Work in Progress – REVISED 10/21/2013

September 26, 2013

Planning Update and Community Workshop

BROADWAY BOULEVARD
EUCLID to COUNTRY CLUB

RTA
Regional Transportation Authority

Prepared for:

Jennifer Toothaker Burdick

Tucson Department of Transportation

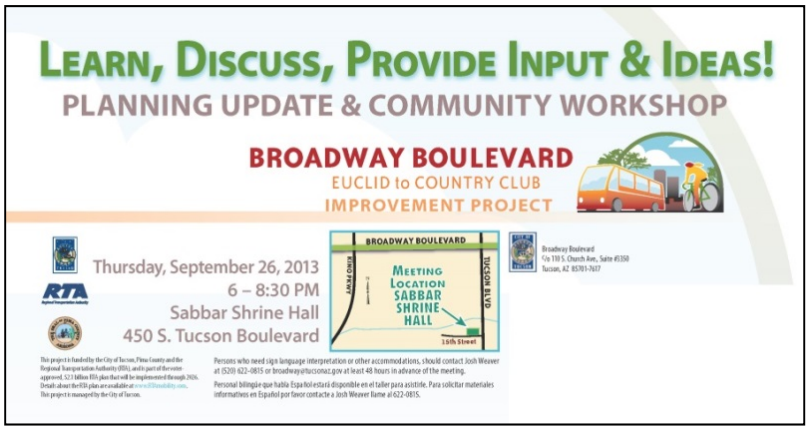
Project manager

Broadway Boulevard:
Euclid to Country Club Improvement Project

DRAFT September 26, 2013 Planning Update and Community Workshop Event Report

Public Involvement Process

The Broadway Boulevard: Euclid to Country Club Improvement Project is currently in the Planning and Design Phase, which began June 2012. This phase of the project will provide the public the greatest opportunity to inform and shape the resulting improvements, with many opportunities during this phase to engage with local and regional stakeholders through a variety of mediums. The input obtained throughout this phase of the project will inform the street's design and ultimate placement. Community-wide meetings are an important component of the Public Involvement Process and during the course of the project will be held at critical junctures. The September 26, 2013 Planning Update and Community Workshop event was the third of five planned large-scale public meetings.



Attendees

Approximately 217 participants signed in at the September 26, 2013 event (the project team estimates that there were more than this in attendance) and the input received will help the Citizens Task Force (CTF) and project technical team select three to four street width (cross section) design alternatives to advance for further design and more detailed

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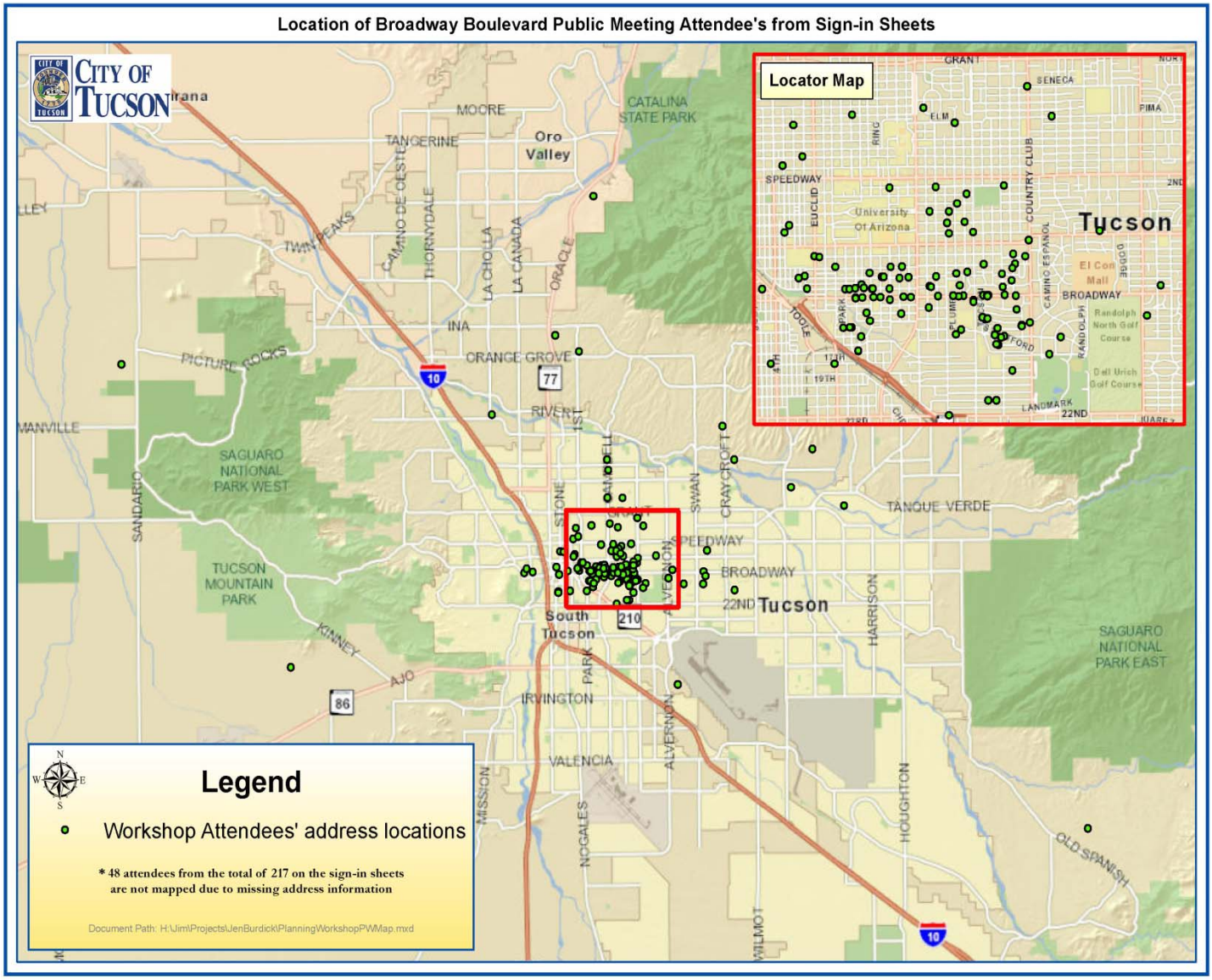
analysis. Of the approximately 217 participants who signed in, 169 (78%) left their address information. A GIS analysis of this information shows that 132 (78%) of the participants live within one mile the Broadway project.



