, but the width of the roadway. Instead, what we read as implicit in the memo is that the Broadway Corridor is being considered as only an arterial roadway through which automobiles must travel to destinations elsewhere, and whatever collateral damage is done in the process of enabling that, is, well, an unfortunate consequence of these “improvements”.

We use header quotes from the various sections in that original memo about which we are commenting.

“1. No Diminishment of Functionality: Immediate after adopting the RTP, the Board adopted its Resolution No. 2005-02, which approved policies for implementation of the RTP. Among these policies was item 2, which read: Functionality Not to be Diminished……”

The memo goes on to argue that it is “the functionality as originally envisioned for the project scope included in the RTA Plan is not diminished.”

Point #1 contains a discussion of functionality, and in the memo, functionality is narrowly construed to mean primarily moving automobiles through faster. There is no mention of the instructions from Mayor and Council to examine other definitions of functionality as found in modern transportation plans adopted by leading US cities. The definition implicitly used by Director Cole, limited as it is to vehicular traffic, is counter to the above mentioned instructions to consider the EPA’s twelve criteria for measuring functionality on a multi-modal roadway. ‘Level of Service’ ratings of the roadway should not be the only criterion used to decide whether functionality is met.
In addition, the data show (see attached Traffic Chart) that traffic has not developed to match the projections used as the basis for the Regional Transportation Plan (RTP). According to the RTA’s lawyer, Thomas Benavidez, in a presentation to the CART on 5/22/13, the RTA has a fiduciary responsibility to spend the bond money wisely, and can make changes in the plans as needed to fulfill its fiduciary responsibility. Therefore if a road widening is not needed to meet future use, it is a waste of money. In fact, changes have been made in several of the road projects in the RTP.

The Citizens Task Force (CTF) at an early CTF meeting repeatedly asked Jim deGrood (Deputy Director, RTA) to define functionality. His reply was that it was the job of the CTF to define functionality. The City Council also asked the CTF to do this. At a RTA Technical Management Meeting, when Chairman Chuck Huckleberry was asked to define functionality, he deferred saying that we was waiting to see what the CTF came up with. There is no record that the CTF has adopted a definition of functionality.

We still believe that the definition of functionality for Broadway Boulevard must include helping to maintain the existing sense-of-place; this requires that the destruction of businesses and historic buildings be minimized, so that people will continue to find it attractive to go and to be there. We need to seek more creative solutions to road design, so that this can happen as well.

2) $7 Million Expenditures Repayment. In the event that the Broadway project stops, repayment to the RTA and Pima County would need to occur. “

Item #2 in the memo addresses the need for the city to pay back money ($7.1 M) thus far spent on the Broadway project. We do not understand the origin of this ‘need’. We know of no precedent or law requiring such repayment, nor do we know of any requests from Pima County or the RTA to reimburse money that was spent in good faith, with their approval, on a project that for some reason could not go forward as planned.

There is also some confusion over what money is being discussed. According to your memo, since 2006 and as of May 30, 2014 $6,921,280 has been spent in acquisitions, planning/design/engineering, project management environmental and utilities, with most coming from RTA and some from 1997 Pima County Bond funds. However, this is at variance with your document for the CTF, dated 12/19/2012, which states that $7.6 million has already been spent on acquisitions and relocations. There, you reported the sources of this money as being: RTA, Pima County 1997 Bonds, PAG, and the City of
Tucson (COT), the largest amount, $2,286,900, coming from COT. We think such discrepancies should be resolved. Were there in reality a need to do so, you could transfer the property thus far purchased to the entity whose funds were used to acquire it, as listed in your 12/19/2012 memo.

In a time of budget austerity, it seems to us that threatening the decision-makers with having to return funds is a scare tactic. Please cite precedence where returning funds for projects not undertaken has occurred.

In addition, the Broadway Coalition has NOT advocated stopping the project. Rather, they have repeatedly asked that needed improvements be made in a way that preserves sense of place, helps the local businesses and protects our historic heritage. We believe that with context sensitive design, that can be done.

“3) Net Project Costs: It is important to note that the Citizens Task Force and community have requested that costs be one of the performance measures to assess the alternatives under consideration.”

Item #3 addresses the net costs of the project. Of course, the net costs of the project will not be known until the project is complete. The prudent project planners will, however, have some clear idea as to how much the project should cost, and what the differential costs associated with different road widths and profiles will be. One question that needs to be asked before you start construction is: “Is the total budget for the project still realistic?” That of course depends on the road right-of-way choices. That is what we wanted to bring attention to. Can every possible variation be accomplished within the RTP budget? The numbers we presented are based on our study of the County Assessor’s records, and represent our attempt to examine potential differences in acquisition costs between the several roadways being proposed. That has not been part of the discussion within the CTF thus far.

In fact it is well known that the County Assessor’s assessed valuation is far below market value. For example in the case of Albert’s Garage on the corner of Campbell and Broadway, the assessed valuation is $359,284 and price paid was $893,000 (as listed on December 19, 2012 document given to the Broadway Blvd CTF.) This purchase price was nearly 2.5 times the assessed valuation. That brings into question the amount of money required for the extensive acquisitions planned for the wider roadway over the narrower one.
“4) Acquisition and Relocation Costs: The only acquisition estimates reported so far for the project that do not include relocation and demolition are those reported in the “Sidewalk Only scenario.” Every other estimate provided for with our process so far includes all aspect of acquisition costs, including demolition, environmental, architectural documentation, and relocation costs (see attached bar graph presented to the 4/30/2014).”

Item #4 deals with relocation costs. We used the projected numbers for our chart that came from the Technical Advisory Committee Report as presented to the Mayor and Council on May 6, 2014.

“5) Sales Tax Revenue Impacts: The way in which the issue of sales tax impacts is raised suggests that it is presumed that acquisition and relocation takes away sales tax revenues from the City. This is an incorrect assumption…”

Item #5 discusses city sales taxes. That discussion assumes that all the businesses that are closed as a result of this project will relocate within the city and do well. That is not an appropriate assumption for a location that currently enjoys a sense of place that comes from the synergy of opportunities for eating, purchasing, and services. Some of these businesses thrive because they are on this sector of Broadway, which is a destination. Move them elsewhere, and they may languish.

We point to Austin’s a once thriving, well-established and treasured diner and ice cream store next to Broadway Village. It moved across from Park Place and in one year closed down. There is a synergy between location and a business. Sometimes it improves with a change in place, sometimes it doesn’t. Moving businesses off this section of Broadway will also impact the Rio Neuvo funding that collects taxes along the north side of Broadway and downtown, and not in other sections of the city.

“6) Size of Remnant Properties: Variations of the alignment are still under review, and the size of remnant properties is a factor that is being considered. However, in general, the remaining lots for the various configurations of the 4-lane, r+2T/6-lane are developable.”

Item #6 addresses the issue of the viability of small remnant parcels. Mr. Cole states that parcels greater than 80 feet deep are economically viable; however, the staff, despite repeated requests, has not provided any evidence that this is the case for streets similar to what is envisioned for Broadway.
While there have been drawings showing how remnant parcels can be developed, these examples demonstrate that they will create a very different place. The examples showed building several stories high surrounded by parking lots, demonstrating that the streetscape will not be pedestrian friendly. Sections of the street, like Solot Plaza and Inglis Flower complex, are walkable because the stores/services are adjacent to each other. What is proposed in the drawings doesn’t create these types of spaces. Currently, the overwhelming majority of non-residential uses on Broadway are buildings greater than 80 feet on parcels greater than 135 feet.

This view is shared by the economic consultants, EPS, who wrote a substantial report for the Broadway project. That report stated that there is little demand by developers for shallow parcels. The wider right-of-way variations create such parcels. That they tend not to be viable was also confirmed by Wulf Grote, Director of Transit for metropolitan Phoenix, who was also brought to advise the CTF: they also found that shallow parcels were not viable.

“7) Property Tax Impacts: Questions have been asked about whether the widening will reduce the amount of taxable land – both in number because the City assumes ownership, and in size because the land becomes part of the new roadway – and how that will impact are local revenues.”

Item #7 deals with property tax issues, and describes well the process of setting property taxes. After some discussion, the memo concludes:

“Conclusions. Bottom line, investments in roadway improvements can result in investments in the properties adjacent to the roadway following construction, and high property values and property taxes down the line. It should be expected that there will be new businesses, and new mixed uses and infill that come into the area. This will bring new employment, new population, sales tax revenues, and additional property taxes that will benefit the community. Additionally, a more multimodal street can help to create an environments that encourages more shopping and dining at restaurants which would help increase sales tax generation.”

This conclusion is true only if the improvements increase opportunities for local businesses to thrive and well create a built environment that is interesting to pedestrians and bicyclists. Road improvements do not necessarily provide these benefits. It requires attention in the design to what is needed to attract businesses. Alignments that reduce lot depth makes it more difficult to attract businesses that everyone states they desire. If Broadway remains a destination, all those things
We agree with the vision and hope found in the conclusion, with the important caveat that it is true ONLY IF the sense-of-place is not fractured by the roadway “improvements”. If Broadway remains a destination, all those things mentioned will likely come to pass. If the Broadway project makes this into just another sub-freeway arterial, then the scenario described in that paragraph will not materialize.

We look at roadway improvements around the town in the style being proposed for Broadway – wide landscaping, wide sidewalks, few curb cuts, big medians. For example, on Campbell Ave from Speedway to Grant, no new businesses have developed.

“8) Maintenance and Operation Costs: The total 20-year capital operations and maintenance costs related to a new constructed Broadway asphalt are estimated at approximately $2 million for a 4-lane roadway and $3 million for a 6-lane roadway. “

Point 8 goes on to state that landscaping, lighting, signal, transit or other maintenance costs are expected to be very similar between the 4-lane and 6-lane design alternatives. We are glad to see that these costs are finally being stated for the public to understand. However, we do note that, as common sense would suggest, that a 6-lane road does cost more to maintain than a 4-lane road.

9) Roadway Dimensions: A map is online that shows the existing dimensions throughout the project area.”

Point 9 contains the URL to find the latest of the map alignments. The map shows the widths of the proposed alignment at a number of different places. In some places the 6-line 118 feet, but also goes up to as high as 170 feet where there are local access roads with parking in front of some of the clusters of small businesses in historic buildings. The intersections are also larger than the 118 feet because of the left-turn lanes and right turn lanes. We are trying to get the truth out on the table, not hiding behind some statement of the roadway being just 118 feet.

We also think that the alignments showing that some of the streets into residential areas will be cut off from left hand turns because the median will run through those intersections needs to be brought to the attention of the neighborhoods where this is happening.
We are asking for full and honest disclosure of the widths in presentations, not just relying on the maps to inform people. Many people find the maps hard to read and do not understand how the blue lines drawn on the maps relate to cross-sections drawn out.

We are also disappointed that we could not locate on any map of the 6-lane alignment where the roadway is 96 feet wide as Director Cole promised Council Member Cunningham he could provide.

“10) Preserving Right of Way for Transit: The entire 11-mile Broadway corridor is the highest ridden bus route in the region.

Point 10 goes on to state that the road alignment should preserve right-of-way for some future mass transit. While this idea has been discussed since the 1970s and the RTA ballot language for Number 17 specifically mentions 2 lanes for transit, we wonder why there was no money put aside for a transit study as part of this roadway project. How can the CTF or the City Council make a rational decision with no professional study of the options and costs. The last transit study, 1991, stated the area was not yet ready for dedicated transit. What has changed since then that would suggest the 11-mile corridor is ready today, or even in the near future for rapid transit.

If the transit is added later, as was done in the Phoenix Metro area, it was, in most areas, done within the existing right-of-way. The street car was put in without tearing down any buildings!

Conclusion

In conclusion the Broadway Coalition states again its support for improving Broadway in such a way that multimodal functionality is improved, and sense of place, historic buildings, and local business are preserved. We envision a street where pedestrians and bicyclists can travel safely, motor vehicles can move smoothly, and transit is inviting so people want to use it. It is a destination in that its sense-of-place is maintained and people want to stop and hang out there. With creative and sensitive design, we are convinced this vision can be made a reality at an affordable price. It is road width, not the number of lanes, which is important.
BROADWAY COALITION

Broadway my way
not a highway!
MEMORANDUM

DATE: June 17, 2014

TO: Council Member Regina Romero
Ward 1, City of Tucson

FROM: Daryl W. Cole, Director
Department of Transportation

SUBJECT: Responses and Clarifications to Information Presented by Broadway Coalition

Please find below information to address issues brought to your attention by members of the Broadway Coalition via email (Attachment 1).

1) **No Diminishment of Functionality:** Immediately after adopting the RTP, the Board adopted its Resolution No. 2005-02, which approved policies for implementation of the RTP. Among these policies was item 2, which read:

> “Functionality Not to Be Diminished - The Technical/Management Committee as well as the Citizens Advisory Committee had specific capacity and/or performance improvements in mind when recommending highway improvement projects as well as transit improvements. This functionality should not and cannot be diminished. The voters, in approving the expenditure plan, are relying on the planned improvements actually being implemented.”

To paraphrase, it is not whether the functionality of the existing roadway is preserved, but rather that the functionality as originally envisioned for the project scope included in the RTA Plan is not diminished. This means that whatever project design modifications are proposed must perform at least as well or better than the project scope originally approved. In the case of Broadway, this means that a modified project scope must perform as well as widening Broadway “arterial to 6-lane, plus 2 dedicated bus lanes, bike lanes, and sidewalks.”

Traffic modeling to date has shown that a six-lane cross section is likely to meet RTA’s functional requirement, and that a four-lane section or a four-lane plus two dedicated transit lanes (the 4+2T) definitely will not. We continue to work with the 4+2T to see if we can improve its performance, and if we can envision a circumstance in the future where a six-lane could be converted to a 4+2T.

2) **$7 Million Expenditures Repayment:** In the event that the Broadway project stops, repayment to the RTA and Pima County would need to occur. The handout provided to you by the Broadway Coalition focuses only a spreadsheet developed in December 2012 that lists
out details about the City-owned properties in the project area. These documents can be found online, and are attached for ease of reference:


Actual total expenditures since 2006 range include not only acquisition, but also environmental, utilities, project management, and planning/design/engineering. As of May 30, 2014, $6,921,280 has been expended – approximately $1.3 Million is Pima County funding and roughly $5.3 Million is RTA funding. The overall expenditures are captured in a monthly report provided online at, and a copy of the current report is attached for reference:

http://sahuaro.tucsonaz.gov/downtown-projects/projects/project/E241008D-B2E9-85B0-990B0D2D1BBBF7F9

3) Net Project Costs: It is important to note that the Citizens Task Force and community have requested that costs be one of the performance measures to assess the alternatives under consideration. Yet, it is still too early to know exactly how much money will spent on acquisition. That will ultimately only be known at the point in time construction concludes.

For example, the Grant Road intersection project at Oracle Road estimated that acquisition would cost $21 Million when it was at 30% design (meaning, the constructions drawings were only 30% complete). At the conclusion of the construction, only $9.6 Million was spent. Additionally, the remaining properties the City acquired have been put on the private market for sale. Revenues received from sale will reduce the overall net project costs.

The Broadway Project is currently at less than 5% design. There is time and still many opportunities to reduce acquisition costs as we continue to move forward with design refinements. In some of the variations we have been exploring, we have already seen the potential to reduce property impacts and acquisition costs by varying the alignment and judiciously narrowing median, landscape, and sidewalk widths at sensitive locations.

4) Acquisition and Relocation Costs: The only acquisition estimates reported so far for the project that do not include relocation and demolition are those reported in the ‘Sidewalk Only’ scenario. Every other estimate provided for with our process so far includes all aspects of acquisition costs, including demolition, environmental, architectural documentation, and relocation costs (see attached bar graph presented to the 4/30/14).

The Task Force is in the process of reviewing alignment variations, and the related estimates will continue to be provided. These estimates will vary for the duration of the project, all the way up until all acquisition – and construction of the improvements – is complete (see Grant Road example in Item 3, above).
Impacted property owners, businesses and tenants are eligible for relocation benefits, including:

- **Relocation Advisory Services:** Residential Assistance, Business, Farm, and Nonprofit Organization Assistance
- **Individuals, and Families:** Moving Costs, Replacement Housing - Purchase Supplement, Replacement Housing - Rental Assistance, Replacement Housing - Downpayment Assistance,
- **Business, Farm, and Nonprofit Organization Assistance:** Moving Costs Reimbursement, Related Eligible Expenses, Reestablishment Expenses, Fixed Payment for move and related expenses

A full overview of the acquisition and relocation services is included online at the project website. Myrline Francis of Tierra Right of Way gave an overview to the CTF on Dec. 13, 2012: http://www.tucsonaz.gov/files/projects/broadway/2012_12-13_TierraROW_RealEstateAcquisition.pdf

5) **Sales Tax Revenue Impacts:** The way in which the issue of sales tax impacts is raised suggests that it is presumed that acquisition and relocation takes away sales tax revenues from the City. This is an incorrect assumption, particularly in instances where businesses choose to relocate within the City to new locations; the time between closure of a business and reopening in a new location varies but, typically, the goal of the business is to minimize this time and therefore any potential loss of sales tax revenue. When properties are reused, and when infill occurs providing new densities, new space for new businesses are created, bringing with it the generation of new sales taxes. Construction activities that occur with infill or revitalization also generate sales taxes.

