

# STATION 4: CTF INTENSIVE DESIGN MEETINGS

The Citizens Task Force (CTF) decided to hold a series of 4 intensive design meetings in late February and early March of 2014, in order to advance discussions about the street design alternatives.

This series of board provides an overview of the designs, assessments, discussions, and decisions that came out of this intensive process:

## GOALS FOR DESIGN MEETINGS

- Develop a shared understanding of performance assessments of the alternatives;
- Recommended refinements and changes to alternatives;
- Recommend the street design concept alternatives to move forward into further design and analysis; and,
- Discussed desired public input to gain from the public at Public Meeting #4



## STREET DESIGN ALTERNATIVES

Following on receiving input from the public at Public Meeting #3, in September, 2013, the CTF decided that the four main street cross section options should all remain under consideration and to start with examining the narrowest and widest alternatives to bracket the range of performance that could be expected from all alternatives; these are the alternatives that were developed for the start of the intensive design meetings:

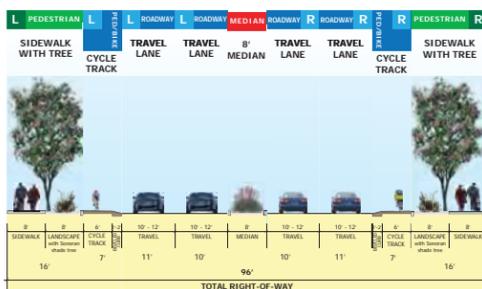
### 4 Lane “Minimize Direct Building Impacts” Alternative

- Align street to avoid impacting buildings
- Minimize Right-of-Way width
- Rebuild some parking
- Increases risk of “unintended” acquisitions
- Includes Rights-of-Way alignment for 4+2T and 4-lane alignments

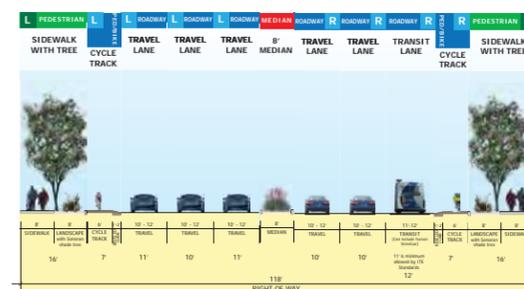


### 4 Lane “Minimize Property Impacts” Alternative

- Align street to minimize risk of full property acquisitions
- Avoid direct building impacts as feasible
- Includes right of way alignment for 4+2T and 6-Lane Alignments



Generalized 4-lane cross section



Generalized 6-lane/4+2T cross section



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## 6+2 Transit Lane Design Alternative

- Align street to minimize risk of full property acquisitions
- Avoid direct building impacts as feasible



Generalized 6+2T cross section

## POTENTIAL LESSONS FROM PHOENIX LIGHT RAIL IMPLEMENTATION

CTF members asked for a presentation regarding implementation of the Phoenix Region's light rail system to see what lessons could be learned to inform what might be done to enhance the potential to achieve high capacity transit along Broadway. Wulf Grote, the Planning and Development Director for Phoenix Valley Metro, was able to make a presentation at the first February meeting and discuss issues with CTF members. The key issues he highlighted regarding preparing for Future Light Rail that were most impactful to the CTF were:

- **Preserve right of way** – provide enough space to accommodate dedicated lanes in the future, but don't make the street so wide that it is difficult for pedestrians to cross or so it doesn't leave enough space for development along the street.
- **Relocate utilities early** – moving underground sewer, water, and other utilities out from under future dedicated transit lanes during the reconstruction of Broadway could create significant cost and time savings. It has also been Tucson's experience that moving utilities was a major cost for the street car project.
- **Improve the pedestrian and bicycle environment now** – improved sidewalks and pedestrian safety, as well as improved bicycle facilities, will support the creation of a walkable and bikeable environment soon and it will help create a transit supportive environment along Broadway.
- **Phasing from bus to rail can be a challenge** – closing/relocating bus facilities to build light rail or streetcar can reduce ridership. But, on the other hand, nearer term bus facilities support increased transit ridership which builds the case for investment in rail.