Throughout the Planning and Design Phase the CTF will be engaged in a process that seeks to create a street design that best meets the needs and goals of all the local and regional communities that this section of Broadway Boulevard serves.

This community-wide event was a publically noticed project event where no decisions were made. Under Arizona State Open Meeting Law, this report will serve as the official meeting minutes from the Planning Update and Community Workshop event. The appendices provide documentation of the input received (A), how the input has been

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analyzed (B), the materials that were present and the input that was received at the individual tables (C), and the displays presented at the event (D).

Goals

As the third public meeting in the public involvement process that will guide the planning and design of the Broadway Boulevard Improvement project, the Planning Update and Community Workshop Event was designed to accomplish the following:

- Reintroduce the CTF and project technical team to the public
- Provide information about the planning process to date:
    - Performance Measures as derived from the project Vision and Goals
    - Design Alternatives and assessments
    - Project progress and schedule
    - Next steps
- Discuss, provide input and ideas in small groups on:
    - Priorities for performance measures
    - Preferences for the stakeholders are willing to accept on performance and design of the street
    - General comments about the project
- Give individuals in the community the opportunity to provide input, ask questions and learn about the project progress to date, and the performance measures and street cross section design alternatives that have been developed to date
- Contribute to the public participation process and engage in dialogue regarding the improvement project

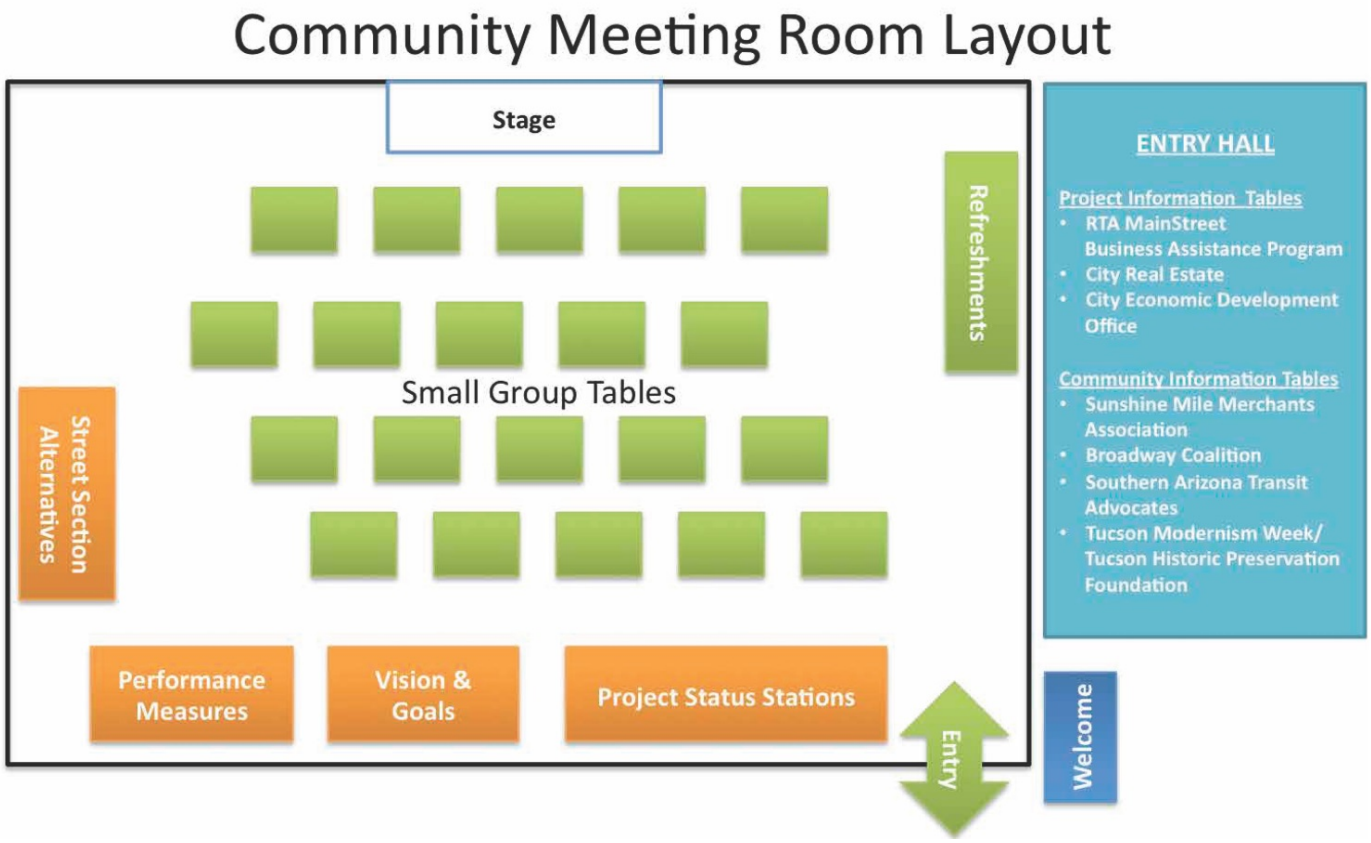
Accomplishing these goals will help advance the public participation process and help the CTF and project technical team select and refine the preferred design alternatives to advance into further study and more detailed analysis.