6) **Size of Remnant Properties:** Variations of the alignment are still under review, and the size of remnant properties is a factor that is being considered. However, in general, the remaining lots for the various configurations of the 4-lane, 4+2T/6-lane are developable. At the Feb-March 2014 Charrette #3, a summary sheet was shared the approximated how many properties would be left, within certain ranges of depths. This can be found online in the Charrette #3 Workbook, as part of Performance Measure 8a., Change in Economic Potential (accessed at http://www.tucsonaz.gov/files/projects/broadway/BroadwayPerfMeasureBookletFINAL.pdf), on numbered page 64 of 71.

80' lot depth and shallower are developable, but have more challenges with smaller uses and result in lower density developments or residential uses. There are other factors beyond just the depth that impact usability such as their width and the presence of an alley for access or adjacent vacant property. Within the current 4+2T/6-lane variations there are only a few areas that fall below this 80' threshold.
7) **Property Tax Impacts:** Questions have been asked about whether the widening will reduce the amount of taxable land – both in number because the City assumes ownership, and in size because the land becomes part of the new roadway – and how that will impact our local revenues. To answer this appropriately, it is important to understand the process used to assess property taxes on an annual basis.

**Annual Process of Setting Property Tax Rates.** Property taxes are the product of multiplying a property’s Assessed Value by the Tax Rate for each taxable property within a jurisdiction. Each taxing authority (e.g., Pima County, the City of Tucson, Fire Districts, School Districts) develops its own annual budget, including what revenues levels are needed to balance the budget. The governing entities calculate their jurisdictional tax rates factoring all available taxable land within the jurisdiction, how much revenue is needed, and what the tax rates need to be in order to achieve the targeted revenues. The tax rate may increase or decrease, depending on the revenue needed. The rates are set by the governing bodies at public hearings, and are implemented for the next tax year, upon approval.

The effect of removing properties from Broadway from the overall tax rolls generating the revenue is small. The amount of taxable real property potentially reduced by the Broadway project is very minute as a fraction of the total taxable assessed value within the City. For example, assuming only for this example that the 96 tax parcels on the north side of Broadway were acquired to complete the project:

- Combined 2014 Assessed Value of 96 Broadway properties = $5,154,548
- Combined 2014 Assessed Value of 175,650 parcels in Tucson limits = $3,932,006,710

The assessed value of the 96 Broadway properties is roughly **0.13109%** of the City’s total overall assessed values. This difference in potential collections, which is very small, will simply be shifted to other taxpayers. The next year, based on remaining taxable land, the annual process to set the tax rate will begin again, and the burden will be shifted to other taxable properties.

In contrast, the City’s primary property tax rate adopted for tax year 2009 was $0.3144. For 2013, it was set at $0.4213. This equates to a **34%** increase in the last 5 years.

**Government-owned Parcels.** It has been noted that the properties acquired for the project by the City do not collect any taxes. That statement is correct; Government owned property is taken off the taxable rolls, as of the next tax year’s roll and will not pay property tax from that point forward. The tax rolls are further reduced when improvements (the buildings) are acquired.
However, the reduction in taxable property should be reversed once the project is complete and when any remnant properties not required for the public purpose roadway project can be sold back to the private market. These properties can then be redeveloped and put to productive use, and generate new property taxes as well as sales taxes.

**Positive Property Tax Impacts from Revitalization Opportunities.** After the project is complete opportunities will be created for combining remnant parcels, and potentially, for new infill construction. New development may be more intense than before - such as building a couple of stories rather than only 1 story. Improvements to the road can be expected to increase both the value of property and the amount of redevelopment along Broadway. This increase in values will help rebuild property tax revenues to make up for loss in taxable land area and improvements.

**Commercial Historic Property Tax Break Incentives.** If a historic district is created, property tax break incentives are available to owners of qualifying contributing properties to the district. Contributing commercial properties that choose to improve their properties appropriately [to Secretary of Interior's standards] can apply for a 10-year tax abatement that has the effect of limiting the amount their assessed value can go up by 1%, per year. Restated, the assessed values of the improvements made are subject to a cap of 1% increase, per year, for up to 10 years.

**Conclusions.** Bottom line, investments in roadway improvements can result in investments in the properties adjacent to the roadway following construction, and higher property values and property taxes down the line. It should be expected that there will be new businesses, and new mixed uses and infill that come into the area. This will bring new employment, new population, sales tax revenues, and additional property taxes that will benefit the community. Additionally, a more multimodal street can help to create an environment that encourages more shopping and dining at restaurants which would help increase sales tax generation.

8) **Maintenance and Operation Costs:** The total 20-year capital operations and maintenance costs related to a newly constructed Broadway asphalt are estimated at approximately $2 million for a 4-lane roadway and $3 million for a 6-lane roadway.

We do not have estimates yet for what landscape, lighting, signals, transit, or other maintenance would cost. That will come with the design refinements, and would likely not change much between a 4-lane and 6-lane (i.e.; extent and size of landscape areas within medians and the along the sides of the street will be very similar between the 4-lane and 6-lane design alternatives).
If new construction does not occur on Broadway, and the City's future maintenance requires rehabilitating the existing roadbed, the costs will range from $23-30 Million for reconstruction of the asphalt, addition of sidewalks, and acquisition from the 226 properties adjacent to both sides of the street to add the sidewalks.

9) **Roadway Dimensions:** A map is online that shows the existing dimensions throughout the project area. [http://www.tucsonaz.gov/files/projects/broadway/03_Table_Map.pdf](http://www.tucsonaz.gov/files/projects/broadway/03_Table_Map.pdf)

10) **Preserving Right of Way for Transit:** The entire 11-mile Broadway corridor is the highest ridden bus route in the region. Preserving enough Right of Way now that would allow for 2 dedicated lanes for future mass transit – whether it is Light Rail, Bus Rapid Transit, or even streetcar – is important to allow for future conversion when the funding is found. In the meantime, incremental enhancements to a roadway that has that room is highly recommended. This is not accomplished in the widths of the existing roadway, nor in the 4-lane design.

DWC/JB/rw

cc: Honorable Mayor Rothschild
    City Council Members
    Mayor and Council Aides
    Jennifer Burdick, TDOT Project Manager

Attachments: 1) 6/10/14 Email from Laura Dent, subject: ‘Thank you and more information’
   1a) ‘3 Million not 7 Million’ handout from Broadway Coalition
   1b) ‘Potential Acquisition Costs’ handout (4/30/14) from Broadway Project team
   2) City Project #107 – Broadway: Euclid to Country Club
   3) Broadway: Euclid to Country Club – City Owned Parcels, Indexed Map and Properties List (Dec., 2012)
Broadway - Fwd: Information shared with Ward 1

From: Jennifer Burdick
To: Broadway
Date: 6/23/2014 10:09 AM
Subject: Fwd: Information shared with Ward 1

>>> On 6/23/2014 at 9:38 AM, Jennifer Burdick wrote:

Drs. Garcia and Tabili,

Attached is a memo and the related attachments that went out to the Mayor and Council members last week. I was asked to respond to information provided by to their office via a meeting and by email.

I am forwarding to provide this information directly to you, and to include this in the Public Input Report.

Please let me know if you have questions.

Sincerely,
Jenn
MEMORANDUM

DATE: June 17, 2014

TO: Council Member Regina Romero
    Ward 1, City of Tucson

FROM: Daryl W. Cole, Director
       Department of Transportation

SUBJECT: Responses and Clarifications to Information Presented by Broadway Coalition

Please find below information to address issues brought to your attention by members of the Broadway Coalition via email (Attachment 1).

1) **No Diminishment of Functionality:** Immediately after adopting the RTP, the Board adopted its Resolution No. 2005-02, which approved policies for implementation of the RTP. Among these policies was item 2, which read:

> "Functionality Not to Be Diminished - The Technical/Management Committee as well as the Citizens Advisory Committee had specific capacity and/or performance improvements in mind when recommending highway improvement projects as well as transit improvements. This functionality should not and cannot be diminished. The voters, in approving the expenditure plan, are relying on the planned improvements actually being implemented."

To paraphrase, it is not whether the functionality of the existing roadway is preserved, but rather that the functionality as originally envisioned for the project scope included in the RTA Plan is not diminished. This means that whatever project design modifications are proposed must perform at least as well or better than the project scope originally approved. In the case of Broadway, this means that a modified project scope must perform as well as widening Broadway “arterial to 6-lane, plus 2 dedicated bus lanes, bike lanes, and sidewalks.”

Traffic modeling to date has shown that a six-lane cross section is likely to meet RTA’s functional requirement, and that a four-lane section or a four-lane plus two dedicated transit lanes (the 4+2T) definitely will not. We continue to work with the 4+2T to see if we can improve its performance, and if we can envision a circumstance in the future where a six-lane could be converted to a 4+2T.

2) **$7 Million Expenditures Repayment:** In the event that the Broadway project stops, repayment to the RTA and Pima County would need to occur. The handout provided to you by the Broadway Coalition focuses only a spreadsheet developed in December 2012 that lists...
out details about the City-owned properties in the project area. These documents can be
found online, and are attached for ease of reference:

Actual total expenditures since 2006 range include not only acquisition, but also
environmental, utilities, project management, and planning/design/engineering. As of May
30, 2014, $6,921,280 has been expended – approximately $1.3 Million is Pima County
funding and roughly $5.3 Million is RTA funding. The overall expenditures are captured in
a monthly report provided online at, and a copy of the current report is attached for reference:

3) **Net Project Costs**: It is important to note that the Citizens Task Force and community have
requested that costs be one of the performance measures to assess the alternatives under
consideration. Yet, it is still too early to know exactly how much money will spent on
acquisition. That will ultimately only be known at the point in time construction concludes.

For example, the Grant Road intersection project at Oracle Road estimated that acquisition
would cost $21 Million when it was at 30% design (meaning, the constructions drawings
were only 30% complete). At the conclusion of the construction, only $9.6 Million was
spent. Additionally, the remaining properties the City acquired have been put on the private
market for sale. Revenues received from sale will reduce the overall net project costs.

The Broadway Project is currently at less than 5% design. There is time and still many
opportunities to reduce acquisition costs as we continue to move forward with design
refinements. In some of the variations we have been exploring, we have already seen the
potential to reduce property impacts and acquisition costs by varying the alignment and
judiciously narrowing median, landscape, and sidewalk widths at sensitive locations.

4) **Acquisition and Relocation Costs**: The only acquisition estimates reported so far for the
project that do not include relocation and demolition are those reported in the ‘Sidewalk
Only’ scenario. Every other estimate provided for with our process so far includes all aspects
of acquisition costs, including demolition, environmental, architectural documentation, and
relocation costs (see attached bar graph presented to the 4/30/14).

The Task Force is in the process of reviewing alignment variations, and the related estimates
will continue to be provided. These estimates will vary for the duration of the project, all the
way up until all acquisition – and construction of the improvements – is complete (see Grant
Road example in Item 3, above).
Impacted property owners, businesses and tenants are eligible for relocation benefits, including:

- **Relocation Advisory Services:** Residential Assistance, Business, Farm, and Nonprofit Organization Assistance
- **Individuals, and Families:** Moving Costs, Replacement Housing - Purchase Supplement, Replacement Housing - Rental Assistance, Replacement Housing - Downpayment Assistance,
- **Business, Farm, and Nonprofit Organization Assistance:** Moving Costs Reimbursement, Related Eligible Expenses, Reestablishment Expenses, Fixed Payment for move and related expenses

A full overview of the acquisition and relocation services is included online at the project website. Myrlene Francis of Tierra Right of Way gave an overview to the CTF on Dec. 13, 2012:


5) **Sales Tax Revenue Impacts:** The way in which the issue of sales tax impacts is raised suggests that it is presumed that acquisition and relocation takes away sales tax revenues from the City. This is an incorrect assumption, particularly in instances where businesses choose to relocate within the City to new locations; the time between closure of a business and reopening in a new location varies but, typically, the goal of the business is to minimize this time and therefore any potential loss of sales tax revenue. When properties are reused, and when infill occurs providing new densities, new space for new businesses are created, bringing with it the generation of new sales taxes. Construction activities that occur with infill or revitalization also generate sales taxes.

6) **Size of Remnant Properties:** Variations of the alignment are still under review, and the size of remnant properties is a factor that is being considered. However, in general, the remaining lots for the various configurations of the 4-lane, 4+2T/6-lane are developable. At the Feb-March 2014 Charrette #3, a summary sheet was shared the approximated how many properties would be left, within certain ranges of depths. This can be found online in the Charrette #3 Workbook, as part of Performance Measure 8a., Change in Economic Potential (accessed at http://www.tucsonaz.gov/files/projects/broadway/BroadwayPerfMeasureBookletFINAL.pdf), on numbered page 64 of 71.

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DWC/JB/rw

cc: Honorable Mayor Rothschild  
City Council Members  
Mayor and Council Aides  
Jennifer Burdick, TDOT Project Manager

Attachments:  
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2) City Project #107 – Broadway: Euclid to Country Club  
3) Broadway: Euclid to Country Club – City Owned Parcels, Indexed Map and Properties List (Dec., 2012)
Hi Jen,

Can your team possibly consider the numbers presented by Broadway folks and let us know if these are reflections that staff agrees with? I know we had a general conversation about this, but don't recall details. I will be at a neighborhood meeting Thursday but will try to catch up with you at the Broadway meeting after. Any feedback will be helpful for CM Romero. Thanks!

best,
Laura

Laura Dent, MPA
Chief of Staff
Council Member Regina Romero
City of Tucson - Ward 1
940 W. Alameda
520.837.4264
www.cms3.tucsonaz.gov/ward1

Follow Council Member Romero
FB: www.facebook.com/tucson.romero
Twitter: @TucsonRomero

>>> "Tabili, Laura - (tabili) <tabili@email.arizona.edu> 5/28/2014 7:45 PM >>>
Dear Councilmember Romero and Ms. Laura Dent,

Thank you for meeting with the Broadway Coalition yesterday.

We are pleased that you continue to take an active interest in the Broadway Project, and thank you particularly for your recent support on the Council.

Recognizing that the threat of financial repercussions is a cause of concern, I attach a number of financial documents as you requested.

1. The first is a statement produced recently by the Broadway Design Team, showing acquisition costs for wider crosswidths would significantly exceed the $43.7 budgeted for acquisition in 2006--of which we believe several million has already been spent. We understand the City of Tucson would be liable for the difference, amounting to tens of thousands of dollars in some cases.
We believe, in fact, that the true costs of a wider road have yet to be calculated fully, including operations and maintenance, heat island effect, and relocation costs, as well as the cumulative impact of lost tax revenues over a period of years. This might begin to put into perspective short-term fears of monies endangered or withheld by various funders.

Yesterday, for example, we shared sales tax figures showing revenues of over $2.7 million in 2011, of which over $675,000 flowed into City coffers. Adding to this the annual $1.5 million impact of Tucson Modernism Week and real estate taxes that totaled over $720,000 last year for the north side alone indicates demolition or disruption of the Sunshine Mile would trigger substantial revenue losses, compounded each year thereafter.

2. I also attach Margot Garcia’s breakdown of the $7 million spent on acquisition thus far, showing only a portion came from RTA. HURF funds expended could be recouped if properties are not demolished but sold.

3. Below I have pasted in the text of our followup email after meeting with RTA Director Farhad Moghimi earlier this Spring.

In response to your question about the current width of the roadway, my records tell me a neighbor measured the curb-to-curb width at Highland (at risk to life and limb) and found it was 64', including two 5-foot bike lanes and five traffic lanes of various widths. At spots further east the roadway may be wider. The Right of Way, my notes tell me, is 79', including sidewalks. This suggests JD’s proposal would require minimal acquisition, and perhaps none further east.


Thank you again for taking the time to meet with us, and for your stalwart support.

Please do not hesitate to contact me if I can provide you with any further information.

With best wishes,

Laura Tabili for the Broadway Coalition

Dear Farhad,

Thank you for meeting with the Broadway Coalition steering committee on February 5. We were pleased with the frank and full discussion.

We believe we have agreement on the following points:

--the 150’, 8-lane version of the plan is unnecessary and wasteful of taxpayer dollars.

--traffic projections on which the plan was premised have not materialized and are unlikely to do so.

--the important economic contribution of existing local businesses.

--the Broadway Project was one of dozens of projects on the 2006 ballot, and thus ballot language for this single project need not be fetishized.

--consistent and substantial public and stakeholder opposition to widening the street has been expressed in all
three public meeting attended by hundreds of people, as well as outside of such meetings.

–RTA legal counsel Thomas Benavidez as well as Jim De Grood have admitted flexibility is permissible.

–the City of Tucson as Lead Agency is entitled to decide on the roadway design as long as functionality is preserved.

We would like to reiterate our desire to work with you to preserve and enhance Broadway and the Study Area.

We applaud your new style of leading the RTA and hope the message of greater openness can be conveyed to the Citizens Task Force, who have been hearing mixed messages since June 2012.

We are pleased that you are open to authorizing a transit study so that the roadway will incorporate appropriate transit infrastructure.

We hope to maintain regular communication with you in the future.

Again, thank you for taking the time to meet with us.

With best wishes,

Laura Tabili for the Broadway Coalition
$3 million, not $7 million

The number 7 million dollars is getting thrown around as the money COT will have to pay back if the Broadway project collapses. This is where the number comes from: See below. Number refers to a piece of property on the map. #15 is Albert's Gas Station, I believe #24 is Volvo, and #16 was Panda Buffet. Note that not all the money is from RTA, some from PC Bond funds, some from COT. I am told the COT money was HURF funds and those would be put back into HURF account. Remember, these properties would be sold, so the money would be recouped.