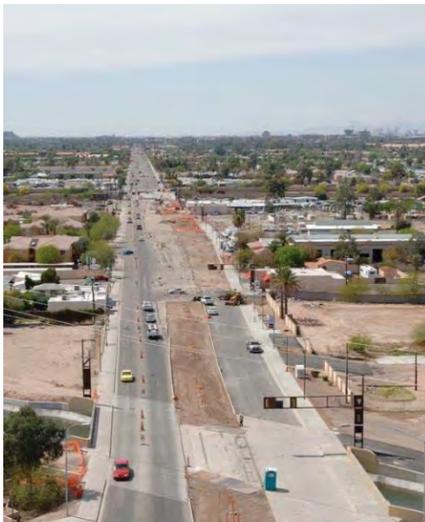


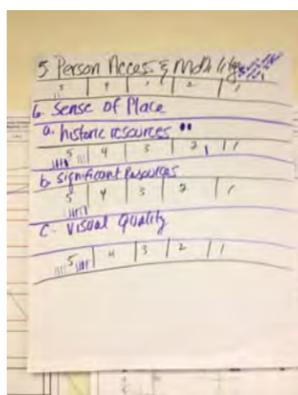
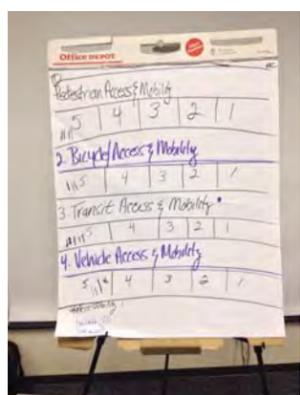
Image Credits: Wulf Grote

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## PERFORMANCE MEASURE PRIORITIES

CTF members were presented with an over 70 page performance assessment workbook that described definitions of the performance measures, the methodology for assessing performance and how the alternatives performed. As part of the workshop process of the meetings, the CTF members were asked to rank which performance measures they felt were most important to their stakeholders and to themselves. The following summarizes the number of times that CTF members ranked measures as very important:

Performance Measure	Times Ranked "Very Important"	Additional Comments
Economic Vitality	10	How long will it take to bring back economic vitality, if it is lost? Why will people come if there is no sense of place?
Sense of Place - Visual Quality	9	
Sense of Place - Historic Resources	8	
Sense of Place - Significant Resources	6	
Transit Access and Mobility	6	Accessible transit for all users is important
Pedestrian Access and Mobility	5	
Bicycle Access and Mobility	3	
Vehicle Access and Mobility	3	There were also 4 rankings for balancing all modes
Person Access and Mobility	2	
Sustainability - Heat Island Effect	2	
Sustainability - Water Harvesting/Green Streets	2	There may be a conflict point with the water harvesting and green streets programs and the desire to minimize the width of medians and landscaping
Sustainability - Greenhouse Gases	1	
Sustainability - Tailpipe Emissions	1	
Project Cost	1	



As the intensive work sessions continued, a set of Key Performance Considerations was identified; some are performance measures and others are design details that affect performance. For example, loss of parking and access and the challenges of providing new parking and access result in properties being at high risk for full acquisition - even though the buildings on site are not directly impacted - because the building cannot be successfully used by an existing or new business. Here are the key performance considerations that were identified during the intensive series of meetings:

- Parking and Access** – Street width and alignment can impact parking and access without impacting buildings. But individual properties may not be able to resolve the impact alone under existing development standards and guidelines. Federal and state laws and regulations related to acquisition of private property for a street improvement project make it challenging to implement solutions involving more than one property. (See the boards and talk to staff about this issue to learn more, at Station 5).
- Community Character and Economic Vitality** – Stakeholders and Task Force members have consistently rated performance measures that relate to these issues as being most important, such as impacts to historic resources.
- Multimodal Transportation Performance** – The CTF is concerned about achieving a balance of performance across pedestrian, bicycle, vehicle, and transit modes; the point of tension relates to which modes should be emphasized.
- Sustainability** – Performing well in terms of water harvesting, air quality, urban heat island effect, public health (supporting active transportation), and the City's ability to maintain and operate the improvements going into the future are important concerns for the CTF.