Format

The Planning Update and Community Workshop Event was organized by the project technical team after receiving input from the CTF and the community regarding the meeting goals, format, and input methods. The event utilized a small group workshop format with 18 small group tables. Each table had a facilitator and a recorder who were trained prior to the meeting to help guide the small group exercises and approximately 8-10 participants from the public. The meeting began with a brief presentation by Project Manager Jennifer Toothaker Burdick that provided an overview of the project and an update of the planning process to date including the progress on developing performance measures and design alternatives. During the presentation, each CTF member introduced themselves to the public and described the interests they represent and why they were

serving on the task force. Following the presentation the public took part in a guided workshop that had three exercises designed to garner input regarding the prioritization of performance measures and street width (cross section) design alternatives preferences. The ultimate goal was to get participants at each table to provide their top four performance measures and top three street width (cross section) design alternatives.

In addition to the small group tables, there were display booths stationed in the lobby with information from community groups and other related City of Tucson and Regional Transportation Authority departments. Display boards were also set up throughout the meeting space that provided general project information as well as information regarding the vision and goals and design work developed by the CTF and project team to date. Comment cards were accepted from individuals throughout the meeting as a method for providing addition public input.



Entry Hall

Project Information Tables

RTA MainStreet Business Assistance Program: The free business assistance services that the RTA MainStreet program offers to qualified businesses and commercial property owners located within a quarter mile of RTA-funded

transportation projects were highlighted at this station. The MainStreet program focuses on minimizing impacts to business during the construction phase of street reconstruction projects such as the Broadway Boulevard Roadway Improvement Project. Representatives from the MainStreet program were available to answer questions and to sign-up new businesses and property owners into the program.

City Real Estate/Tierra Right-of-Way: Project team members and staff from the City of Tucson Real Estate Office and Tierra Right-of-Way provided information regarding the property acquisition process and the right-of-way acquisition and relocation assistance programs that are available for property owners and qualified businesses impacted by the improvement project.

City Economic Development: Staff from the City of Tucson Economic Development Department were on hand to provide information regarding business incentives, loan programs, business incentives programs and development services programs that may be available for businesses located within the project study area.

Community Information Tables

Sunshine Mile Merchants Association: The Sunshine Mile Merchants Association is a merchants group comprised of locally owned (Tucson) businesses and restaurants located along the two-mile stretch of Broadway in between Campbell Avenue and Country Club Road. Representatives from the merchant group attended the Planning Update and Community Workshop event to promote their member businesses and provide informational materials.

Broadway Coalition: The Broadway Coalition is an advocacy group comprised of individuals, businesses, and neighborhoods that envision Broadway Boulevard from Euclid Avenue to Country Club Road as a destination, a multi-modal transportation street serving the adjacent neighborhoods, the University community, midtown, and Greater Tucson. The Broadway Coalition provided informational materials and position papers regarding business vitality, concept statements and proposed design criteria.

Southern Arizona Transit Advocates (SATA): SATA, formerly known as Tucsonans for Sensible Transportation, is a group dedicated to the development and provision of High Capacity Transit throughout the Tucson metropolitan area. SATA maintains the position that transit is the most important part of the Broadway: Euclid to Country Club Improvement Project. Members of SATA were on hand to provide background information supporting their position.

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Meeting Room

Sign-in and Welcome: The sign-in and welcome station provided an area for attendees to sign-in and provide contact information for future project notices, project fact sheets, and also provided a location for meeting attendees to provide input through comment cards. Project team members welcoming and orienting incoming attendees were from Kaneen Public Relations and Advertising.

Project Status Stations: The general project information stations included displays that showed project facts, history, and what has been accomplished to-date. This station also included information about the public participation process and the overarching models – Context Sensitive Solutions (CSS) and the International Association of Public Participation (IAP2) Spectrum of Public Participation – that guide it. Additionally, the project team provided displays detailing the Historic and Significant Building Inventory that was produced at the beginning of the project as well as the history of the architecture in the corridor.

Vision and Goals: The project team provided display boards of the comprehensive set of vision and goals that have been developed by the CTF to date. The vision and goals have been a work in progress since the inception of the Planning and Design Phase of the project and continue to be an iterative process. The vision and goals that have been established have helped guide the development of the performance measures and street width (cross section) design alternatives. The final design product produced by the CTF will seek to accomplish as many of these goals as possible.

Performance Measures: Display boards were presented detailing the performance measures that were developed by the CTF and Project Team to assess and analyze the street width (cross section) design alternatives.

During intensive meetings and work sessions the CTF and Project Team created 61 performance measures organized by the following topic areas: **Pedestrian Access and Mobility, Bicycle Access and Mobility, Transit Access and Mobility, Vehicular Access and Mobility, Sense of Place, Environment and Public Health, Economic Vitality, Project Cost, and Certainty.** For the purpose of the community workshop the project team combined and distilled the 61 performance measures into the following 11: **Pedestrian Environment, Bicycling Environment, Transit Time, Accommodation of High Capacity Transit, Through Traffic Movement, Potential Historic and Significant Buildings, Visual Quality, Walking and Bicycling Health Benefits, Change in Economic Potential, Construction and Acquisition Cost, and City's Ability to Maintain Improvements.** These are described in the tables below.

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PEDESTRIAN ACCESS AND MOBILITY

Pedestrian Environment

The overall quality of the pedestrian experience on Broadway. This includes improvements that influence the experience of people walking along Broadway such as:

- Width of the sidewalk and landscape buffer separating pedestrians from the roadway and how the width of the buffer area provides distance and landscape affects pedestrian comfort;
- Ability of sidewalk and buffer width to provide space for shade, lighting, seating, drinking fountains and other features to serve pedestrian needs, and provide for visual interest;
- Degree to which conflicts between pedestrians and vehicles exist at driveways; and,
- Provision of access and mobility for people of all ages and abilities using design elements that go beyond base requirements of the Americans with Disabilities Act (ADA) federal design requirements.