Margot

### Broadway BL: Euclid Av to Country Club Rd. 1989 Right-of-Way Plan & City-owned Parcels to Date

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<th>Non RTA Project Funding</th>
<th>Acquisition costs</th>
<th>Relocation costs</th>
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Total/ Non RTA           | $4,595,184        |

### RTA Funding

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Tota/ RTA           | $3,010,965        |

Grand Total         | $7,606,149        |

Taken from Broadway BL. COT document Dec 19, 2012
Potential Acquisition Costs

Values shown are in millions

- Upper Range
- Lower Range

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Project #107 - Broadway - Euclid to Country Club (Road Improvement)

Location: Broadway Blvd between Euclid and Country Club
Status: In Planning
Total Estimated Project Cost: $71,347,000
Expenditures to Date Through 04/30/2014: $6,660,914.00
Estimated date of completion as of 11/14/2012: 07/31/2017
Project Contact: Jennifer Toothaker Burdick (837-6648) (mailto:Jennifer.Burdick@tucsonaz.gov)

View this project on the Projects Map (http://maps.tucsonaz.gov/construction/?projID=107)

Description: Widen roadway to six travel lanes, two transit lanes, and a raised median. Improve sidewalk, street lighting, bike lanes, and landscaping.

This project is included in the Regional Transportation Authority 20-year plan. For additional information visit:
Broadway Boulevard Project Website (http://cms3.tucsonaz.gov/broadway)
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| 8     | 2799 | 10 0 Park | 125-06-30-A     |      | 220 Enterprises | industrial/office | Tenant Old Pueblo Trails | TDOE/RE | 9/7/2001  | $ 476,463 | $ 476,463 |      | $ 476,463 |      |      | $ 476,463 |

| 9     | 2798 | HEC Bonanza/Park | 125-05-20-A     |      | Seaborn LLC | tenant Old Pueblo Trails | TDOE/RE | 4/12/2006  | $ 88,000  | $ 88,000  |      | $ 88,000  |      |      | $ 88,000  |

| 10    | 2799 | 106 E.   | 125-06-30-A     |      | Charles Lewis | residential | Old Pueblo Trails | TDOE/RE | 7/23/2006  | $ 196,000 | $ 25,462  | $ 221,462 | $ 313,669 |      |      | $ 313,669 |


| 13    | 3200 | 2288 E.  | 125-05-20-A     |      | E. Broadway 2000 LLC | residential | Tenant (lease) | TDOE/RE | 1/17/2010  | $ 656,000 | $ 656,000 |      | $ 656,000 |      |      | $ 656,000 |

| 14    | 2710 | 2235 E.  | 125-05-20-A     |      | Kent Montoya  | commercial | Tally Kali | TDOE/RE | 2/23/2011  | $ 348,500 | $ 348,500 |      | $ 348,500 |      |      | $ 348,500 |


**Acquisitions Funded by Source**

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**RFA Project Funding Summary**

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**TOTAL**

$ 7,740,000

*12/31/2012*

*TDOT/RE = Tucson Department of Transportation Real Estate Office*  
*HCD = Housing & Community Development*
Mr. Cohen,

Thank you for providing your comments for consideration by the Citizens Task Force and project team. I am including this in the upcoming Public Input Report for the next Task Force meeting (July 17, 5:30pm, 2800 E. Broadway).

I am not sure if you are aware of the recent data compiled during this process, and offer this information to you in order to provide additional context to the discussions that are leading to support for a narrowing of the roadway. We used the most current projections available for the project area and modeled the different alternatives under consideration. The modeling of the original project scope of 6-lanes, plus 2 dedicated bus lanes indicates that such a roadway would be building more lanes than is needed. The capacity of the 2 additional lanes in each direction (one for automobiles and one for bus) would only be used at 50% capacity or less. The cost-benefit ratio does not support the building of this large of a facility at this time.

The 6-lanes alternative performs the best of all the alternatives right now, and achieves improvements for all four modes (car, bus, bike, pedestrian). As this would be built on a major transit corridor, this configuration could also be converted to a 4-lanes plus 2 dedicated lanes when a shift in mode use supports such a conversion.

I mean only to share this information with you in case you are not aware.

Your points about the voter confidence and trust is important, and is not lost on the Citizens Task Force or the project team.

Again, as mentioned, this email will be shared with the Task Force for their consideration.

Respectfully,
~Jenn

******************************************************************************
Jennifer Toothaker Burdick, Project Manager
Broadway: Euclid to Country Club Roadway Improvement Project
City of Tucson Department of Transportation

Direct: (520) 837-6648   Cell: (520) 390-7094
Web: <www.tucsonaz.gov/broadway>
******************************************************************************

>>> On 6/22/2014 at 2:39 PM, David Cohen <dcohen@beachfleischman.com> wrote:
   I urge you to keep the originally anticipated design (six lanes plus) instead of narrowing the roadway. Not
only will this make traffic flow better into the six lanes east of Country Club, but wider lanes facilitate the flow of commerce and people. One reason that Phoenix has a better economic situation are its roads and overall infrastructure. EVERY major east/west street is three lanes.

Despite the additional modes of transportations, vehicle transit in Tucson is not going to be diminished.

Finally, you MUST honor the vote that was taken in passing the Prop. Materially changing ANY part of plan jeopardizes the Public’s confidence and trust. Of course, the loss of Federal tax funding would be a foolhardy thing to jeopardize in these lean economic times.

The citizen’s committee should work on aesthetic and mitigation issues but not be allowed to make major changes such as what is being discussed. Move forward and get this thing done as originally designed.

David J. Cohen, CPA
35 year resident

1985 E River Road, Suite 201
Tucson, AZ 85718
1 (520) 321-4600
1 (520) 321-4040 [fax]

20830 North Tatum Boulevard, Suite 225
Phoenix, AZ 85050
1 (602) 265-7011


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loss or damage arising from the use of this email or attachment(s).
Dr. Garcia,

I have gone through the maps and displays we had at the Open House in an effort to try to respond to your email. I am not finding what you are describing. In order for me to be able to provide a sufficient answer to you, I need your assistance in pointing out specifically what you are referring to.

All of the materials from the Open House are now online at: [http://www.tucsonaz.gov/broadway/public-meeting-4](http://www.tucsonaz.gov/broadway/public-meeting-4)

The relevant materials to where we are at in this process were put out at Station 5. Images with any roadway widths shown would have been in the 4-lane and 6-lane refined alternative maps on tables, each with variations showing CTF requested refinements:

4-Lane: [http://www.tucsonaz.gov/files/projects/broadway/4-Lane_96x30_Sheet-02ksV2.pdf](http://www.tucsonaz.gov/files/projects/broadway/4-Lane_96x30_Sheet-02ksV2.pdf)
6-Lane: [http://www.tucsonaz.gov/files/projects/broadway/4-Lane_96x30_Sheet-02ksV2.pdf](http://www.tucsonaz.gov/files/projects/broadway/4-Lane_96x30_Sheet-02ksV2.pdf)

There was also a board representing potential intersection treatments at the heaviest traveled intersection, Broadway/Campbell, which includes turn lanes for left hand turns and right hand turns, and possible transit infrastructure - queue jumps and stations. (This board was positioned next to a picture board showing what some of those treatments could look like): [http://www.tucsonaz.gov/files/projects/broadway/Station5_Campbell-BusStationStudies.pdf](http://www.tucsonaz.gov/files/projects/broadway/Station5_Campbell-BusStationStudies.pdf)  [http://www.tucsonaz.gov/files/projects/broadway/Station5_Campbell-ConceptsIncrTransitImpr.pdf](http://www.tucsonaz.gov/files/projects/broadway/Station5_Campbell-ConceptsIncrTransitImpr.pdf)

If you can provide me with the specific examples of what you saw that I can respond to, I will try to address your concerns.

~Jenn

---

On 6/20/2014 at 10:29 PM, "Garcia, Jose D - (jdgarca)" <jdgarca@email.arizona.edu> wrote:

Jenn,

I was hoping that my letter did not get lost in the ether.

Are there any answers to my implied questions?

JD Garcia
June 12, 2014

To: Broadway Project Design Team
   and to BroadwayCTF

I was extremely disappointed in the design elements displayed at the Broadway Project Open House today. In particular, despite the CTF stated goals and criteria concerning minimizing the damage to buildings and businesses, and a design criterion that expressly calls for preserving as much as possible the sense of place and keeping Broadway a destination, the vast majority of the roadway designs displayed (all but one?) had curb to curb widths greater than 120 feet. One could then calculate from those drawings that the corresponding right-of-way was 152 feet or greater!

In fact, there were a many drawings there for which the right-of-way was greater than 170 feet, clearly exceeding the RTA bond language concerning 150 foot right-of-way. When we inquire about keeping the roadway narrow so as to try to minimize the destruction of businesses and enhancing the livability of Tucson, we are told that funding depends on carefully following the bond language, but when the design team puts forward the list of possible out of compliance designs, then ...

I have been to all three public meetings for this project; in each case, the public sentiment expressed the desire to wanting to minimize the destruction of businesses and historic buildings has been very clear. Yet every effort of the project staff and consultants has been to disregard this public expression.

I do not understand why staff is steering so hard to maximize the right-of-way, rather than attempting to follow, as closely as possible, what the Mayor and Council, and the public and the CTF have expressed that they want. There must be a reason.

It seems to be illogical, in light of the facts, and leading to the public distrusting its government, however well intentioned these acts may have been.

Nobody has talked about a 170 foot right-of-way in any meetings. It certainly wasn't at the request of the CTF or the Mayor and Council that these designs were so structured.

I hope this can be corrected in the near future.

JD Garcia
3100 E. Calle Portal
Tucson, AZ 85716
Robert,

Thank you for sharing these views, concerns and questions, and the link to the Living Streets Alliance posting regarding their ideas about the Broadway project.

The report you submitted: "The Fundamental Law of Road Congestion: Evidence from US cities", from the University of Toronto, published in 2010, has been reviewed, but not yet responded to. I will make an effort to provide that response to you, and copy the CTF and Council member Fimbres, in the near future.

Sincerely,

~Jenn

*******************************************************************************
Jennifer Toothaker Burdick, Project Manager
Broadway: Euclid to Country Club Roadway Improvement Project
City of Tucson Department of Transportation

Direct: (520) 837-6648    Cell: (520) 390-7094
Web: <www.tucsonaz.gov/broadway>
*******************************************************************************

>>> On 6/12/2014 at 11:31 AM, <rhadel@gmail.com> wrote:

	Dear Task Force and planning team,

	I do applaud and acknowledge the work the task force and planning team has done thus far. I do have a few concerns, however. I do know that many including myself have produced many studies that are quite conclusive in evidence that adding lanes to roadways does not work to reduce congestion. I was concerned that these are not necessarily being acknowledged in the planning and design process as adding automobile lanes is still seen as the primary functionality objective that the process is being guided by. Has the project team been able to do a review of any of these I know my submission was #136 on the public input record and has not received any follow up after being posted to the record.

	I would also like to add that the Living Streets Alliance in Tucson, which has been a very reputable advocacy group and has helped get lots of transportation specific funding for the Tucson area, echoes these ideas and adds that we must be building “complete streets” and that “Adding vehicle travel lanes does not relieve congestion”.

	
All of their ideas are on their website at http://www.livingstreetsalliance.org/2014/06/our-thoughts-on-the-broadway-boulevard-project/

This group is not only advocates, but planners and engineers who have great deal of public and business support.

I hope that these type of smart growth strategies can come into play with the design of this and future projects, as this not only lessens financial burden of all parties that build these projects, but also puts Tucson in a better place for long term transportation planning and community building.

Thank You

Robert Hadel
rhadel@gmail.com
1803 E 13th St
From: Jennifer Burdick
To: ericksonterrascape@gmail.com
Date: 6/12/2014 6:59 AM
Subject: Re: Broadway planning

Thank you, Helen, for sending in your comments. These will be added to the Public Input Report and shared with the CTF.

~Jenn

******************************************************************************
Jenn Toothaker Burdick, Project Manager
Tucson Department of Transportation
Phone: (520) 837-6648
Cell: (520) 390-7094
Fax: (520) 791-5902
Web: www.tucsonaz.gov/transportation
******************************************************************************

>>> Helen Erickson <ericksonterrascape@gmail.com> 06/12/14 6:52 AM >>>
As I and most of my fellow historic preservation associates are here in Rio Rico for the annual Arizona Historic Preservation Conference, I wanted to let you know that I do not support a road designed to increase speed through this area. A narrower road with narrower lanes will calm the traffic, reducing bicycle and pedestrian accidents. I understand that one option gives motorists a three- minute reduction in driving time. Placing this against greater safety for everyone else, it seems really overvalued.
Thanks for listening,
Helen Erickson

Sent from my iPad
Broadway - Re: Broadway widening

From: Broadway
To: Nancy Fahringer
Date: 7/9/2014 5:48 PM
Subject: Re: Broadway widening

Mr. Fahringer,

Thank you for emailing the Citizens Task Force and me, the project manager, with your sensible encouragement. I will share this with the Task Force for the upcoming meeting on July 17.

Sincerely,
~Jenn

Jennifer Toothaker Burdick, Project Manager
Broadway: Euclid to Country Club Roadway Improvement Project
City of Tucson Department of Transportation
Direct: (520) 837-6648   Cell: (520) 390-7094
Web: <www.tucsonaz.gov/broadway>

On 6/10/2014 at 4:41 PM, Nancy Fahringer <nfahr@cox.net> wrote:

Dear Citizens’ Task Force and Project manager,

I read the Op Ed views in the Sunday Star. I write this as a long time Tucson resident, simply to ask that you make your decisions on the Broadway widening project based not on which group is the most clamorous, but, instead, based on what in your sound professional judgement makes the most sense and is best for the future of the Tucson community.

Thank you,

Philip Fahringer
Thank you, Bob, for sending this in. I have also been alerted that Doug Mance has an editorial in the paper, as well (see attached).

Both your’s and Doug’s OpEds will be shared with the Task Force tomorrow, and I’ll include them in the Public Input Report.

As we move forward, the 6+2T has been removed from consideration. Our design process with the Task Force will begin to work through with them issues related to the width. They have already begun to identify the ‘inspiration/pinch points’ along the roadway, and we can pursue with them what facilities could be narrowed down, as you suggest in your email.

As you mention, transit will be a key point to address, especially how to take advantage of this current project to enhance existing local bus transit - and prep for future mass transit (such as streetcar, as well as Bus Rapid Transit and/or Light Rail).

Thank you for taking the time to submit your opinions and for drawing attention to key issues at the heart of this process, and sharing your thoughtful suggestions for solutions.

See you Thursday!

Respectfully,

~Jenn

>>> On 6/8/2014 at 4:04 PM, Bob Cook <unispan@dakotacom.net> wrote:
   Dear Jenn,

   I am writing in response to the Guest Opinion published in the Sunday Arizona Daily Star June 8th (see attached) While I was the author supporting the vision of the Broadway Coalition and the Citizens Task Force, the piece represents the work of hundreds of committed professionals and activists in this community who are at the forefront of bringing forth solid analyses as well as forward-looking ideas about what is to be done.

   We want to expand the community’s conversation about such complex issues -- since that may be the only hope for making better decisions and taking more effective actions. The fundamental economic truism we
must face is simple: To do what is needed for our prosperity, we have to stop public expenditures on what is not needed. And we do not build what we can not maintain.

As I wrote in the Star piece, the design outcome of the City of Tucson’s Broadway Boulevard, Euclid to Country Club Project is going to say a lot about whether we will become a more resilient and vibrant region. There is so much good research out there to show why the community stakeholders’ vision is the direction we should go. For example, a recent study in Omaha, shows that transit incentive programs increase demand for transit and are less costly than providing parking. We have not even begun to talk about this research and its implications for better solutions here in Tucson.

We have heard from Douglas Mance and other proponents of the view that every specification in the 2006 RTA Plan must be rigidly followed to maintain credibility with the voters. That is nonsense; in fact, the opposite is true. Investing precious public funds in unnecessary infrastructure raises greater questions about public accountability. While I personally believe the RTA is one of the best performing local public agencies in managing and delivering projects, in this case insisting on a rigid interpretation of the 2006 RTA Plan can only damage its reputation. Excellence in public works also requires creativity, good design, and responsiveness to quality of life issues and the economic realities of the community.

The proponents of the rigid RTA interpretation also tell us that the community’s preferences for the Broadway redesign would reduce “functionality of mobility,” a key goal of the Plan. Again, the opposite is true. As a “smart growth” strategy, transit-oriented development doesn’t diminish, but actually increases “functionality of mobility.” The recent transformation along the Street Car route is dramatic evidence that even when no roads are widened, mobility functionality as well as economic vitality can increase significantly. The UA is planning to serve 20,000 additional students in the next decades with thousands more staff and faculty as well. The Street Car will play a critical role in their mobility.

While the many benefits of the community-supported design are clear, the remaining question is who will pay for the consequences of an unsustainable, out-of-scale roadway if we end up rigidly following the ballot language specifying a 150ft-wide, 8-lane design? I think the answer is clear -- it’s us, our children, our grandchildren and the generations to come.

Contrary to official rhetoric, the RTA and County can remove the obstacles to what is best for the region. So please, join us and help make this project one we won’t regret, a project which will make Broadway Blvd, Euclid to Country Club, a Tucson Centro destination that the whole region can enjoy and benefit by.

Thank you for your thoughtful consideration,
Robert Cook,
Member, RTA Citizen's Accountability for Regional Transportation Committee
Douglas Mance: Options available for Broadway project that meet RTA's 'functionality' test

15 HOURS AGO • BY DOUGLAS MANCE SPECIAL TO THE ARIZONA DAILY STAR

The last time I addressed the Broadway Corridor Citizens Task Force, I let them know I wanted those dedicated volunteers to succeed in their efforts to come up with a design that would be acceptable to all of the funding entities: the Regional Transportation Authority, Pima County and the city of Tucson.