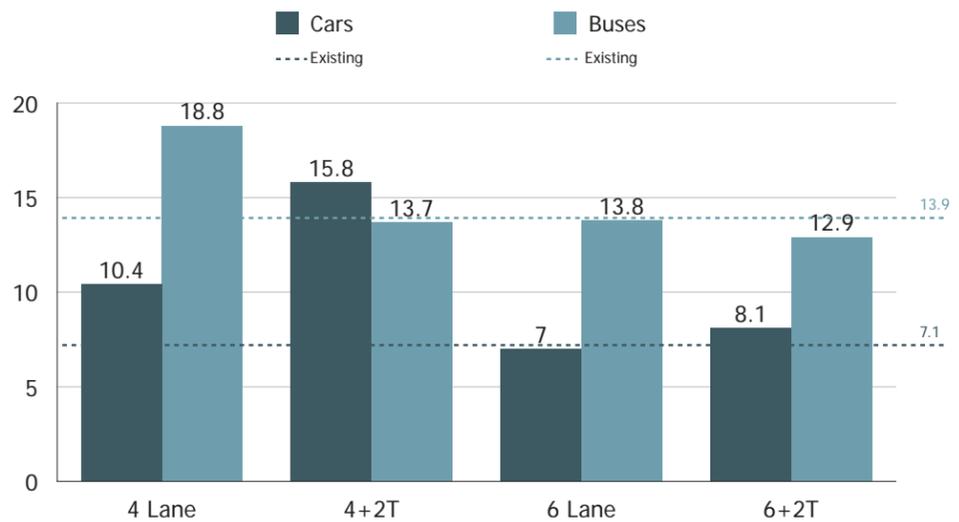
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## MULTIMODAL TRANSPORTATION ASSESSMENT

A transportation simulation program was used to assess the performance of all 4 initial design cross sections. Assumptions used in the modeling included:

- Local bus service (10 min. headway) and limited stop express bus (30 min. headway)
- Evaluate two future volume scenarios -
  - 33% growth (existing and required regional transportation projections)
  - 22% growth (reduction of regional projections)

**Travel Time**  
(From Euclid to Country Club in Minutes)



## EXPLORATION OF STREET DESIGN CONCEPTS

As a result of reviewing the 4 Lane and 6+2T Lane design concepts and the performance assessment, the CTF identified several additional street design concepts to explore. The Planning Team develop sketch alignments and/or street sections. These were in reaction to some key “points of tension” between the range of stakeholder goals and how the design concepts performed in the assessments.

### Tension Point

- **Narrow Width vs. Capacity for Transportation:** the narrow width of the 4 Lane Concepts allows them to avoid more impacts to buildings and properties in general, but they do not achieve good performance for transit or vehicles.
- **Widening to the North Impacts more Historic Contributors:** this is particularly an issue west of Campbell given the existing Rincon Heights Historic District.
- **Impacting Parking and Access can Increase the Risk of Full Acquisition:** alignment and other design approaches that avoid impacting buildings may impact more parking areas creating risk of full acquisitions and it is not clear how this may affect viability of buildings and potential demolition for property reuse.