It also includes the ease of walking across Broadway and side streets intersecting with Broadway, which is influenced by both distance and presence of medians that can provide a refuge for crossing pedestrians.

BICYCLE ACCESS AND MOBILITY

Bicycling Environment

The overall quality of the bicycling experience on Broadway. This includes improvements that influence the experience of people bicycling along Broadway such as:

- Degree to which the street design elements allow horizontal and vertical separation of cyclists from vehicular traffic;
- Frequency of points where vehicles cross the bike lane and the ability of the street design to make those potential conflicts evident to cyclists and motorists; and,
- Ability of cross section design to provide space for bike racks, shade, drinking fountains, green pavement (bike boxes and other markings), and other features to serve bicyclists' needs.

It also includes the convenience and quality of bicycle crossings of Broadway and side streets intersecting with Broadway, as well as the safety of cyclists turning left off and onto Broadway.

VEHICULAR ACCESS AND MOBILITY

Through Traffic Movement

The effectiveness of moving through vehicular traffic along Broadway in the project area, which affects a variety of other transportation, environmental, and economic factors.

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TRANSIT ACCESS AND MOBILITY

Transit Travel Time

The time it takes to travel the length of the Broadway project by transit.

Accommodation of High Capacity Transit

The ability of the roadway and roadside design to accommodate future high capacity transit. This can ultimately improve performance of design concepts in relation to other transit performance measures through a future improvement project.

SENSE OF PLACE

Potential Historic and Significant Buildings Impacts

The number of historic and significant structures lost due to direct impact and loss of usefulness resulting from reductions to parking, setbacks, site access, and other conditions.

Visual Quality

The ability of Broadway's design to enhance the visual quality along it. This includes the width and design of median and streetside landscaping and number and location of placemaking features such as public art, wayfinding, lighting, and furniture. It also includes Broadway's relationship with and impacts to the existing and future visual character of adjacent uses.

ENVIRONMENT AND PUBLIC HEALTH

Walking and Biking Health Benefits

The degree to which the Broadway improvements can support increased frequency and length of walking and biking trips and the resulting positive effect on public health.

ECONOMIC VITALITY

Economic Potential

The suitability of parcels along Broadway to provide for current commercial or residential use, repurposing, adaptive reuse, and a future mix of commercial, residential, and open space uses that improves the economic value of uses along Broadway.

PROJECT COST

Construction and Acquisition Cost

The total construction cost of planned improvements.

CERTAINTY

City's Ability to Maintain Improvements

The assessment of relative cost and benefit, and ability of city budget to support costs for the operations and maintenance of the Broadway improvements.

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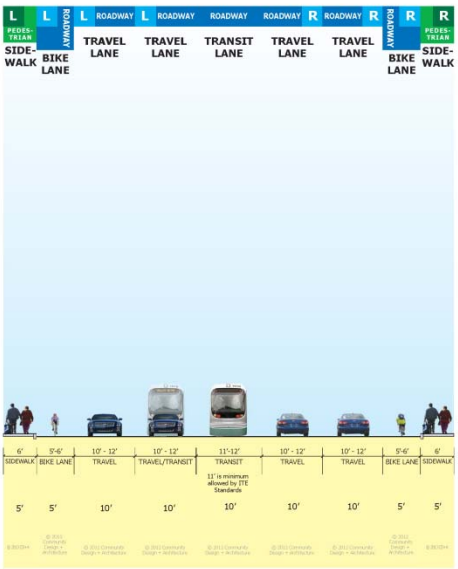
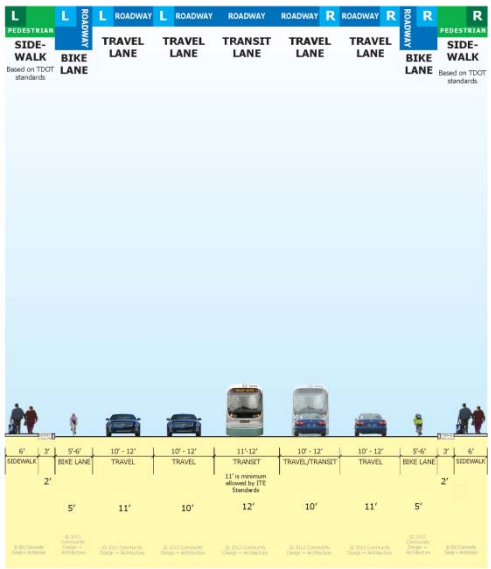
Street Width (Cross Section) Design Alternatives: The Street Width (Cross Section) Design Alternatives that the CTF approved to be presented at the Planning Update and Community Workshop Event were on display for public review and comment. In total, nine design alternatives were presented and were organized by the following categories: **Four Lane + Dedicated Transit Without Landscaping, Four Lane with Landscaping, Four Lane + Dedicated Transit With Landscaping, Six Lane With Landscaping, and Six Lane + Dedicated Transit With Landscaping**. The street width (cross section) design alternatives vary in terms of: the number of lanes, how transit is provided for, bicycle facility improvements, pedestrian improvements, landscaping, and the width of the street. Additionally each category has alternatives that represent a range of width and facility improvement/options.