On another occasion I addressed the same body as the ex-officio liaison to my CART Committee (Citizens Accountability for Regional Transportation). I let them know that I felt that their process now was like a "bowling alley with gutters." My intimation was that if the task force put forth a plan that ignored the 2006 ballot language, they might jeopardize the chances of it being funded at all.

The Broadway task force now needs regional community guidance so it can avoid rolling a gutter ball. On Thursday the entire regional public needs to participate in a public forum on this important Broadway project.

Prominently stated in the 2006 voter-approved Regional Transportation Plan is the overarching policy that “functionality is not to be diminished.” Some of the task force proposals would clearly diminish functionality.

At risk here is more than $42 million from the RTA, more than $25 million from Pima County and $3 million from the city of Tucson. The obligation that both the RTA and Pima County has is to the voters of the entire region and the entire county. The obligation attached to the city of Tucson, the Broadway project manager, seems to be to city voters only.

The city’s apparent unwillingness to take into account other regional vested interests could paralyze the efforts to find a common ground. Or this could be a wonderful opportunity to allow three representative governmental bodies to work together to find an
elegant compromise solution for this important stretch of Broadway — a gateway to a vibrant downtown for the entire greater Tucson region.

I have served on the CART committee since its inception in 2006, and all of us on the committee have a stated mission to “ascertain that the Regional Transportation Authority plan is implemented as presented to the voters of Pima County on May 16, 2006.” The CART is a recommending body of citizen volunteers who will be making our recommendation on the Broadway Corridor RTA project directly to the RTA Board.

Like the volunteers on the Broadway Citizens Task Force, we CART members perform our duties because we believe in and we are very proud of our community. The CART committee is also dedicated to keeping the promises made to the 2006 regional voters. The Regional Transportation Plan is a comprehensive plan that contains many hundreds of incredible and visionary component projects, and naturally, not all the projects carry the same popularity levels.

That being said, the RTA Plan represents one of the most successful compromises that the Tucson region has ever agreed upon and funded, and if we endanger the plan now by going against the will of the voter and the taxpayer, we run the real risk of affecting the credibility of this entire plan and similar future plans.

Within the portfolio of Citizen Task Force Broadway Corridor design options that are now on the table, there are options that may meet both the functionality tests that the voters approved and the fiduciary responsibility that the RTA plan places upon the RTA Board. Unfortunately, there are also some options on the table that will diminish multi-modal transportation functionality on Broadway.

We have before us a wonderful opportunity to bowl a good score on this important transportation corridor. All we need to do now plan together and avoid gutter balls.

**The Broadway Boulevard Project**

The Regional Transportation Authority Plan’s project No. 17 is described as: widen Broadway to six travel lanes, plus two dedicated bus lanes; bike lanes, and sidewalks. It includes Broadway from Euclid Avenue, just east of downtown, to Country Club Road.

The City of Tucson is leading this project, and is in the planning and design stage. Working with a Citizens Task Force, the project scope and roadway configuration alternatives are being reviewed.

For details go to http://m.tucsonaz.gov/broadway
Info box

A planning update and open house on the Broadway Boulevard project will be held at the Sabbar Shrine Hall, 450 S. Tucson Blvd., from 5 to 8 p.m. on Thursday, June 12.
Bob,

Thank you very much for forwarding the comments you would have shared at the 5/22 CTF meeting. We appreciate your substantive ideas regarding the project design.

I will enter this into the Public Input Report, and, because of the technical suggestions you make, I will forward this email to members of the project technical team for their review and response. It may be that a meeting would be useful to cover the issues you raise, although I believe this will have to wait until after the June 12 Open House.

I hope we will see you at the June 12 Open House! A Save the Date announcement is online now, and will be distributed soon to the email listserv: http://www.tucsonaz.gov/files/projects/broadway/Bdwy-PUOH_eblast_06-12-14.pdf

Best regards,

~Jenn

******************************************************
Jennifer Toothaker Burdick, Project Manager
Broadway: Euclid to Country Club Roadway Improvement Project
City of Tucson Department of Transportation

Direct: (520) 837-6648   Cell: (520) 390-7094
Web: <www.tucsonaz.gov/broadway>
******************************************************

>>> On 5/26/2014 at 6:17 PM, "Robert M. Kaye" <r_m_kaye@hotmail.com> wrote:
   Jennifer:
   I’m pleased I was able to attend the meeting last week and sorry that I was unable to stay for the second round of public comments. Here are the comments I would have made:

   1. **Bus Operations on Broadway.** As part of the redesign of the ROW and intersections, look for ways to fine-tune bus operations to improve speed and efficiency: a) location of bus stops in relation to signalized intersections; b) design of bus stops (with "high-speed" cut-outs from the traffic (per my comment on 4/30)); and, c) installation of "smart" signals that can be controlled by "clickers" in emergency vehicles and buses.

   2. **Demand-Driven Traffic Management.** Design/install new signals and control equipment at the major intersections with wired or wireless connections to a new central control room. Signals should include cameral equipment so that central monitoring staff can watch peak hour operations at each of the signals along the corridor and allocate...
green time to the peak movements. This can significantly increase capacity at intersections and can speed operations along the corridor. In the best of all worlds, this would be done along the entirety of Broadway from downtown to Wilmot. Then, the Speedway corridor should be retrofitted with this system. Hopefully, this sort of equipment is already included in the design specs for the Grant road widening. There may even be Federal grant money to support this work, but every city that has installed these systems -- and there are many -- has found them to be cost effective, especially where there is no available option for widening. Worst case, the most expensive parts of the monitoring/control system can be added at a later date. At a minimum, the signals should be interconnected and synchronized so that vehicles proceeding east or west on Broadway at some specified and knowable speed -- say, 35 mph -- see green at every intersection. This was done with the N/S avenues in New York city in the 1950s...certainly this could happen in Tucson now.

3. **Parking for Businesses.** Study and implement the use of corridor-specific signage and pavement/curb painting to indicate to commercial patrons the location of driveways and parking for the businesses they are visiting.

4. **Landscaping.** Focus on planting trees that will create shade along the sidewalks. In my opinion, shade is a pre-condition for pedestrian traffic.

I would be pleased to answer any questions you or your colleagues might have about these comments.

Regards,
Bob

Robert M. Kaye
330 E. Hillcrest Place
Tucson, AZ 85704
617-990-6050 (cell)
r_m_kaye@hotmail.com
May 29, 2014

Dear Broadway Project Citizens' Task Force,

Thank you for the many hours you have spent working on our behalf. In the final 4-5 months of the planning for the RTA's Broadway Corridor Project, it appears that you are very close to coming up to what everybody could consider as a win-win situation. We see that as follows: a design that has been tailored to significantly improve the way in which people are able to move to the Broadway corridor as a destination, as well as move through it as a corridor, but a corridor in the heart of a thriving metropolitan area.

The block-by-block analysis of the layout will give you an opportunity to explore in detail the implications of the proposed changes. You have already expressed a strong desire to do as little damage to existing business and historical structures as possible, while remaking the roadway to be more efficient in moving people by as many means as possible.

Broadway Project staff and Transportation Director Cole have mentioned that a 6 lane, 96 foot right-of-way was possible. Actually, it is not hard at all to conceive of a proper 6 lane road in a right-of-way as narrow as 88 feet (the minimum right-of-way within the project currently is ~84 feet): 4 car lanes at ten feet, plus 2 twelve foot transit lanes, plus 2 five foot bicycle lanes, plus 2 four foot sidewalks plus 2 three foot separators. Of course, the roadway is already wider than that in most parts of the study area. As you can see, the above estimate was obtained without any attempt at using all the tools available for designing smart roadways. A creative design team can use its expertise to find ways to make the throughput per minute larger without destroying the sense of place in the process. This is such a wonderful opportunity for the city of Tucson to shine.

We believe you share our goal of a thriving, livable Tucson. We have a vision of how the Broadway Project will contribute to that goal. We envision an attractive two mile stretch of road that has been tailored to be...
a mix of flourishing businesses, from the Sunshine Mile to Broadway Village, and historic properties that have been enhanced through reinvestment because the situation has been stabilized, supported by city-owned parks, parking structures or parking lots (utilizing in part vacant City-owned property). We see a road that periodically has wider right-of-way to accommodate turn lanes, and synchronized traffic control lights helping to make automobile throughput more efficient for those wishing they could stay but needing to move on. We see pedestrians being able to get across the street in well-marked, well lit attractive crosswalks. And we see the large copper plaque on an elegant pedestal honoring the City of Tucson for best design and creative enhancement of an existing destination while improving the functionality of the major arterial at its center.

We ask you to challenge the Design team to give you plans that push the limits of minimizing the right-of-way footprint of the roadway and to incorporate elements that to reinforce a sense of a living community, while improving throughput for those who need to move through. We believe this can be done if we are clever and determined. Be not deterred by the easiest layouts; insist on creating a roadway we can all be proud of. Focusing only on moving automobiles rapidly at the cost of creating a bleak landscape should not, in our view, be an option, in part because the traffic data do not support that, but mostly because it makes Tucson a much less desirable place to live.

We applaud your efforts to date, and urge you to insist on a creative solution that is truly a win for Tucson.

JD Garcia
For the Broadway Coalition
There seems to be some misunderstanding about Rincon Heights Neighborhood’s position on widening Broadway.

For the third time since June 2012, I attach (and paste in below) our September 2010 resolution, whose gist was:

"Be it therefore resolved that Rincon Heights Neighborhood Association go on record opposing the 1987 plan to widen Broadway, and propose instead a genuine street improvement within the existing footprint that will preserve all businesses and other structures on both sides of the street."

Rincon Heights Neighborhood Association Resolution on the Broadway Project

The City of Tucson’s 1987 Draft Final Report on Broadway Boulevard calls for a 150’ wide street with eight lanes and a 24’ landscaped median as well as a 30’ landscaped buffer and sound wall. This would necessitate demolishing all structures on the north side of the street between the alley and Broadway, Euclid and Country Club. This would wipe away virtually all local businesses, several dozen historic structures, and two churches. It would also jeopardize Rincon Heights Neighborhood’s Historic District designation by removing 19 contributing properties that face Broadway, and several others from adjacent side streets.

Whereas plans to widen the Euclid-to-Country Club section of Broadway were concluded with almost no public input and despite significant local opposition, both in 1987 and in 2005; and

Whereas this 23 year old plan is based on outdated approaches and inaccurate predictions of traffic volumes, and would cost $71 million taxpayer dollars we simply do not have; and

Whereas this stretch of Broadway contains several dozen historically and architecturally significant buildings, including longstanding family businesses, that contribute to the unique local ambience drawing tourists and tourist dollars to Tucson; and

Whereas the business sector on Broadway Boulevard between Euclid and Country Club contains 287 taxpaying and tax-generating businesses facing the street alone, and over 500 in the vicinity; and

Whereas the Broadway business district serves local residents for at least a mile radius, some of whom have no local business strip, and, if elderly, disabled or children, do not drive; and

Whereas destroying viable businesses is counterproductive to job and revenue growth and recovery; and

Whereas the City of Tucson, Pima County and the Rio Nuevo TIF taxing district derive revenues from businesses on Broadway; and

Whereas the City, County and other public entities are already facing the worst revenue shortfalls in decades due to the current depression, and

Whereas destroying local businesses and services is counterproductive to the City and County’s stated goals of livability, sustainability, walkable streets and accessibility; and
Whereas small businesses account for 50% of employment and 60% of new employment nationwide, according to Federal Reserve Chairman Ben Bernanke (12 July 2010 NPR 5 p.m.); and

Whereas local businesses generate 30%-70% more revenues for localities than chain stores; and
Whereas doubt about when the City will widen the street discourages reinvestment, producing blight that depresses property values and in turn revenues;

Be it therefore resolved that Rincon Heights Neighborhood Association go on record opposing the 1987 plan to widen Broadway, and propose instead a genuine street improvement within the existing footprint that will preserve all businesses and other structures on both sides of the street.

RATIONALE

This decades-old plan is not only gratuitously destructive, but unnecessary given current and historic traffic volumes. It will also damage the region’s tax base and livability and cost a projected $71 million taxpayer dollars we do not have to waste.

1. TRAFFIC PROJECTIONS OFF

Traffic projections on which this plan was premised were wildly off. Although the 1987 report is remarkably short on objective data, it does show the street carried 30,000 cars per day in 1984. http://dot.tucsonaz.gov/projects/broadway. Over 20 years later, the 2006 Streetcar Study found only 33,600 cars per day on that stretch of Broadway—barely more than 1984, and a far cry from the 40% rise predicted. This was before gas prices started going up, and the economy tanked. The street may well be carrying less traffic today than in the 1980s.


To solve this non-problem, the project was expected to cost $71 million in 2006 dollars, money that could be used for more pressing needs.

2. NEGATIVE IMPACTS ON TAX BASE & LIVABILITY

We question whether the expenditure of $71 million taxpayer dollars will provide benefits to the community outweighing the damage to the regional economy and livability due to the disruption and loss of commercial activity and tax revenues on Broadway.

We are in the worst depression since the 1970s, some say the 1930s, yet the 1987 plan would destroy dozens of locally-owned taxing and tax-generating businesses, the backbone of our economy. Businesses on Broadway not only generate revenue for the City, State and County, but form part of the Rio Nuevo taxing district. Destroying these businesses will further depress already lagging sales tax revenues needed for other projects.

Further, the 1987 plan would degrade not only the immediate locality but the livability of a large section of central Tucson. The stretch between Euclid and Country Club is the only commercial strip on Broadway between Downtown and the El Con Mall, neither of which offer a comparable variety of businesses and services. These include auto repair, insurance, restaurants, professional services, and specialty shops of all sorts.

This vibrant commercial cluster serves neighborhoods for at least a mile radius in all directions. Destroying it would force local residents to drive to businesses and services they can now walk to—the opposite of PAG’s stated goals for sustainability. This would impose particular hardship on the elderly, disabled, students and the poor, many of whom do not drive.

This stretch also contains at least 19 contributing properties to Rincon Heights Historic District. Historic districts boost owner-occupancy, thus tax revenues, stabilizing and strengthening vulnerable central city neighborhoods critical to Downtown revitalization. It also contains 39 potential contributing properties to Sam Hughes Historic District.

3. THE PLAN IS SIMPLY OUTDATED
Regional conditions as well as gas prices have changed since 1987. Tucson’s historic fabric and ambience are now recognized as a resource for the tourist economy. Walkability, livability and sustainability are now integral to responsible transportation planning. Neighborhood preservation and mobility are not antithetical but interdependent in planning for our region’s future.

4. PROCESS ISSUES

The planning process itself has suffered from a lack of transparency and accountability: Public input into the Broadway project has been nil so far. A meeting scheduled for May 17 was cancelled and never rescheduled. In the meantime, the City has been pressuring local property owners to sell (blockbusting) by creating an impression of inevitability about the destruction of their property.

The consultant, HDR has consumed substantial amounts of time and tax money and has yet to produce the historic property inventory and study of alternative alignments or to convene the Citizens Task Force, all mandated in Phase I of the project's Scope of Work.
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To solve this non-problem, the project was expected to cost $71 million in 2006 dollars, money that could be used for more pressing needs.

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The consultant, HDR has consumed substantial amounts of time and tax money and has yet to produce the historic property inventory and study of alternative alignments or to convene the Citizens Task Force, all mandated in Phase I of the project’s Scope of Work.
Jennifer Burdick - Re: FW: Broadway Coalition statement

From: Jennifer Burdick  
To: ldobbyn@email.arizona.edu; Mary Durham-Pflibsen  
Date: 5/28/2014 10:06 AM  
Subject: Re: FW: Broadway Coalition statement

Dear Mary and Linda -

Thank you for the emails regarding getting this to the Task Force. I will make sure it gets into the report and distributed to Task Force members.

Respectfully,

~Jenn

>>> On 5/27/2014 at 9:55 PM, Mary Durham-Pflibsen <marypflib@hotmail.com> wrote:

Hi, Linda,
Thank you for taking the time to attend our May 22nd CTF meeting and for forwarding your comments. I'm so sorry that you weren't able to participate in our call to audience, but am including Jenn Burdick, our project manager, in this email. Jenn will ensure that your comments are added to the public input report for all of the CTF members to read.

Mary

Mary Durham-Pflibsen
members thought I should also send it to you two to make sure it was distributed to the task force.

Thanks so much - for all the time and energy you've put into keeping Broadway real,
Linda Dobbyn
Jennifer Burdick - FW: Broadway Coalition statement

From: Mary Durham-Pflibsen <marypflib@hotmail.com>
To: "ldobbyn@email.arizona.edu" <ldobbyn@email.arizona.edu>
Date: 5/27/2014 9:55 PM
Subject: FW: Broadway Coalition statement
CC: "jennifer.burdick@tucsonaz.gov" <jennifer.burdick@tucsonaz.gov>
Attachments: Broadway 5-22-14 statement.doc

Hi, Linda,
Thank you for taking the time to attend our May 22nd CTF meeting and for forwarding your comments. I'm so sorry that you weren't able to participate in our call to audience, but am including Jenn Burdick, our project manager, in this email. Jenn will ensure that your comments are added to the public input report for all of the CTF members to read.

Mary

Mary Durham-Pflibsen

From: ldobbyn@email.arizona.edu
To: marypflib@hotmail.com
Subject: Fwd: Broadway Coalition statement
Date: Sun, 25 May 2014 22:09:43 +0000

oops, I think I misspelled your email address... here's another try at it...