Potential New Street Design Concept	Goal	Assessment	Result
“Phased” 6 Lane to 6+2T Lane	Reduce initial cost and implement transit lanes when ridership supports the investment	Concept is as wide as the original 6+2T Lane design and has similar results in terms of impacts to existing buildings, etc.	Likely lower initial cost for implementation not seen as outweighing negative impacts of wide width
4 Lane West of Campbell and 6 Lane East	Minimize property impacts with narrower improvements where there is less width between existing buildings to north and south	Creates vehicular and transit delays for west bound traffic with “lane drop” just west of Campbell intersection. Does not provide space for high capacity transit to the west of Campbell.	Does not appear to provide enough benefit compared to 4 Lane to work as effective compromise for those that favor further development of 6 Lane Concept. Creates additional property impacts east of Campbell compared with 4 Lane so is not an effective compromise for those that favor further development of 4 Lane Concept.
4 Lane West of Campbell Widen to the South	Minimize impacts to buildings that contribute to Rincon Heights Historic District	Widening to the south does avoid impacts to contributing historic buildings, as well as fewer total potential and current contributing buildings	Moved forward as a concept worth further exploration Concerns about potential impacts to Miles School

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### RESULTS FROM THE INTENSIVE DESIGN MEETINGS

#### STREET DESIGN CONCEPTS ADVANCED FOR FURTHER DESIGN AND ASSESSMENT

In preparation for Public Meeting #4, and to provide more information to allow the CTF to continue working towards a consensus design recommendation for the project, the CTF decided to:

- **Advance both the 4 Lane and 6 Lane street design concepts** with a set of alignment options being explored to illustrate trade-offs in terms of building and property impact compared to widening to the north or south.
- **Create design vignettes (variations)** for how to address challenging areas identified by the CTF members, including: narrowing elements of the street cross section (i.e.; travel lanes, medians, sidewalks, etc.) to avoid negative impacts, changes in alignment to avoid negative impacts and maximize positive conditions.
- **Explore options for phasing of transit improvements** to transition a 6 Lane design into a 4+2 Transit Lane design (See discussion of Potential 6 / 4+2T Lane Hybrid at Station 5).
- **Take the 6+2 Transit Lane design off the table for further analysis**, because it performs worse for vehicles and only marginally better transit than the 6 Lane, its width creates the highest implementation costs and impacts to properties and buildings, and performing equally or not as well as the 6 Lane design for many other performance measures.

#### CONCERNS ABOUT FUNDING VIABILITY AND COMMITMENT TO TRANSIT

Several CTF members expressed on-going concerns about the lack of clarity related to project funding. Would a 4 Lane Alternative or a 4+2T Lane Alternative receive funding from the RTA so it could be implemented? How would Mayor and Council, who have directed the CTF to explore creative design options (including fewer lanes), react to the lack of funding? Some expressed frustration with the challenge of the stakeholders they represent strongly favoring alternatives that might not get funding. Concerns were also expressed that significant investment in transit improvements would be much more difficult to achieve if the recommended alternative did not include dedicated transit lanes.

Here are a few comments that were made by CTF members as they discussed what options to move forward for further design and to present at the public meeting:

- I would hate to design a roadway that isn't a transit priority roadway and the 10 years down the road realize we have the ridership and not the roadway to support it. We need to design the corridor to grow and incentivize ridership to make transit a priority.
- If we are going to have a high capacity system like light rail or bus rapid transit we need to decrease the amount of time a bus currently takes to get travel along the corridor
- It would be good to have the RTA tell us we can't move forward with the 4 lane... They need to define what functionality is or they need to flat out tell us "no."
- We can study the 4 lane alternative but I don't think it will fly with the stakeholder agencies and I can vote for it.
- The high interest in the 4 lane is due to the building impacts the other options would incur as well as the preservation of economic vitality. The 6 lane is not a deal breaker if it is done correctly. As we get more detailed analysis we need to find more creative ways to save buildings and reduce impacts. I do not think we have even scratched the surface in terms of what we can do creatively.



#### PROJECT WORK BETWEEN THE INTENSIVE DESIGN MEETINGS AND PUBLIC WORKSHOP #4

The CTF met twice between the Design Meetings and this workshop, and the Broadway project was discussed at a Mayor and Council meeting between those CTF meetings. Also, the project's Technical Advisory Committee met during this period and their recommendations were presented to the CTF. The results of these meetings have resulted in the materials presented at Station 5: Revised Street Design Alternatives and Station 6: Where We Go From Here.