4 LANE + DEDICATED TRANSIT WITHOUT LANDSCAPING 70′-80′ R.O.W

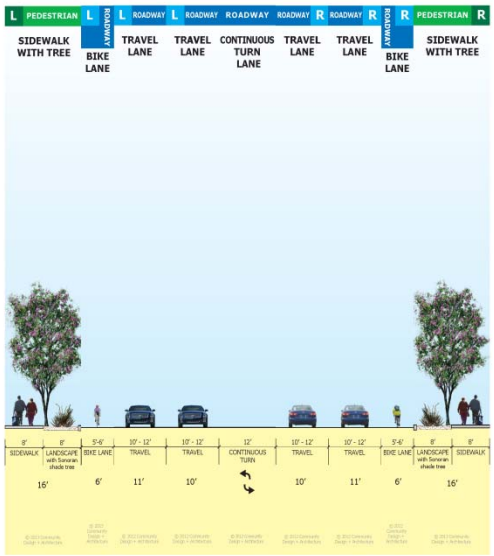


Option 4+T SATA: 70′ Right-of-Way (West of Campbell)

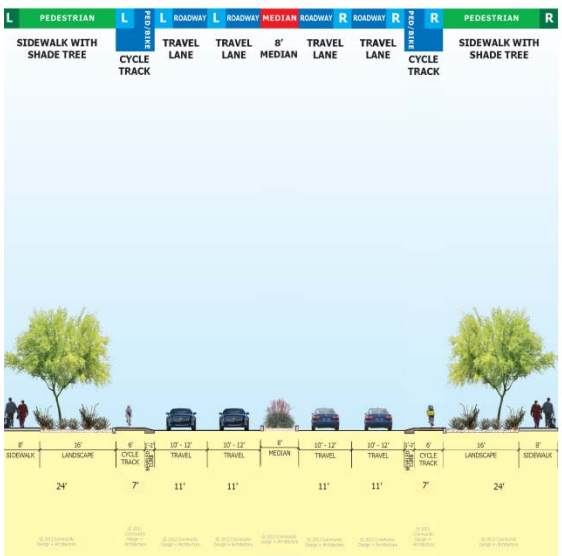


Option 4+T SATA: 80′ Right-of-Way (East of Campbell)