Begin forwarded message:

From: LINDA DOBBYN <ldobbyn@email.arizona.edu>
Subject: Broadway Coalition statement
Date: May 25, 2014 at 3:08:22 PM MST
To: <marypflib@hotmail.com>, Colby and Karen <psalm116@gmail.com>

Hi Mary and Colby,
I was going to read the attached statement (on behalf of the BC - written by Mark Homan) at last Thursday's task force meeting, but was never permitted to, given the limited time allowed for public statements. I've submitted it on-line to the Broadway Project site, but other BC members thought I should also send it to you two to make sure it was distributed to the task force.

Thanks so much - for all the time and energy you've put into keeping Broadway real,
Linda Dobbyn
Tonight you will hear a presentation from the City about the financial implications of some choices regarding the number of lanes. Again, we hope you look at the **cross-width** of the roadway as the critical issue, rather than just the number of lanes.

We expect that the City will be giving you a full, accurate accounting of **all** associated costs to assist in your decision making, not just a partial view, which, of course, would be, at best, misleading.

You may hear that a four lane option will result in the loss of money coming from the County and the RTA. Know that not only has the County taken **no** position on the matter, but Pima County Manager Chuck Hukleberry, though advocating 6 lanes, has reminded the Supervisors that they indeed have options in the matter. Again, the County has taken **no** position. At best it is speculative to suggest that there will be any loss of County funds.

You will also hear that there may be a need to repay money to the RTA. First, much of the money that Mayor and Council were told may be lost isn’t RTA money at all. Second, the RTA decision making body is the RTA Board – a group of elected officials, who routinely defer to the wishes of the elected official representing the jurisdiction most affected. In this case, that is our Mayor, Jonathan Rothschild. So, saying the RTA will or will not do something is really saying what Mayor Rothschild will do, and it is pretty unlikely that he’d act to cause a loss to the City. Again, the RTA has taken **no** position on this. Any other suggestion is speculation.

Let’s turn to the costs of the 118 foot, 6 lane right of way that we expect the City will review with you. Again, to withhold this information would paint only a partial picture of the matter of costs.

Costs associated with a 118 foot, 6 line right of way that need to be factored into any decision are:

- Costs of acquisition of property
- Costs of destruction of property
- Costs of relocation of businesses
  
  Note that these three items **alone** represent tens and tens of millions of dollars

  Other costs
• Loss of sales tax revenue – remember this is a loss that will occur year after year after year. So a 1.5 million dollar loss in one year quickly mounts to 15 million dollars in just ten years.
• Loss of property tax revenue – again, year after year after year.
• Loss of sales tax revenue from special events related to the area. For example this year’s Mid Modern Architecture week produced 1.5 million dollars to the local economy. If we decimate the mid modern architecture of the area, we lose that event, and any other events related to the uniqueness of the area. Local businesses lose millions of dollars and the City loses more sales tax revenue, again, year after year after year.
• Loss of sales tax revenue from a revitalized business district, which is likely to occur once this matter is finally resolved, businesses protected, and businesses now able to make investments in the future. Again, this is a loss that will happen each and every year.
• Of course, there’s the cost of maintaining all that extra asphalt – and we do so well maintaining our streets in Tucson. Again, this will not be a one time cost.

We expect that the City will have seriously analyzed all these costs and will give you a full accounting so that you have a complete picture, not a partial one. Thank you for considering all these matters as you decide what alignment will make our community safe, vibrant, and beautiful.
Dear Task Force members,

It was disappointing to hear in the May 22, 2014 meeting the same myths repeated that the Mayor & Council, Broadway Coalition, Southern Arizona Transit Advocates and others have produced evidence to dispel.

Let me try again:

Myth #1: Bicyclists will benefit from a wider road.

The RTA’s own 2012 Traffic Engineering Study (attached) admits on p.27 that:

“The results, provided in Exhibit 19, indicate that a 6-lane roadway with 5-ft or 6-ft bike lanes will provide good level of service for transit users and pedestrians, however bicyclists will experience poor level of service (LOS E). The primary factors affecting bike level of service are high traffic volumes and high density of driveways and side streets. Wider multi-use lanes may improve bicycle level of service simply based on a more lateral clearance between a cyclist and adjacent traffic, however the effects of conflicting transit vehicles and right-turn traffic using the same lane could very well make it a worse condition for cyclists.”

Myth #2: The County Board will not fund less than 6 lanes. The recent letter from County Executive Chuck Huckelberry (attached and distributed in the meeting) admits that “there are mechanisms to amend the ordinance, which are described in the County Code” and that “the Board is free to direct a bond amendment that would do otherwise (than the six-lane road).”

Myth #3: A configuration less than 6 lanes will trigger a COT payback of $7 million. Margot Garcia’s calculations (attached) show only $3 million of RTA funds expended thus far. This is about two years’ worth of tax revenues lost if the north side of the street were demolished. That revenue loss, however, would be compounded year after year.

Myth #4: A four-lane configuration would not allow for transit. The Southern Arizona Transit Advocates produced a 5-lane transit plan using existing streets (attached) ranked #1 by stakeholders in the September 2013 meeting. Yet somehow it has disappeared from subsequent discussions.

Additionally, a clarification: The COT’s Major Streets & Routes Plan states on p.20 (distributed--again--at the May 22 meeting):

“a. Landscaped medians shall be provided on routes of more than four through lanes, except where the route passes through or adjacent to a historic area and the width of the roadway would intrude on the character of historic structures, ...”

All of the Study Area between Euclid and Country Club, on both sides of the street, is historically sensitive.

Finally, I think it is reaching to expect the CTF to consider seriously a CART committee meeting held nearly a year ago, when major developments, including a new RTA Director, have intervened. The CTF got clear direction from the Mayor & Council earlier this month.
Thank you all for your service.

Laura Tabili
FINAL REPORT

Traffic Engineering Study

Broadway Boulevard, Euclid Avenue to Country Club Road

Prepared For:
HDR Engineering, Inc.
5210 East Williams Circle, Suite 530
Tucson, AZ 85711

Prepared By:
Kittelstein & Associates, Inc.
33 N. Stone Ave., Suite 800
Tucson, AZ 85701

March 2012
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EXECUTIVE SUMMARY

The Regional Transportation Authority (RTA) plan approved by Pima County voters in 2006 includes widening Broadway Boulevard from Euclid Avenue to Country Club Road to a 6-lane divided arterial with two dedicated transit lanes. As part of the planning and preliminary engineering phase of the project, a traffic study was conducted to determine the capacity requirements of the roadway and intersections, traffic control and access control requirements, and facilities to address multi-modal needs.

A preliminary traffic assessment prepared in 2009 evaluated corridor capacity requirements based on projected 2030 traffic demands. This report updates the initial capacity recommendations to reflect the 2040 planning horizon and provides a detailed assessment of arterial operations and multi-modal needs.

Analysis of roadway and intersection capacity was conducted utilizing the analytical procedures provided in the Highway Capacity Manual. Detailed evaluation of corridor operations, particularly the impact of dedicated transit, or multi-use lanes, was conducted using a microscopic simulation model that was developed for a one mile section of the corridor, Cherry Avenue to Tucson Boulevard. The findings of this traffic study are summarized below.

- Current (2010) daily traffic volumes on Broadway Boulevard range from 34,000 to 41,000 vehicles per day (vpd). 2040 traffic demands are projected to range from 40,000 to 56,000 vpd. The capacity analysis indicates that a 6-lane roadway with appropriate turn-lane capacity and storage at signalized intersections will be required to serve future demand at a satisfactory level of service.

- At Euclid Avenue, dual left-turn lanes will be required on the eastbound and westbound approaches to serve projected 2040 peak-hour traffic volumes. At Campbell Avenue, dual left-turn lanes and exclusive right-turn lanes will be required on all approaches. Even with the recommended capacity improvements, some movements at Campbell Avenue will likely operate at or near capacity during the evening peak period. At Country Club Road, dual left-turn lanes and right-turn lanes are required to serve projected future turning demand, however due to constrained right-of-way, it is likely that only single left-turn lanes can be provided. As such, it is expected that this intersection will become congested during the evening peak traffic period based on 7-10 years of projected traffic growth. Recommended intersection lane requirements are provided in Exhibit 13.

- A review of historical crash data covering the most recent 3-year period indicated that over 400 crashes occurred on Broadway Boulevard from Euclid Avenue to Country Club Road. Rear-end crashes accounted for approximately 40% of all crashes. Widening the roadway and reducing intersection congestion will reduce rear-end crash potential.

- Providing a high level of access control will optimize roadway capacity and reduce crash potential. Based on a potential shift of the Broadway Boulevard alignment to the north, a conceptual plan for the location of median openings was prepared in this study. An access
management plan should be developed for the corridor based on the final roadway alignment and anticipated redevelopment of adjacent properties. This plan should strive to minimize the number of driveways that provide direct access onto Broadway Boulevard.

- The current pedestrian activity at the Treat Avenue marked crossing does not justify installation of a pedestrian signal; however, it is anticipated that a signal will be required in the future to accommodate the City’s plan to convert Treat Avenue into a bike boulevard.

- To optimize Broadway Boulevard operations, it is critical that all pedestrian signals, either HAWK or Pelican, be integrated into the corridor’s coordinated signal operations. This will require that the HAWK signals be designed and operated as 2-stage crossings.

- Based on current side street and driveway traffic volumes, no additional traffic signals will be required. It is recommended that all traffic signals be equipped with transit signal priority technology to enhance transit performance and support ridership within the corridor.

- Microscopic simulation models were developed for the 6-lane and 6-lane with multi-use lanes scenarios. The multi-use lanes are expected to serve three functions – dedicated bus lanes, right-turn deceleration lanes, and bike lanes, as they currently do on much of Broadway Boulevard to the east of Columbus Road. The simulation results indicate that the multi-use lanes will improve transit performance. Average delay of buses will be approximately 12% less, number of stops will be 15% less, and the average speed of buses will be 6% higher. The benefit to vehicles in the general traffic lanes is marginal. Considering current local bus service and the potential future implementation of Bus Rapid Transit (BRT) service on Broadway Boulevard, provision of a dedicated lane is not essential, however it will benefit transit operations. What is essential if multi-use lanes are not included are pull thrus/outs at signalized intersections and other major transit stops, although not at minor stops. Reducing driveway density along the corridor will also benefit transit and bicycle operations if multi-use lanes are not provided.
1. **BACKGROUND AND SCOPE**

The City of Tucson Department of Transportation is moving ahead with plans to widen Broadway Boulevard from Euclid Avenue to Country Club Road as part of the Regional Transportation Authority (RTA) transportation improvement program. Kittelson & Associates, Inc. (KAI) was retained by HDR Engineering to evaluate existing and future traffic conditions along Broadway Boulevard. This report documents the evaluation results, including existing conditions, projected traffic growth within the corridor, and roadway capacity and control requirements to serve traffic demand. Specific recommendations were developed for the design of improvements on Broadway Boulevard, including the lane configuration at signalized intersections, turn lane storage requirements, and needed traffic control. The study limits are defined in Exhibit 1.

The traffic assessment conducted included five signalized intersections - Euclid Avenue, Highland Avenue, Campbell Avenue, Tucson Boulevard and Country Club Road; four intersections with HAWK pedestrian signals - Park Avenue, Cherry Avenue, Norris Avenue and Plumer Avenue; and a two-way stop-controlled intersection with pedestrian crossing at Treat Avenue. Existing intersection peak period turning movement counts, 24-hour segment counts with vehicle classification data, and 24-hour counts on eleven side streets were collected during February 16, 2009 and February 19, 2009 and were used to establish the existing conditions. Socioeconomic data, driveway activity data, pedestrian counts, lane utilization information, and crash data were also collected.
2. **Existing Conditions**

2.1 **ROADWAY**

Broadway Boulevard currently has a 6-lane cross section with a raised between Euclid Avenue and Tyndall Avenue, transitioning to a 5-lane cross section with a center two-way left-turn lane (TWLTL) between Tyndall Avenue and Park Avenue, and a 5-lane cross section between Park Avenue and just west of Country Club Road. The TWLTL accommodates access to adjacent commercial and residential properties. The current cross sections include 11-foot travel lanes with 5-foot bike lanes. A short frontage road located on the north side of Broadway Boulevard, extending from 400 feet west of Treat Avenue to Stewart Avenue provides access to twelve residences. No on-street parking exists within the study corridor. Sidewalk or paved areas on both sides of the roadway are available for pedestrians along the entire roadway section. Current access (driveways and side streets) along Broadway Boulevard is summarized in Exhibit 2.

<table>
<thead>
<tr>
<th>Broadway Section</th>
<th>North Side</th>
<th>South Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euclid Ave. - Highland Ave.</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>Highland Ave. - Campbell Ave.</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>Campbell Ave. - Tucson Blvd.</td>
<td>37</td>
<td>34</td>
</tr>
<tr>
<td>Tucson Blvd. - Country Club Rd.</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>98</strong></td>
<td><strong>102</strong></td>
</tr>
</tbody>
</table>

2.2 **LAND USE**

The study section of Broadway Boulevard is fully developed. Residential and small retail commercial are the principal land uses between Euclid Avenue and Campbell Avenue. Retail commercial, including several strip commercial buildings, is the principal land use between Campbell Avenue and Country Club Road. Nearly all of these developments currently have full access onto Broadway Boulevard.

2.3 **SPEED LIMIT**

The existing posted speed limits within the study limits are as follows:

- Broadway Boulevard - 30 mph from Euclid Avenue to Campbell Avenue, 35 mph from Campbell Avenue to Country Club Road.
- Euclid Avenue - 30 mph north of Broadway Boulevard, 35 mph south of Broadway Boulevard.
- Highland Avenue - 25 mph.
• Campbell Avenue - 35 mph north of Broadway Boulevard, 40 mph south of Broadway Boulevard.
• Tucson Boulevard - 30 mph north of Broadway Boulevard, 35 mph south of Broadway Boulevard.
• Country Club Road - 35 mph.
• All other side streets - 25 mph.

2.4 TRAFFIC OPERATIONS

Traffic counts collected between February 16, 2009 and February 19, 2009 include peak-period turning movement counts at the study intersections. Daily (24-hour) directional traffic counts were collected on Broadway Boulevard between Campbell Avenue and Tucson Boulevard and on eleven side streets. Recent daily traffic counts were also obtained from the Pima Association of Governments (PAG). The hourly and daily traffic volume data are summarized in Exhibit 7 and the detailed counts (including pedestrian counts) are included in Appendix A.

2.4.1 Traffic Factors

The traffic factors listed in Exhibit 3 were calculated from the 24-hour roadway counts. The K-factor represents the percentage of daily traffic that occurs during the peak hour and the D-factor represents the percentage of traffic in the heaviest direction of travel. The hourly segment count data indicates that existing demand remains heavy throughout the day with the two-way volume exceeding 2,000 vehicles per hour from 7 AM until 7 PM.

<table>
<thead>
<tr>
<th>Broadway Boulevard</th>
<th>K</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Campbell Ave. to Tucson Blvd.</td>
<td>7%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Four hour vehicle classification counts were taken on September 1, 2011 on Broadway Boulevard near Norris Avenue. The observed heavy vehicle percentage during the peak periods (7-9 AM and 4-6 PM) is about 2%. The Federal Highway Administration (FHWA) defines 13 vehicle categories. Heavy vehicles as those in Categories 5 thru 13. The vehicle classification data is summarized in Exhibit 4.

Based on the 24-hour segment and peak period intersection turning movement count data, the morning peak hour occurs from 7:30 to 8:30 AM and evening peak hour from 4:30 to 5:30 PM. Traffic operations were evaluated for these two peak hours.
### Exhibit 4  Summary of Vehicle Classification Data

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
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<tbody>
<tr>
<td>Peak Period</td>
<td></td>
<td></td>
<td>Peak</td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
<td>PM</td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Motorcycles/Bikes</td>
<td></td>
<td></td>
<td></td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>0.0%</td>
<td>0.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Pass. Cars</td>
<td></td>
<td></td>
<td></td>
<td>48.4%</td>
<td>47.1%</td>
<td>47.9%</td>
<td>47.9%</td>
<td>47.9%</td>
<td>47.9%</td>
<td>47.9%</td>
<td>47.9%</td>
<td>47.9%</td>
<td>47.9%</td>
</tr>
<tr>
<td>Trucks, Vans, etc</td>
<td></td>
<td></td>
<td>1.3%</td>
<td>1.7%</td>
<td>0.7%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Bus</td>
<td></td>
<td></td>
<td>1.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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</tr>
<tr>
<td>Single Unit Trucks</td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Truck with Trailer</td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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<td>0.0%</td>
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<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Truck with Multi Trailers</td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
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<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2Axle, 6 Tire</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>3 Axle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>4 Axle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>&lt;5 Axle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>5 Axle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>&gt;6 Axle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>6 Axle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>&gt;6 Axle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.0%</td>
</tr>
</tbody>
</table>

### 2.4.2 Pedestrian and Bicycle Volumes

Pedestrian counts taken at each of the four existing HAWK signals and at the unsignalized pedestrian crossing during the vehicular peak hour (7:30-8:30 AM and 4:30-5:30 PM) on Broadway Boulevard are summarized in Exhibit 5. These data were collected in February 2009 and again in September 2011. The 2011 counts also include the number of times that HAWK signals were activated during each peak hour. A detailed evaluation of the impact of these HAWK signals on traffic flow on Broadway Boulevard was conducted using a microscopic traffic simulation model (VISSIM) and the results are discussed in Section 3.2.4.