4 LANE WITH LANDSCAPING 84′-138′ R.O.W

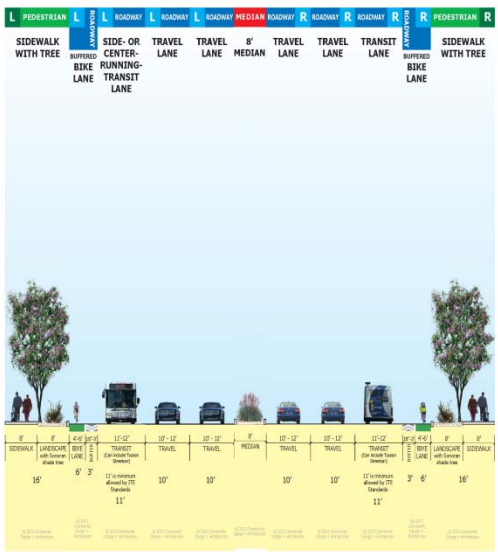


Option 4A: 98′ Right-of-Way

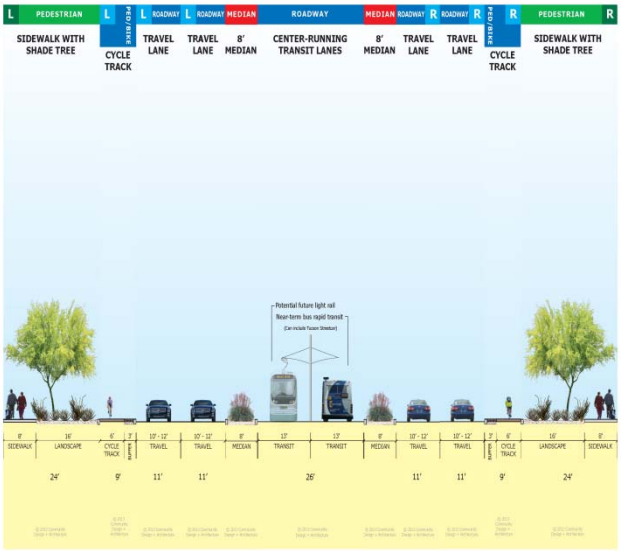


Option 4B: 114′ Right-of-Way

4 LANE + DEDICATED TRANSIT WITH LANDSCAPING 106′-162′ R.O.W

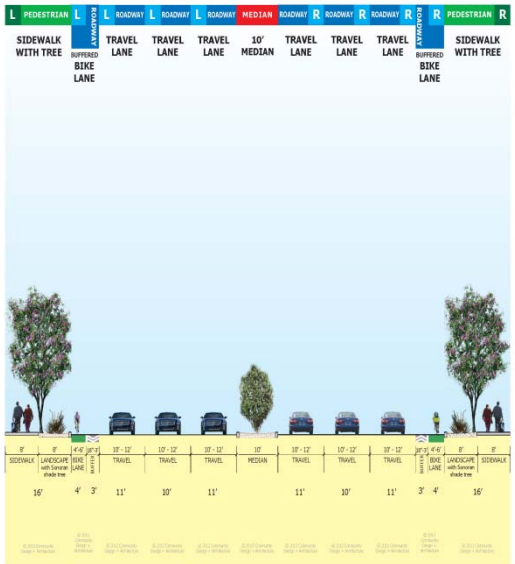


Option 4+T A: 124′ Right-of-Way

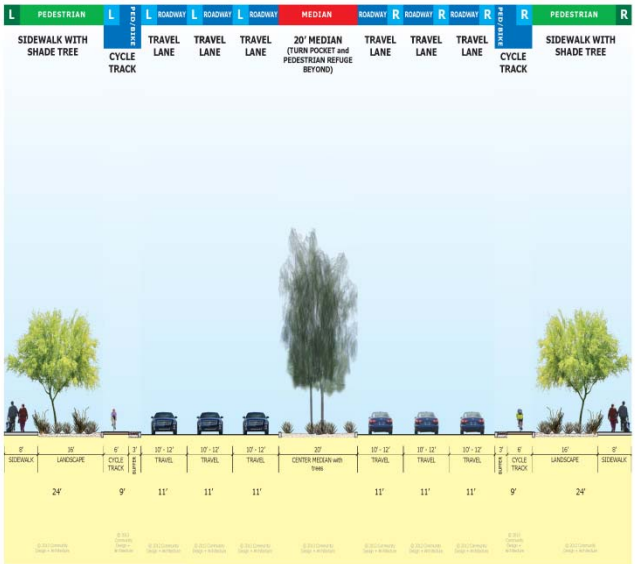


Option 4+T B: 152′ Right-of-Way

6 LANE WITH LANDSCAPING 104′-162′ R.O.W

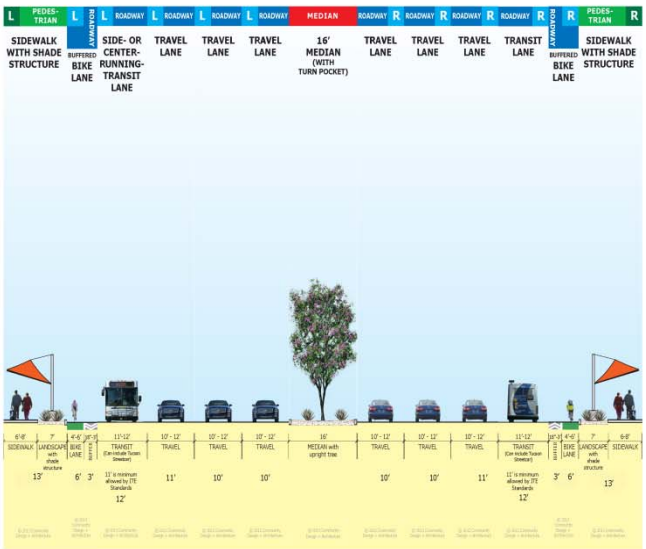


Option 6A: 120′ Right-of-Way

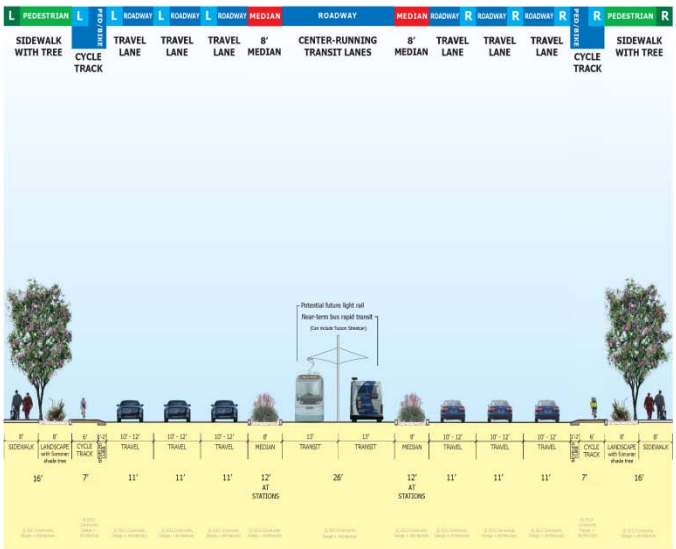


Option 6B: 152′ Right-of-Way

6 LANE + DEDICATED TRANSIT WITH LANDSCAPING 126′-186′ R.O.W



Option 6+T A: 146′ Right-of-Way



Option 6+T B: 154′ Right-of-Way

Small Group Exercises

Following the brief presentation made by Project Manager, Jenn Toothaker Burdick project team member Phil Erickson, the planning team's Context Sensitive Solutions lead, led the small group tables through a set of three facilitated exercises. This small group work was the focus of the Planning Update and Community Workshop Event. The goals of the facilitated exercises were for each table to:

- Select (up to) the top four performance measures and record input as to why the group the group selected each one.
- Select three recommended Broadway cross sections (with modifications if any) to take forward for further development and assessment and record input as to why the group selected each one.
- Produce a summary of the most discussed topics and key points of conflict, and highlight any tradeoffs that were discussed.

The input provided by the public during the workshop critical in helping the CTF and the Project Team decide what design alternatives to advance into further design development and detailed analysis. Based on project budget and timeline, it is possible for up to 3-4 alternatives could be chosen to run through this analysis.

Each small group had a facilitator, a recorder, and a volunteer from the stakeholders at the table to report out at the end of the workshop. During the meeting, project team members were located throughout the room to help answer any technical or project related questions that the tables may have had, and the CTF members floated from table to table to observe the exercises and listen to the discussions that occurred during them. Listed below are the roles and responsibilities each of these individuals had:

- **Facilitator:** Guide the group through the exercise in a way that keeps the group focused, on time, on task, spurs useful discussion, and maintains facilitator's neutrality.
- **Recorder:** Capture the group's discussion, especially why the group made the decisions it did and how it arrived at those decisions. The recorder should also be sensitive to capturing minority opinions that may not be apparent in the group decisions.
- **Volunteer for the Report Out:** Member of the public participating in small group activities that will report back to the larger group on the results of the small group exercises.
- **Project Team:** Answer technical questions or more foundational questions or concerns that a group may have about the Broadway project.

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- **CTF Members:** Observe and actively listen to the small group work in process and be available for conversations with participants outside of the small group work.