#### Exhibit 5  Peak Hour Pedestrian Volumes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Park Ave./Broadway Blvd. (HAWK)</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Cherry Ave./Broadway Blvd. (HAWK)</td>
<td>31</td>
<td>40</td>
</tr>
<tr>
<td>Norris Ave./Broadway Blvd. (HAWK)</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Plumer Ave./Broadway Blvd. (HAWK)</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Treat Ave./Broadway Blvd. (marked crosswalk)</td>
<td>3</td>
<td>35</td>
</tr>
</tbody>
</table>

The peak-hour of pedestrian activity at each crossing is also provided in Exhibit 5 for the 2011 counts. At Plumer Avenue and Norris Avenue, the number of pedestrians peaked from 3:15 to 4:25 PM; at Park Ave, the peak pedestrian activity occurred between 9:15 – 10:15 AM with 41 pedestrians in 15 signal activations; at Cherry Ave the highest pedestrian volume observed was 21 pedestrians between 7:45 – 8:45 AM; the pedestrian activity at the Treat Ave crossing was low with a maximum of 6 pedestrians observed between 9:45 and 10:45 AM.
Bicycle counts were collected at the Norris Avenue intersection on September 1, 2011 between 4:30 and 5:30 PM. Six bicyclists were observed travelling in the eastbound direction and one in the westbound direction along Broadway Blvd.

2.4.3 Arterial Traffic Flow

Travel time data was collected on February 19, 2009 between 7 and 9 AM and between 4 and 6 PM using the floating car method. The average travel times on the 1.92 mile section of Broadway Boulevard from Euclid Avenue to Country Club Road are provided in Exhibit 6. The Synchro models developed for capacity analysis were calibrated to better reflect the observed travel times. The travel time and speed outputs given by the calibrated Synchro models are also provided in Exhibit 6 for comparison. The results show the Synchro model outputs match the field data reasonably well with the exception of the westbound traffic flow during the evening peak period. This may be due to the impacts of the HAWK signals, which are included in the field data, however are not modeled by Synchro.

Assuming a free-flow speed of 30/35 mph (the same as the posted speed limits) the average delay traveling on Broadway Boulevard between Euclid Avenue and Country Club Road is 27 seconds during the morning peak period and 57 seconds during the evening peak period in the eastbound direction and 56 seconds during morning peak period and 80 seconds during evening peak period in the westbound direction.

Exhibit 6  Travel Time Summary

<table>
<thead>
<tr>
<th>Broadway Boulevard</th>
<th>Field Data</th>
<th>Synchro Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Runs</td>
<td>Avg. Travel Time (sec)</td>
<td>Travel Time Standard Deviation (sec)</td>
</tr>
<tr>
<td>AM</td>
<td>PM</td>
<td>AM</td>
</tr>
<tr>
<td>Eastbound</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Westbound</td>
<td>10</td>
<td>8</td>
</tr>
</tbody>
</table>

2.4.4 Intersection Capacity

Intersection capacity analysis was performed using the Synchro 7 traffic analysis software which utilizes the current Highway Capacity Manual procedures. The analysis results of existing traffic conditions at the signalized intersections are summarized in Exhibit 7. The detailed capacity analysis worksheets are included in Appendix B. The results show that overall traffic operations at the Euclid Avenue, Highland Avenue, Campbell Avenue, Tucson Boulevard and Country Club Road intersections are at LOS D or better during the morning and evening peak periods. Several movements at some intersections operate at LOS E or F during at least one of the peak periods. The eastbound and southbound left-turn movements at the Euclid Avenue intersection operate at LOS F with a volume-to-capacity (v/c) ratio greater than 1.00 during the morning peak period. A v/c ratio exceeding 1.00 indicates significant congestion. During the evening peak period, the eastbound and
westbound left-turn movements at the Campbell Avenue intersection operate at LOS F with a v/c ratio greater than 1.00. The southbound left-turn, through and right-turn movements at the Country Club Road intersection also operate at LOS F with a v/c ratio greater than 1.00 during the evening peak period.

2.4.5 Signal Warrants

Based on peak-hour counts taken at the unsignalized intersections, the highest volume on a side street was 79 veh/hr. To warrant a signal based on vehicular volume, the 8th highest hour side street volume would need to exceed 75 veh/hr for Warrant 1 (Eight-Hour Vehicular Volume) and the 4th highest hour side street volume would need to exceed 80 veh/hr for Warrant 2 (Four-Hour Vehicular Volume). As such, no additional signals are currently warranted based on existing volumes.

2.4.6 Pedestrian Signal Warrants

A marked crosswalk is currently located at Treat Avenue. A pedestrian signal warrant analysis was conducted for this crossing for current conditions following the City of Tucson HAWK signal warrant criteria. Based on the analysis results, the intersection received 16 points which does not meet the minimum score of 25 points for consideration of a HAWK signal installation. The warrant evaluation for the Treat Avenue pedestrian crossing is included in Appendix C. Although a pedestrian signal is not currently warranted, future City of Tucson plans to convert Treat Avenue into a bike boulevard will increase demand at the Broadway Boulevard crossing, likely requiring the installation of a pedestrian signal.

2.5 CRASH HISTORY

The City of Tucson provided historical crash data for the 3-year period from January 1, 2008 to December 31, 2010. The data includes the number of crashes and crash type, but not injury level or severity. During the 3-year period no fatalities occurred along Broadway Boulevard within the study limits. The segment and intersection crash data are summarized in Exhibit 8.

The intersection accident rates ranged from 0.30 to 1.21 accidents per million vehicles entering the intersection. The highest number of accidents occurred at the Campbell Avenue intersection. Of the 101 accidents, 41 were rear end crashes, with 20 occurring on Broadway Boulevard, 12 on Campbell Avenue, and 9 on Kino Parkway. As a comparison, the average 3-year (2007-2009) accident rate at signalized intersections on the Pima County roadway system was 0.81 accidents per million vehicles with a standard deviation of 0.52. Therefore, the range of observed signalized intersection accident rates on the Pima County system was 0.29 to 1.33 accidents per million vehicles, which is consistent with the rates observed on Broadway Boulevard. Average accident rate information within the City of Tucson is not available for comparison.

The 3-year segment accident rates along Broadway Boulevard range from 0.77 to 2.69 accidents per million vehicle miles travelled on a segment. The segment from Campbell Avenue to Tucson Boulevard experienced the highest number of crashes (59) with rear-end crashes being the most
predominant (33). Rear-end crashes are typically the most common on roadways that experience heavy congestion and which have frequent driveways and side streets. The average 3-year (2007-2009) accident rate on high volume roadway segments (daily traffic > 10,000) within Pima County system is 1.26 accidents per million vehicle miles with a standard deviation of 1.08. Therefore, the range of observed segment accident rates on the Pima County system is 0.18 to 2.34 accidents per million vehicle miles.

Exhibit 8  Crash Data Summary (January 1, 2008 to December 31, 2010)

<table>
<thead>
<tr>
<th>Signalized Intersections</th>
<th>Euclid Avenue</th>
<th>Highland Avenue</th>
<th>Campbell Avenue</th>
<th>Tucson Blvd</th>
<th>Country Club Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Accidents</td>
<td>67</td>
<td>12</td>
<td>101</td>
<td>51</td>
<td>70</td>
</tr>
<tr>
<td>Angle</td>
<td>5</td>
<td>7%</td>
<td>1</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>Rear-End</td>
<td>16</td>
<td>24%</td>
<td>3</td>
<td>25%</td>
<td>41</td>
</tr>
<tr>
<td>Turning</td>
<td>13</td>
<td>19%</td>
<td>3</td>
<td>25%</td>
<td>20</td>
</tr>
<tr>
<td>Other</td>
<td>33</td>
<td>49%</td>
<td>5</td>
<td>42%</td>
<td>28</td>
</tr>
<tr>
<td>Daily ADT:</td>
<td>55,500</td>
<td>36,500</td>
<td>76,500</td>
<td>51,500</td>
<td>63,500</td>
</tr>
<tr>
<td>Accident Rate</td>
<td>1.10</td>
<td>0.30</td>
<td>1.21</td>
<td>0.90</td>
<td>1.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Roadway Segments</th>
<th>Euclid Ave to Highland Ave (0.5 mile)</th>
<th>Highland Ave to Campbell Ave (0.4 mile)</th>
<th>Campbell Ave to Tucson Blvd (0.5 mile)</th>
<th>Tucson Blvd to Country Club Rd (0.5 mile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Accidents</td>
<td>27</td>
<td>26</td>
<td>59</td>
<td>21</td>
</tr>
<tr>
<td>Angle</td>
<td>1</td>
<td>4%</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Rear-End</td>
<td>8</td>
<td>30%</td>
<td>9</td>
<td>35%</td>
</tr>
<tr>
<td>Turning</td>
<td>4</td>
<td>15%</td>
<td>9</td>
<td>35%</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>52%</td>
<td>7</td>
<td>27%</td>
</tr>
<tr>
<td>Daily ADT:</td>
<td>34,000</td>
<td>40,000</td>
<td>40,000</td>
<td>36,740</td>
</tr>
<tr>
<td>Accident Rate</td>
<td>1.45</td>
<td>1.48</td>
<td>2.69</td>
<td>0.77</td>
</tr>
</tbody>
</table>

1. Intersection accident rates refer to the number of accidents per million vehicles entering the intersection. Rate = (number of 3-year accidents x 10^6)/(3 years x weekday entering volume x 365 days).
2. Segment accident rates refer to the number of accidents per million vehicles-miles of travel. Rate = (number of 3-year accidents x 10^6)/(3 years x weekday segment volume x 365 days x segment length).

2.6 TRANSIT SERVICE

Current Sun Tran service along Broadway Boulevard includes one fixed route and one express route - Route 8 (Broadway/6th Ave) and Route 108X (Broadway-Downtown Express). Route 8 runs from the Roy Laos Transit Center on South 6th Avenue to the Ronstadt Transit Center downtown, then to Houghton Road. Route 8 is has the highest Sun Tran ridership. Bus headways range from 10 minutes
during the peak commute periods to 30 minutes during other periods. Sample daily ridership data for Route 8 is provided in Exhibit 9.

Route 108X, the Broadway-Downtown Express, is served by buses stationed at the Ronstadt Transit Center with three morning runs and three evening runs. The route is the same as that of Route 8 but has no stop within the study limits. Route 108X service is planned for expansion to six morning runs and six evening runs by 2012.

There are three bus pull-outs within the project area, two of which are located near the Campbell Avenue intersection. The third one is located on the north side of Broadway Boulevard, between Olsen Avenue and Plumer Avenue. There are 16 bus stops within the study limits.

**Exhibit 9  Sample Route 8 Daily Ridership Data**

<table>
<thead>
<tr>
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3. **FUTURE CONDITIONS**

3.1 **PLANNED IMPROVEMENTS**

The Regional Transportation Authority (RTA) 20-year improvement plan includes the widening of Broadway Boulevard, Euclid Avenue to Country Club Road to a 6-lane divided arterial with two dedicated bus lanes, bike lanes, and sidewalks. The High Capacity Transit (HCT) plan for the PAG region has established Broadway Boulevard as a priority corridor, identifying Bus Rapid Transit (BRT) as the most viable HCT option. Beyond the possible addition of a BRT system, no other planned roadway improvements within this section of the Broadway Boulevard corridor, including the cross streets, are part of the PAG 2040 Regional Transportation Plan.

3.1.1 **High Capacity Transit**

As a primary transit corridor within the region, Broadway Boulevard has long been considered a potential candidate for the implementation of a HCT system. Assessment and planning for HCT on Broadway Boulevard began in 1989 with the Broadway Corridor Study. This study concluded that the best long range HCT option was to install dedicated bus lanes between the downtown and Pantano Road. An 8-lane divided cross section that accommodates this option is essentially in place between Columbus Boulevard and Pantano Road. However, the outside “multi-use” lanes that are in place do not operate solely as dedicated bus lanes, but serve several other functions including right-turn deceleration lanes and bike lanes.

The PAG High Capacity Transit Study, completed in 2009, recommended that BRT is the best HCT option on Broadway Boulevard. While the optimal application is to run BRT in dedicated travel ways similar to Light Rail Transit (LRT), applications of BRT in general travel lanes on arterials and parkways are gaining increasing popularity across the country due to the prohibitive cost associated with implementing dedicated transit travel ways. Both the original Broadway Corridor Study and the High Capacity Transit Study concluded that LRT is not a viable long term option on Broadway Boulevard due to insufficient ridership and very high cost. The High Capacity Transit Study did suggest that extending the Tucson Modern Streetcar from downtown to El Con Mall could be considered depending upon several factors, including the success and cost of the initial streetcar line between downtown and the University of Arizona and redevelopment along Broadway Boulevard at the mall. The mall redevelopment is nearly complete and includes no residential uses which are integral to supporting a street car option.

BRT operation on Broadway Boulevard can be achieved in both a 6-lane and 6-lane plus multi-use lane cross section. An analysis of the operational characteristics of each cross section was conducted as part of this traffic study. The findings are discussed in Section 3.3.4.
3.1 TRAFFIC PROJECTIONS

Future traffic demands for this study were developed based on the 2040 projections produced by the PAG regional traffic forecasting model. The 2040 PAG traffic projections are provided in Exhibit 10. The projections indicate that traffic demand on Broadway Boulevard is expected to see moderate annual growth, essentially ranging from 0.5% to 1.3%. Considering that Broadway Boulevard is located within a heavily urbanized and developed area, annual traffic growth ranging from 1% to 1.5% is reasonable.

On the major cross streets, Euclid Avenue, Campbell, Avenue, Tucson Blvd, and Country Club Road, low to moderate annual traffic growth is projected. On Highland Avenue, a major collector roadway, very high annual growth (6.7%) is projected. Given the nature and limitations of the regional traffic forecasting model, projected 2040 volumes, which is assumed to be the design year for the Broadway Boulevard improvements, were adjusted for several roadway segments included in this traffic study. These adjustments are discussed below.

- **Euclid Avenue** – The roadway capacity, land use, and characteristics of Euclid Avenue north and south of Broadway Boulevard are not conducive to a doubling of traffic volumes over the next 30 years. To the north, Euclid Avenue has a 5-lane cross section, however the impact of pedestrian crossing facilities at Tucson High and the University of Arizona diminish roadway capacity. To the south, the 5-lane section narrows to 3 lanes at 22nd Street. As the 2040 regional plan does not include a project to increase the capacity on Euclid Avenue and since the surrounding areas are well developed, more moderate growth rates (1.7% and 2.0%) were assumed for this study.

- **Highland Avenue** – Highland Avenue is a two-lane residential collector road that has historically carried 5,000 to 7,000 vpd. North of Broadway Boulevard, there exist speed bumps that discourage high speed and volume. South of Broadway Boulevard, Highland Avenue terminates at Barraza Aviation Parkway. As such, it is very unlikely that future traffic growth on Highland Avenue can reach 17,000 vpd without substantial capacity improvements. A more reasonable 9,000 to 10,000 vpd was assumed.

- **Campbell Avenue/Kino Parkway** – PAG’s 2040 projection for the south Kino Parkway leg is 70,000 vpd. Since Campbell Avenue is not planned to be widened beyond its current 6-lane cross section, volumes on Campbell Avenue won’t be able to reach this level. Historically, the daily traffic volumes on the north and south legs have been comparable. As such, annual growth rates of 0.7% and 2.2% were assumed for the north and south legs, respectively, resulting in a more realistic future volume.

Using the existing traffic factors, turning movement counts, and design year ADTs, 2040 peak period turning volumes were developed for use in the analysis of future intersection and roadway capacity requirements. Worksheets used to develop the future turning movement volumes are provided in Appendix D.
### Exhibit 10  Traffic Projections

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Segment</th>
<th>Current Daily Volume (Year)</th>
<th>PAG Daily Volume Projection</th>
<th>Design Year (2040)</th>
<th>Annual Growth Rate</th>
<th>Daily Volume Assumed For This Study</th>
<th>Annual Growth Rate</th>
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</thead>
<tbody>
<tr>
<td>Euclid Ave</td>
<td>North</td>
<td>24,000 (10)</td>
<td>46,000</td>
<td>36,000</td>
<td>1.7%</td>
<td>36,000</td>
<td>1.7%</td>
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<td></td>
<td>South</td>
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<td>44,000</td>
<td>29,000</td>
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<tr>
<td>Highland Ave</td>
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<td>17,000</td>
<td>9,000</td>
<td>2.2%</td>
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<td></td>
<td>South</td>
<td>7,000 (09)</td>
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<td>Campbell Ave</td>
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<td>55,000</td>
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<td>Kino Pkwy</td>
<td>South</td>
<td>34,000 (10)</td>
<td>70,000</td>
<td>56,000</td>
<td>2.2%</td>
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<td>Tucson Blvd</td>
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<td>12,000</td>
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<td>Country Club Rd</td>
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<td>South</td>
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<td>Euclid Ave to Highland Ave</td>
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<td>1.2%</td>
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<td>Campbell Ave to Tucson Blvd</td>
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<td>1.3%</td>
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<td>Tucson Blvd to Country Club Rd</td>
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<td>East of Country Club Rd</td>
<td>41,000 (08)</td>
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<td>1.0%</td>
<td>53,000</td>
<td>0.9%</td>
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</table>

### 3.3 MEDIAN OPENINGS

As specified in the City’s Major Streets and Routes Plan for high volume arterials, the widening of Broadway Boulevard will include a raised median. The City’s Transportation Access Management Guidelines specifies 660 feet as the minimum spacing between full access median openings on an arterial. Based on this guideline and examination of existing cross street traffic demand, network connectivity, and potential future development, a conceptual median opening plan for Broadway Boulevard, Euclid Avenue to Country Club Road is presented in Exhibit 11.
3.4 CAPACITY AND LEVEL OF SERVICE ANALYSIS

3.4.1 Methodology

Future intersection and roadway lane requirements were determined based on the results of capacity and level of service analysis of the 2040 traffic forecasts. The following criteria were assumed for the analysis:

- Percentages of heavy vehicles are the same as existing conditions if they are greater than 2%, otherwise they are 2%.
- For Broadway Boulevard and major cross streets, peak-hour factors are the same as existing if greater than 0.92, otherwise they are 0.92. A minimum peak-hour factor of 0.92 was used for future conditions because variation in traffic demand tends to decrease during peak periods as traffic demand increases. On the minor cross streets, peak-hour factors are the same as existing.
- 4-phase signal operation with permitted/protected left-turn phasing.
- Cycle lengths are 90 seconds with optimized timing to minimize intersection delay.
- Right-turns on red are permitted.
- Platoon arrival Type 4, representing coordinated signal operations.