Facilitator Training

Prior to the September 26, 2013 Planning Update and Community Workshop Event, the project team developed a facilitator handbook (see appendix C) that included an overview of the event, goals of the exercise, roles and responsibilities of the participants, and ground rules; detailed instructions for each exercise; and discussion tips and troubleshooting. Each facilitator and recorder attended at least one of three training sessions offered by the project team. Each training session was two-and-a-half hours long, went through a detailed description of the workshop activities, and included a mock run-through of the small group exercises. Additionally, the facilitators and recorders met at Planning Update and Community Workshop Event site two hours prior to the event start time to go over any last minute questions or concerns, and to familiarize themselves with the room layout and the finalized materials.

Group Introductions

Just prior to the start of Exercise 1, time was given for each table's participants, facilitators and recorders to introduce themselves to each other. This allowed

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each group to break the ice, give each group a sense of who the members are and why they attended the workshop, and allowed each group to choose a volunteer to report out at the end of the meeting about their table discussions.

Exercise #1: Performance Measures Discussion and Prioritization

Exercise #1 aimed to have each member of the small table group indicate what their top three performance measures were and why they chose those particulars measures. This was indicated by having them place sticky dots on a sheet next to the measures. To help facilitate this decision, each member of the public was given a handout with the performance measures listed on it as they signed in at the Welcome Table, and were encouraged to choose their measures prior to the exercise beginning.

The goal of this exercise was to identify the groups' top four performance measures that they felt were most important for the evaluation of the design of Broadway Boulevard.

After each member chose their top three performance measures and explained why they chose them, the facilitator looked at the sheet to see if there were four measures that stood out as an obvious result for the group. In most cases (see appendix C for individual table materials), there was an obvious 1-3 performance measures that stood out. If this was the case, the facilitator asked the group to

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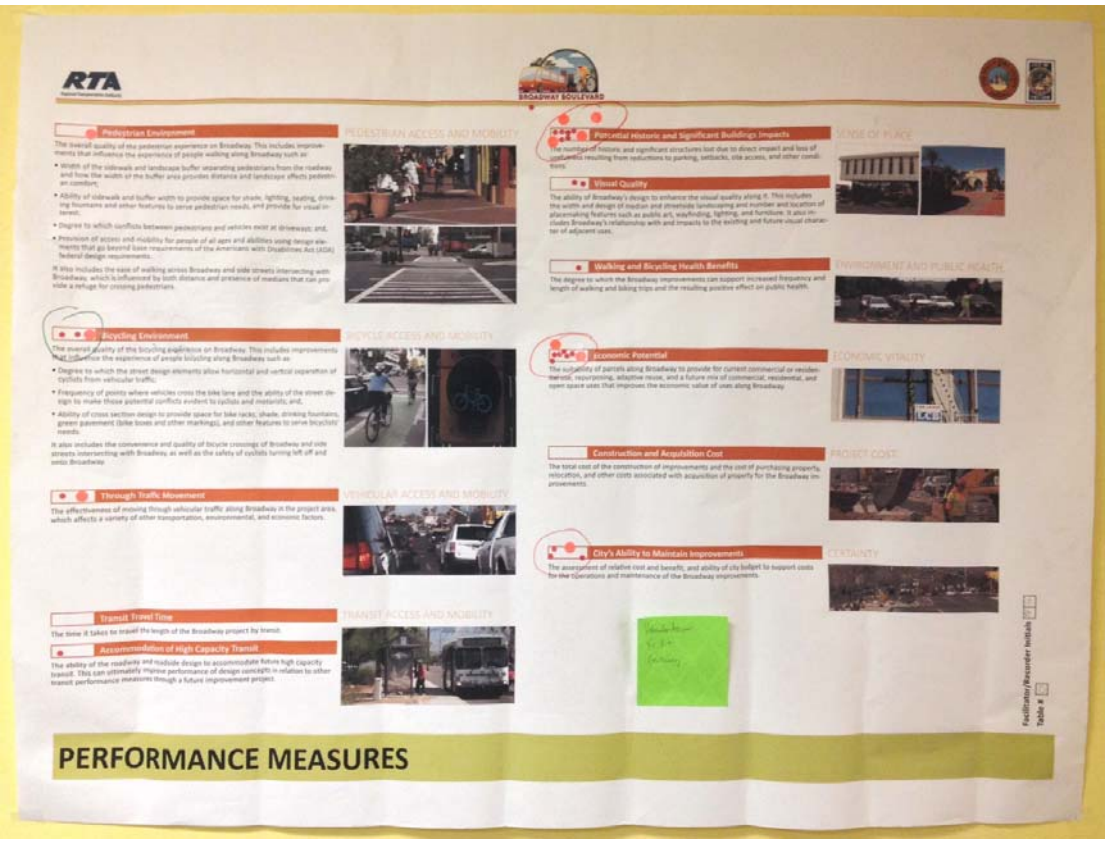
deliberate on what the other measures should be in order to come to a resolution of which four to move forward into Exercise #2.