3.4.2 Intersection Capacity

The intersection capacity analysis results indicate that with the provision of sufficient turn lane capacity, a 6-lane cross section will provide overall operations of LOS D or better at each intersection. Intersection capacity and level of service analysis worksheets are provided in Appendix E. The intersection level of service analysis results are summarized in Exhibit 152. Intersection lane requirements are presented in Exhibit 12.

At Campbell Avenue, the eastbound and southbound left-turns may operate at LOS F even with dual left-turn lanes provided and several through movements are predicted to operate at LOS E. Several potential solutions to increase intersection capacity include utilizing left-turn overlap phasing at the Campbell Avenue intersection or potentially implementing a traffic adaptive signal control system on Broadway Boulevard. Adding overlap phasing for the eastbound and westbound left-turn movements was evaluated to assess the potential benefit to intersection operations. The results are included in Appendix E. Overall intersection operations will improve slightly with the greatest benefit realized by the eastbound left-turn.

At the Euclid Avenue intersection, dual eastbound and westbound left-turn lanes are required.

At Country Club Road, substantial right-of-way constraints, particularly on the southeast and southwest corners will make it difficult to achieve the required left-turn lane capacity on the southbound approach. Implementing single left-turn lanes on each approach and right-turn lanes on all but the eastbound approach will provide satisfactory operation during the morning peak period,
## Exhibit 12  Summary of 2040 Capacity Analysis Results

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but will be insufficient for the westbound and southbound left-turn demands in the evening peak. Considering the critical intersection movements – southbound left-turn, eastbound through, northbound through, and westbound left-turn, this alternative intersection configuration will provide sufficient capacity to accommodate 7-10 years of projected traffic growth before movements begin to fail. Potential solutions to optimize capacity include utilizing overlap phasing for the southbound and westbound left-turn movements and implementing traffic adaptive signal control.

The recommended storage lengths for turn lanes at the signalized intersections are summarized in Exhibit 14. They are based on the estimated 95% percentile queue lengths calculated by the Synchro software and the minimum storage requirements specified in the PCDOT/TDOT Pavement Marking Design Manual, 2nd Edition. Storage length calculations are included in Appendix F.

### Exhibit 14  Estimated Queue Storage Length Requirements

<table>
<thead>
<tr>
<th>Intersection Broadway Blvd at</th>
<th>Eastbound Left</th>
<th>Eastbound Right</th>
<th>Westbound Left</th>
<th>Westbound Right</th>
<th>Northbound Left</th>
<th>Northbound Right</th>
<th>Southbound Left</th>
<th>Southbound Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euclid Ave.</td>
<td>170 x 2</td>
<td>110</td>
<td>150 x 2</td>
<td>290</td>
<td>110 x 2</td>
<td>210</td>
<td>140</td>
<td>350</td>
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<td>Highland Ave</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>140</td>
<td>-</td>
<td>120</td>
<td>-</td>
</tr>
<tr>
<td>Campbell Ave</td>
<td>160 x 2</td>
<td>110</td>
<td>130 x 2</td>
<td>200</td>
<td>130 x 2</td>
<td>200</td>
<td>220 x 2</td>
<td>200</td>
</tr>
<tr>
<td>Tucson Blvd</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>170</td>
<td>110</td>
<td>170</td>
<td>130</td>
</tr>
<tr>
<td>Country Club Rd</td>
<td>140 x 2</td>
<td>110</td>
<td>130 x 2</td>
<td>220</td>
<td>110 x 2</td>
<td>150</td>
<td>160 x 2</td>
<td>130</td>
</tr>
<tr>
<td>Country Club Rd (Alt. A)</td>
<td>300</td>
<td>-</td>
<td>300</td>
<td>150</td>
<td>200</td>
<td>110</td>
<td>400</td>
<td>110</td>
</tr>
</tbody>
</table>

1. Minimum storage length of 110 ft per PCDOT/TDOT Pavement Marking Design Manual.
2. Storage lengths do not include tapers.

### 3.4.3 Roadway Segment Capacity

Detailed roadway segment capacity analysis for 6 through lanes was performed using the Synchro 7 traffic analysis software. Synchro is not able to evaluate the impacts of continuous multi-use lanes used for transit, bicycles, and right-turns. The analysis results summarized in Exhibit 15 show that a 6-lane arterial operates at an overall LOS C in both the eastbound direction during the evening peak period and the westbound direction during the morning peak period.
3.4.4 VISSIM Modeling

In addition to the intersection and arterial capacity analyses, microscopic simulation modeling of corridor operations was conducted to more precisely evaluate impacts of the HAWK signals, transit signal priority, dedicated transit lanes, bus pull-outs/pull-thrus, and Bus Rapid Transit (BRT). The VISSIM software was used to develop the models. Since the primary purpose of the VISSIM modeling was to evaluate the operational impacts of specific corridor elements and not to determine intersection capacity, only a portion of the corridor and only the evening peak hour were modeled. The section of Broadway Boulevard modeled extends from west of the Cherry Avenue intersection to east of the Tucson Boulevard intersection. The model was calibrated so that the simulated turning movement volumes essentially matched the estimated 2040 turning movement volumes. Models were developed for the following two scenarios:

- Six general purpose lanes with bus pull thrus/outs at signalized intersections, and
- Six general purpose lanes with outside multi-use lanes for use by transit vehicles, right-turning vehicles, and cyclists.

The following outlines the modeling techniques and assumptions used in the evaluation of the two scenarios.

GENERAL MODEL

The following features and assumptions were included as part of the model:

- Intersection lane configurations matched the recommendations (Exhibit 13) developed from the capacity analysis.
- The basic signal timing (cycle length, phasing, phase splits, clearance intervals) were consistent with those used for the intersection capacity analysis.
- The 2040 evening peak-hour was modeled, including a 15 minute warm-up period and 30 minute cool-down period.
- Median openings for side street and driveway access were as shown in Exhibit 11.
- Turning volumes at each minor side street were estimated based on existing traffic counts. Due to the complexity of modeling the many closely spaced residential driveways and commercial driveways at the strip centers, a single driveway, representing multiple closely spaced driveways was modeled at each location. Peak-hour volumes for driveways and minor side streets were as follows:
  - Safeway right-in/right-out driveway – volumes estimated from data collected; 160 in, 70 out
  - Sonic Drive-In entry/exit – 40 right-in, 40 right-out
  - All other driveways – 20 right-in, 20 right-out
- 2% truck volumes assumed
• 0.5% bike volumes assumed
• Pedestrian volumes increased 25% for 2040

6-LANE MODEL
A typical section of the 6-lane arterial is illustrated in Exhibit 16. Bus pull-thru/out lanes are provided at each signalized intersection.

6-LANE W/MULTI-USE LANES MODEL
A typical section of the 6- arterial with multi-use lanes is illustrated in Exhibit 16. The multi-use lane is dedicated to buses/BRT and bikes, and also can be used by right-turners for deceleration. If rail is implemented in the future, dedicated transit and bike lanes will be required and right-turning vehicles would be prohibited from using either lane.

HAWK SIGNAL OPERATIONS
The HAWK signals at Cherry Avenue and Plumer Avenue were modeled as two-stage actuated crossings, unlike the current one-stage crossing, allowing them to be included in the coordinated system on Broadway Boulevard. HAWK signal operations were modeled as follows:

• 3 second flashing yellow for vehicles
• 3 second solid yellow for vehicles to come to stop
• Vehicles are then shown red for 5 seconds while the pedestrian is given the Walk signal
• The flashing red is then displayed to vehicles while the Flash Don’t Walk is displayed to pedestrians for the appropriate amount of time (12/15/18 seconds depending on number of lanes the pedestrian is required to cross)
• Due to VISSIM’s limitations, it was assumed that cars remain stopped while the flashing red is displayed.

TRAFFIC SIGNAL OPERATIONS
The traffic signals at Campbell Avenue and Tucson Boulevard were included in the model. Signal phasing and timing was based on the optimized settings developed with the Synchro model, with minor adjustments made to accommodate demand. Each signal was controlled using a Ring Barrier Controller, which includes the transit priority feature that can call a phase early or extend a phase (up to 3 seconds) to allow a bus or BRT vehicle to continue through the intersection without stopping. The signals were coordinated based on start of green for eastbound and westbound Broadway traffic (phases 2 & 6). Protected/permitted left-turns were coded as overlap phases.
6-LANE CROSS SECTION
(NOT TO SCALE)

8-LANE CROSS SECTION - MULTI USE LANE*
(NOT TO SCALE)
*BUSES, BICYCLES, RIGHT-TURNING VEHICLES

8-LANE CROSS SECTION - TRANSIT LANES
(NOT TO SCALE)
TRANSIT OPERATIONS

Local buses were modeled at 10-minute headways (i.e., six buses during the peak hour). In the 6-lane model, the buses either stop in the outside lane at mid-block or unsignalized intersection stops or pull into the bus bay at signalized intersections to drop off and collect passengers. These buses stop at all bus stops on the route. BRT vehicles were modeled at 15-minute headways (i.e., 4 buses during the peak hour). BRT vehicles stop only at the Broadway Boulevard/Campbell Avenue intersection, pulling into the bus bay. BRT vehicles are typically articulated buses, 60 feet in length.

At major transit stops where route transfers occur, such as at Campbell Avenue, bus and BRT vehicles dwell for 30 seconds. At minor bus stops, including Cherry Avenue, Plumer Avenue, and Tucson Boulevard, the dwell time is 15 seconds.

MODELING RESULTS

Four network performance measures (average delay per vehicle, average number of stops per vehicle, average speed, and average travel time) were collected by vehicle type (cars/trucks and transit vehicles) from the VISSIM simulation runs for the evening peak-hour, 4:30 to 5:30 PM. Ten model runs were made for each scenario and the performance measures produced by each run were averaged. The network performance results are summarized in Exhibit 17.

The results show that multi-use lanes will provide marginal improvement, less than 2%, in delay, number of stops, and travel speed for general traffic (cars/trucks). Transit vehicles, bus or BRT, would realize benefits from multi-use lanes, with 12% lower delay, 15% fewer stops, and 6% higher travel speed.

Average vehicle travel time by direction (seconds per vehicle) are also graphically depicted in Exhibit 18. In the eastbound, or heaviest direction of travel during the evening peak period, a multi-use lane reduces car/truck travel time by approximately 6%, however has no impact on bus travel time. Travel times in the westbound direction are 13% and 11% lower for cars/trucks and buses, respectively, with a multi-use lane.

### Exhibit 17  Simulation Performance Measures

<table>
<thead>
<tr>
<th>Performance Measures</th>
<th>6-Lanes w/Multi-use Lanes</th>
<th>6-Lanes</th>
<th>Percent Change</th>
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<tbody>
<tr>
<td></td>
<td>General Traffic</td>
<td>Buses</td>
<td>General Traffic</td>
</tr>
<tr>
<td>Average Delay per Vehicle, secs</td>
<td>78.8</td>
<td>92.6</td>
<td>79.3</td>
</tr>
<tr>
<td>Average Number of Stops per Vehicle</td>
<td>2.12</td>
<td>1.37</td>
<td>2.16</td>
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<tr>
<td>Average Speed, mph</td>
<td>17.3</td>
<td>16.3</td>
<td>17.1</td>
</tr>
<tr>
<td>Average Eastbound Travel Time; sec</td>
<td>160</td>
<td>260</td>
<td>170</td>
</tr>
<tr>
<td>Average Westbound Travel Time; sec</td>
<td>142</td>
<td>230</td>
<td>161</td>
</tr>
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</table>
3.4.5 Multi-Modal Operations Analysis

Evaluation of pedestrian, bicycle, and transit level of service within a widened (6-lane) Broadway Boulevard with projected 2040 traffic demand was conducted utilizing the multi-modal urban streets methodology (MMLOS) provided in the 2010 Highway Capacity Manual. The MMLOS analysis method assigns LOS for each mode of travel based on a range of parameters that affect the user perception of the facility. The parameters considered for bicycle, pedestrian, and transit travel on an urban street are listed on the following page. Bicyclists, for instance, consider the availability of a dedicated bike lane or wide outside travel lane, the volume of traffic in the outside travel lane, the amount of truck traffic, the quality of the pavement, traffic speed, density of driveways and sides streets and driveways, and width of cross streets at signalized intersections. These parameters generally describe the level of comfort that a bicyclist feels when traveling along an urban street. Similar parameters are defined for transit riders and pedestrians.
Bicycle
- Vehicle volume in outside (right) lane
- Heavy vehicle percentage
- Vehicle speeds
- Travel lane and bicycle lane widths
- Pavement quality
- Signalized intersection cross street width
- Unsignalized intersections/driveways

Pedestrian
- Vehicle volume in outside (right) lane
- Vehicle speeds
- Presence and width of sidewalk and buffer
- Lateral separation between vehicles and pedestrians
- Right-turns on red and permitted left-turns during “Walk” phase
- Crossing delay (signalized and uncontrolled)

Transit
- Service Frequency
- Perceived wait time and travel time
- Actual speed
- Provisions for waiting passengers

Based on the 2040 evening peak hour volumes in the eastbound direction and a divided 6-lane roadway with bicycle lanes or multi-use lanes, transit stops with shelters, and sidewalks, multi-modal operations were evaluated. Three bike lane options were evaluated – 5-ft bike lane, 6-ft bike lane, and 12-ft multi-use lane. A 6-ft wide sidewalk immediately behind curb was assumed. The MMLOS worksheets are included in Appendix G.

The results, provided in Exhibit 19, indicate that a 6-lane roadway with 5-ft or 6-ft bike lanes will provide good level of service for transit users and pedestrians, however bicyclists will experience poor level of service (LOS E). The primary factors affecting bicycle level of service are high traffic volumes and high density of driveways and side streets. Wider multi-use lanes may improve bicycle level of service simply based on a more lateral clearance between a cyclist and adjacent traffic, however the effects of conflicting transit vehicles and right-turn traffic using the same lane could very well make it a worse condition for cyclists. The HCM MMLOS methodology does not address these effects.

<table>
<thead>
<tr>
<th>Broadway Cross Section</th>
<th>Transit</th>
<th>Bike</th>
<th>Ped</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 lane divided w/5 ft bike lanes &amp; 6 ft sidewalk</td>
<td>MMLOS Score</td>
<td>1.27</td>
<td>4.37</td>
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<td></td>
<td>LOS</td>
<td>A</td>
<td>E</td>
</tr>
<tr>
<td>6 lane divided w/6 ft bike lanes &amp; 6 ft sidewalk</td>
<td>MMLOS Score</td>
<td>1.27</td>
<td>4.27</td>
</tr>
<tr>
<td></td>
<td>LOS</td>
<td>A</td>
<td>E</td>
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<tr>
<td>6 lane divided w/12 ft multi-use lanes &amp; 6 ft sidewalk</td>
<td>MMLOS Score</td>
<td>0.25</td>
<td>3.59</td>
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<td></td>
<td>LOS</td>
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4. CONCLUSIONS

Proposed roadway improvements are based on the analysis results of the existing and future traffic operations, analysis of crash data, and the City’s Transportation Access Management Guidelines. The following proposed roadway improvements are intended to increase the capacity on Broadway Boulevard in order to serve future traffic demand which is expected to increase 30-50% over the next 30 years.

4.1 ROADWAY CROSS SECTION

The results of an evaluation of the intersection and roadway capacity requirements utilizing the analytical procedures provided in the Highway Capacity Manual and an analysis of traffic operations using a microscopic simulation modeling effort both indicate that six through lanes with the provision of appropriate turn-lane capacity at signalized intersections and pull thrus/outs at transit stops will provide sufficient capacity to serve projected future traffic demands and transit operations at acceptable levels of service. Increased roadway capacity will not only reduce congestion, but will also reduce crash potential, particularly rear-end type crashes.

The simulation modeling indicates that adding multi-use lanes for use by transit vehicles, right-turning vehicles, and bicycles, will provide marginal capacity and operational benefits to general traffic. Transit vehicles, including local buses and future BRT vehicles would benefit using the multi-use lanes, potentially realizing a 12% reduction in vehicle delay, reduced number of stops, and increased travel speed. While having a dedicated lane for local buses and BRT is optimal, the modeling results suggest that the benefits offered by the multi-use lanes for transit operations may be diminished due to their multi-functionality. The results indicate that buses and BRT can operate effectively within the general purpose lanes on Broadway Boulevard. Providing multi-use lanes on Broadway Boulevard is not essential, as long as pull thrus/outs that can accommodate buses and larger BRT vehicles (60 feet in length) are provided at signalized intersections and other major transit stops. Pull thrus/outs would not be required at minor stops. Implementing transit signal priority along Broadway Boulevard will benefit transit operations. Finally, reducing the density of driveways on Broadway Boulevard will benefit general traffic operations.

While BRT can operate in a general purpose lane on an arterial, introducing rail (i.e. a street car) into a general purpose arterial lane will adversely impact operations of both general traffic and the street car. Although street car operation was not modeled, the need for frequent stops and the typically lower operating speed relative to general traffic requires that a street car be placed within a dedicated running way on a higher speed arterial. Although not desirable a street car could share a multi-use lane with right-turning vehicles. However, a separate bicycle lane would be required due to the presence of rail. The viability of extending street car from Downtown to El Con Mall, as suggested in the PAG High Capacity Transit Study, is unclear at this time and will heavily depend upon the success of the initial street car route and the redevelopment of Broadway Boulevard to support street car usage.
4.2 INTERSECTION LANE CONFIGURATION

Based on the capacity analysis results, the intersection lane configurations provided in Exhibit 13 are recommended. At Country Club Road, since provision of dual left-turn lanes may not be possible given right-of-way constraints, the lane configuration provided in Alternative A should be constructed. Recommended storage lengths for exclusive left and right-turn lanes are provided in Exhibit 14.

4.3 SIGNALS

Unless redevelopment within the corridor produces high access demand onto Broadway Boulevard from a side street, no additional traffic signals are expected on Broadway Boulevard between Euclid Avenue and Country Club Road. Several modifications to signal system operations should be considered as part of the corridor improvements, including adding transit signal priority and potentially implementing adaptive signal control.

Pedestrian signals will need to be re-installed at Park Avenue, Cherry Avenue, Norris Avenue, and Plumer Avenue. To optimize traffic flow on Broadway Boulevard, the City of Tucson prefers the application of a HAWK signal design that allow for a 2-stage crossing so that these signals can be included in the coordinated signal operations on Broadway Boulevard. A Pelican pedestrian signal design could be considered instead of the HAWK. The marked pedestrian crossing at Treat Avenue should also be reinstalled and infrastructure for a future pedestrian signal installation included with the roadway improvements. A pedestrian signal warrant analysis of the Treat Avenue crossing should be conducted as the roadway construction plans are being finalized.

4.4 MULTI-MODAL FACILITIES

Bus pull thrus/pull outs will be required on Broadway Boulevard on the departure side of each signalized intersection. At Campbell Avenue, the bus bays should be of sufficient length to accommodate an articulated transit vehicle. This may require rearranging the location of the right-in/right-out driveway at the Safeway shopping center on the southeast corner. Bus pull thrus/outs will also be required on the north and south legs of the Euclid Avenue, Campbell Avenue, and Country Club Road intersections. Due to right-of-way constraints, it may not be possible to install a bus pull thru on southbound Country Club Road. Shelters should be provided at all transit stops.

Continuous sidewalk will be required on both sides of Broadway Boulevard. Bike lanes will be required with a 6-lane section or can be incorporated into the multi-use lane if one is provided and provision for future rail is disregarded.
4.5 ACCESS

A raised median, a minimum of 20-ft wide, will be required to provide appropriate access control for a 6-lane arterial. Conceptual median opening locations are presented in Exhibit 11, however additional assessment will be required as more information on potential redevelopment within the corridor becomes available. It is recommended that an access management plan be prepared. The plan should include locations of full and partial (left-in only) median openings, driveways, and right-turn deceleration lanes, if needed. Reducing driveway density will be important if multi-use lanes are not provided. The City of Tucson typically does not include right-turn deceleration lanes at unsignalized side streets or driveways on 6-lane arterials, however including a deceleration lane on eastbound Broadway Boulevard at the Safeway center should be considered given the relatively high volume of right-in/right-out traffic. As the existing driveway is located some 120 feet from the Campbell Avenue intersection and there is a bus bay present, implementing a deceleration lane may require relocating the driveway and bus bay.

4.6 SPEED LIMIT

A speed limit of 35 mph is recommended for this section of Broadway Boulevard and is consistent with the speed limit to the east.

4.7 LIGHTING

Street lighting is currently in place and will need to be included in the roadway widening. The street lighting provides improved visibility of driveways, pedestrians, and bicycles, thereby reducing the potential of nighttime crashes. Street lighting also provides improved security for pedestrians.
REFERENCES


5. PAG High Capacity Transit Study; Pima Association of Governments, 2009.
MEMORANDUM

Date: May 8, 2014

To: The Honorable Chair and Members
    Pima County Board of Supervisors

From: C.H. Huckelberry
      County Administrator

Re: Broadway Corridor

At their Study Session May 6, 2014, the Tucson Mayor and Council discussed the Broadway Corridor, or the transportation widening improvements on Broadway Boulevard. There was no real conclusion, other than concern regarding funding losses that would occur if only the four-lane Broadway improvements were selected. The limited four-lane improvements seem to be favored by the citizen committee formed by the Mayor and Council to study the issue of increasing transportation capacity along Broadway Boulevard.

The Mayor and Council indicated that those who were potentially concerned about the loss of funds should contact the Board of Supervisors and express their concerns. The purpose of this memorandum is to alert the Board that you may receive calls regarding the County's position on the allocation of the County's Highway User Revenue (HURF) bond funds for Broadway Boulevard improvements.

The Bond Implementation Plan for Broadway Boulevard calls for a minimum six-lane divided facility with appropriate ancillary bicycle facilities and pedestrian improvements. Anything less would not conform to the adopted Bond Implementation Plan Ordinance. There are mechanisms to amend the ordinance, which are described in the County Code.

I would not recommend any ordinance amendment that would not increase the capacity to a six-lane divided facility; however, the Board is free to direct a bond amendment that would do otherwise.

It also should be remembered that the availability of HURF bond proceeds is subject to the cash flow available from annual HURF distributions, which have been previously significantly reduced due to decreased fuel consumption and State funding diversions.

CHH/anc

c: John Bernal, Deputy County Administrator for Public Works
    Priscilla Cornelio, Director, Transportation Department
$3 million, not $7 million

The number 7 million dollars is getting thrown around as the money COT will have to pay back if the Broadway project collapses. This is where the number comes from: See below. Number refers to a piece of property on the map. #15 is Albert's Gas Station, I believe #24 is Volvo, and #16 was Panda Buffet.

Note that not all the money is from RTA, some from PC Bond funds, some from COT. I am told the COT money was HURF funds and those would be put back into HURF account.

Remember, these properties would be sold, so the money would be recouped.

Margot

---

Broadway BL: Euclid Av to Country Club Rd. 1989 Right-of-Way Plan & City-owned Parcels to Date

<table>
<thead>
<tr>
<th>Non RTA Project Funding</th>
<th>Acquisition costs</th>
<th>Relocation costs</th>
<th>Total</th>
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<tbody>
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Total/ Non RTA          $4,595,184

RTA Funding

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Total/ RTA              $3,010,965

Grand Total            $7,606,149

Taken from Broadway Bl. COT document Dec 19, 2012
Per the direction of the CTF at their May 30th Meeting, the Broadway Boulevard Planning Team has worked with Gene Caywood of the Southern Arizona Transit Advocates (SATA) to prepare the attached street cross sections that are illustrative of SATA’s design concept plans and design considerations that were presented at the May 30th meeting (SATA’s description of their design considerations which was handed out at the CTF meeting is attached).

Similar to what was done with the other initial cross-sections, two mid-block sections have been prepared, one to the west and one to the east of the Campbell Avenue intersection (see attached). Both of these keep to the existing curb-to-curb measurements and roughly the same lane widths for traffic lanes, bicycle lanes, and the center running transit lane (existing continuous turn lane); west of Campbell the curb-to-curb width is 60 feet and 64 feet to the east of Campbell. The transit is illustrated as a streetcar with one direction of travel in the center lane and the other direction in the adjacent travel lane going in the opposite direction; the streetcars would “mix” with vehicular traffic for much of the length of the street. Per the SATA design concept plan, depending on location along the roadway, the streetcar in the center lane could either be traveling east or west.

The sidewalk/pedestrian areas that are illustrated in the cross sections are designed to allow the street cross section to fit within the width of the minimum typical existing right of way to the west and east of Campbell. The west of Campbell concept provides 5 foot wide sidewalks with no additional buffer from traffic, resulting from a 70 foot right of way (the right of way to the west of Campbell ranges from 70 to 104 feet). To the east of Campbell a 6 foot wide sidewalk with additional 3 foot wide buffer, with no landscaping, is illustrated within an 80 foot wide right of way (the right of way to the east of Campbell ranges from 80 to 145 feet).

The Planning Team has also made revisions to the draft proposed assessment of street cross section concepts to include an initial assessment on the SATA concept. Note that as with the other performance measure assessments completed to date, these are provided as a starting point for consideration and review by the CTF. The notes regarding current assessment methodology on page three of the preferred assessment table have also been revised to describe the methods and reasons behind the Planning Team’s initial evaluation; please see the assessment table and its cover memorandum for more information.

The CTF meeting on June 20th will provide an opportunity to discuss the SATA concept and its assessment along with the cross section concepts that have been prepared in consultation with the CTF, to date.
### Option 4+T SATA: 70’ Right-of-Way (West of Campbell)

| L | R | R | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane |
| 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ |

### Option 4+T SATA: 80’ Right-of-Way (East of Campbell)

| L | R | R | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L | L |
| Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane | Bike Lane |
| 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ | 5’ - 7’ |

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**Southern Arizona Transit Advocates Concept**

**DRAFT** Initial Cross Section Concepts

**June 10, 2013**
SOUTHERN ARIZONA TRANSIT ADVOCATES
BROADWAY CORRIDOR STUDY
DESIGN CONSIDERATIONS FOR CONSTRAINED ALTERNATIVE

This drawing is SATTA’s attempt at creating an alternative for Broadway that stays within the 5 lane cross section of the existing roadway as much as possible while still providing two lanes and stops for High Capacity Transit (HCT). Below are the design considerations/constraints used, or which resulted during design.

- A goal of no buildings demolished. It was reached with the exception of part of one building already in City ownership.
- Minimum right-of-way “takes”. It is to be noted that right-of-way takes are shown on the drawing only when on private property, not when impacting City or ADOT owned property.
- Existing right-of-way used as much as possible, especially where additional right-of-way has been acquired over the years with development and is vacant other than landscaping.
- Transit stops have been placed as near as possible to where Sun Tran buses currently stop.
- The roadway has been widened only at transit stops.
- To conserve space, transit typically has been placed in the median as much as possible, and in the left travel lane for some distance on the far side of an intersection.
- While not specifying a particular mode of HCT, the design was done to accommodate the streetcar since it stops more frequently than BRT or LRT.
- The curves used in design match the minimum radius used on Broadway through the U.P. R.R. underpass. Design speed was not calculated, but speed limits were presumed to match those currently in place in the underpass.
- Providing transit lanes requires closing median left turns except at ¼ mile spacing as would be the case with a 6 or 8 lane divided roadway with raised medians.
- Sidewalks and crosswalks, and pedestrian connections to transit stops where not shown but adequate space was provided for them.
- Driveways were not shown on the drawing.
- Transit connections have been shown west of Euclid Ave. into downtown and east of Country Club to El Con.
- Wide medians were provided at both ends of the project which will improve the “first impression” of the project and which provide space for a gateway feature. The drawing shows something spanning one or more transit “lanes”.
- Medians are not defined as to raised (or curbed) vs. painted, but are shown as curbed in order to more clearly define where left turns would be prohibited and where cross streets would be closed.
- Resultant Right-of-Way needs:
  - 17 parcels impacted
  - 1 partial building demolition
  - 13 impacted parcels contain a significant building – one shown on the Broadway Corridor Study “Summary of National Register Status” map
Ralph,

The email exchange between the Pastor and I, and the letters he has submitted to me, are online.

While the letter clearly states that the official stance of the church is that they support relocation, the designs we are looking at avoid impacting the property. We cannot promise that - because we received the letters - that the design will be altered.

See Item 161 on the list for the Public Input Report:
http://www.tucsonaz.gov/broadway/public-input-report

In this item, there is:

Letter with the Official Stance of the church:

Clarifications to the information included on the petition:

The petition and signatures is also listed on this web page, as item 22:

Please let me know if you have questions or additional follow-up.

See you tomorrow evening,

~Jenn
Ms. Alaniz,

I appreciate your contacting me to be added to our list. I will do so today.

I am the project manager and am working with a professional technical team and a volunteer citizens committee in this planning and design phase. We post materials online at the project web site: www.tucsonaz.gov/broadway

As you may be aware, the project planning and design phase is currently reviewing different roadway widths and options for placement of the improvements. Some of the options being explored with the Task Force show widening of the roadway to the south of Broadway. These maps are on the home page of the web site.

There are no decisions yet.

The conversations about these options allow for full discussion of the benefits and trade-offs to both the property owners, business owners, residents of the area, and visitors/commuters. The neighborhood near your store, Miles Neighborhood, will be discussing this issue tonight at a neighborhood meeting (6:30pm, Miles Elementary School gymnasium, 1400 E. Broadway).

By way of this email, I would like to introduce you to the Regional Transportation Authority's MainStreet Business Assistance Program manager, Britton Dornquast. He runs a program that offers an incredible assortment of free services to help businesses prepare for construction. His ombudsman, Jan Waukon, has been through the corridor meeting business and property owners. Your tenant may have been in touch with her. You can read about their program online at: http://www.rtamobility.com/MainStreet.aspx

Please feel welcome to contact me for more information.

Sincerely,

Jenn

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Jennifer Toothaker Burdick, Project Manager
Broadway: Euclid to Country Club Roadway Improvement Project
City of Tucson Department of Transportation

Direct: (520) 837-6648   Cell: (520) 390-7094
Web: <www.tucsonaz.gov/broadway>

**************************************************************************************************************
Jennifer,

Circle K Stores Inc. is the tenant in possession under a long term lease with DBNCH on the above referenced location. Please add my contact information to your distribution list for any future notices regarding upcoming meetings regarding the Project #107 - Broadway - Euclid to Country Club Road Improvement Project. All correspondence in the future should also be sent to my attention at the address below.

Thank you and let me know if you have any questions.

Patricia Alaniz  
Real Estate Property Supervisor  
Circle K Stores Inc.  
P.O. Box 52085  
Phoenix, AZ 85072-2085  
(602) 728-4695 Direct  
(602) 728-5292 Fax  
palaniz@circlek.com
Broadway - Fwd: Re: Consulting Services

From: Jennifer Burdick
To: Broadway
Date: 7/10/2014 7:23 PM
Subject: Fwd: Re: Consulting Services

>>> On 7/10/2014 at 7:22 PM, Jennifer Burdick wrote:

Mr. Nelson,

I am following up on this to share the following information with you. The project expenditures to date, as of 5/30/2014, are $6,921,280. Of that amount, $3,010,965 has been spent on property acquisition between 2006-2011.

The remainder, $3,910,315, has been spent on the current planning & design phase of the project. A majority of these costs are for consultant services covering a myriad services.

Best regards,
~Jenn

>>> On 5/20/2014 at 5:50 PM, Jennifer Burdick wrote:

Mr. Nelson,

To date, approximately $7 million has been spent on the Broadway RTA project to purchase properties and fund the planning and design process.

I need to request the specific breakout from our finance folks for consulting services, and will respond with that as soon as I can.

Sincerely,
Jenn

**********************************************
Jennifer Toothaker Burdick, Project Manager
Broadway: Euclid to Country Club Roadway Improvement Project
City of Tucson Department of Transportation

Direct: (520) 837-6648    Cell: (520) 390-7094
Web: <www.tucsonaz.gov/broadway>
**********************************************

>>> On 5/20/2014 at 5:04 PM, "William I. Nelson" <wnelson@glhn.com> wrote:

Could you please send the cost for Consulting Services to date on this project.
Thank you.
WILLIAM I. NELSON, PE
Principal, Mechanical Engineering
wnelson@glhn.com

GLHN Architects & Engineers, Inc.
2939 E Broadway Blvd.
Tucson, AZ 85716
P 520.881.4546
F 520.795.1822
GLHN.com

| An ESOP Company |
Notice that Mr. Huckelberry now is clarifying that “there are mechanisms to amend the ordinance, which are described in the County Code” and that “the Board is free to direct a bond amendment that would do otherwise (than the six-lane road).”
Date: May 8, 2014

To: The Honorable Chair and Members
   Pima County Board of Supervisors

Re: Broadway Corridor

At their Study Session May 6, 2014, the Tucson Mayor and Council discussed the Broadway Corridor, or the transportation widening improvements on Broadway Boulevard. There was no real conclusion, other than concern regarding funding losses that would occur if only the four-lane Broadway improvements were selected. The limited four-lane improvements seem to be favored by the citizen committee formed by the Mayor and Council to study the issue of increasing transportation capacity along Broadway Boulevard.

The Mayor and Council indicated that those who were potentially concerned about the loss of funds should contact the Board of Supervisors and express their concerns. The purpose of this memorandum is to alert the Board that you may receive calls regarding the County’s position on the allocation of the County’s Highway User Revenue (HURF) bond funds for Broadway Boulevard improvements.

The Bond Implementation Plan for Broadway Boulevard calls for a minimum six-lane divided facility with appropriate ancillary bicycle facilities and pedestrian improvements. Anything less would not conform to the adopted Bond Implementation Plan Ordinance. There are mechanisms to amend the ordinance, which are described in the County Code.

I would not recommend any ordinance amendment that would not increase the capacity to a six-lane divided facility; however, the Board is free to direct a bond amendment that would do otherwise.

It also should be remembered that the availability of HURF bond proceeds is subject to the cash flow available from annual HURF distributions, which have been previously significantly reduced due to decreased fuel consumption and State funding diversions.

CHH/anc

c: John Bernal, Deputy County Administrator for Public Works
    Priscilla Cornelio, Director, Transportation Department