<u>Exercise #2: Street Section Alternatives and Performance Assessment</u>

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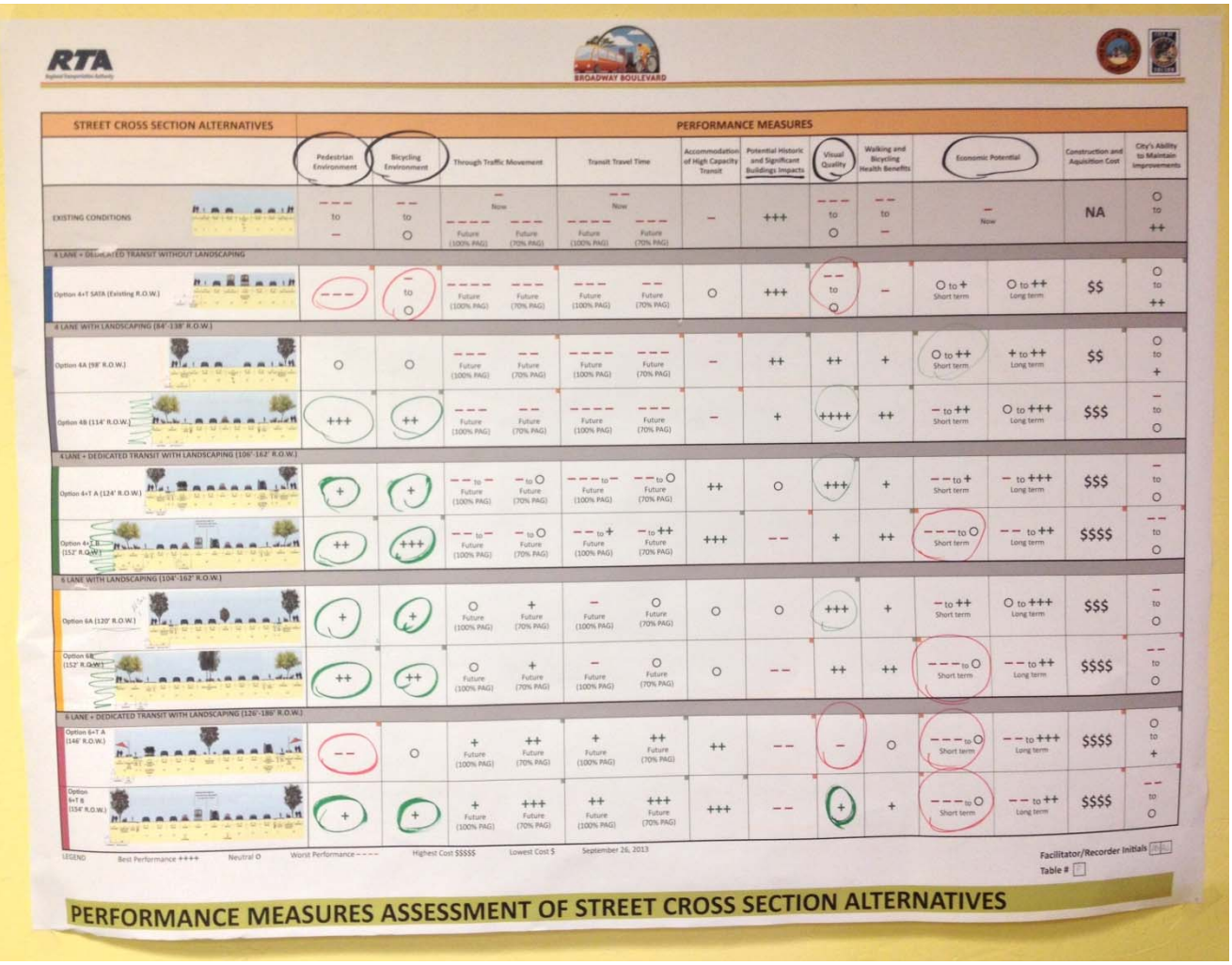
During the brief presentation that preceded the second exercise, the facilitators and recorders highlighted their group's (up to) top four performance measures along the top of the street section alternatives and performance assessment sheet (see circled measures in the top row of the table below).



STREET CROSS SECTION ALTERNATIVES	PERFORMANCE MEASURES: Pedestrian Environment	Bicycling Environment	Through Traffic Movement		Transit Travel Time		Accommodation of High Capacity Transit	Potential Historic and Significant Buildings Impacts	Visual Quality	Walking and Bicycling Health Benefits	Economic Potential		Construction and Aquisition Cost	City's Ability to Maintain Improvements
EXISTING CONDITIONS	– – – to –	– – to O	– Now	– – – – Future (100% PAG)	– – Now	– – – Future (70% PAG)	–	+++	– – – to O	– – to –	– Now		NA	O to ++
4 LANE + DEDICATED TRANSIT WITHOUT LANDSCAPING														
Option 4+T SATA (Existing R.O.W.)	– – –	– to O	– – – – Future (100% PAG)	– – – Future (70% PAG)	– – – Future (100% PAG)	– – Future (70% PAG)	O	+++	– – to O	–	O to + Short term	O to ++ Long term	$$	O to ++
4 LANE WITH LANDSCAPING (84'-138' R.O.W.)														
Option 4A (98' R.O.W.)	O	O	– – – Future (100% PAG)	– – Future (70% PAG)	– – – – Future (100% PAG)	– – – Future (70% PAG)	–	++	++	+	O to ++ Short term	+ to ++ Long term	$$	O to +
Option 4B (114' R.O.W.)	+++	++	– – – Future (100% PAG)	– – Future (70% PAG)	– – – – Future (100% PAG)	– – – Future (70% PAG)	–	+	++++	++	– to ++ Short term	O to +++ Long term	$$$	– to O
4 LANE + DEDICATED TRANSIT WITH LANDSCAPING (106'-162' R.O.W.)														
Option 4+T A (124' R.O.W.)	+	+	– – to – Future (100% PAG)	– to O Future (70% PAG)	– – – to – Future (100% PAG)	– – to O Future (70% PAG)	++	O	+++	+	– – to + Short term	– to +++ Long term	$$$	– to O
Option 4+T B (152' R.O.W.)	++	+++	– – to – Future (100% PAG)	– to O Future (70% PAG)	– – to + Future (100% PAG)	– to ++ Future (70% PAG)	+++	– –	+	++	– – – to O Short term	– – to ++ Long term	$$$$	– – to O
6 LANE WITH LANDSCAPING (104'-162' R.O.W.)														
Option 6A (120' R.O.W.)	+	+	O Future (100% PAG)	+ Future (70% PAG)	– Future (100% PAG)	O Future (70% PAG)	O	O	+++	+	– to ++ Short term	O to +++ Long term	$$$	– to O
Option 6B (152' R.O.W.)	++	++	O Future (100% PAG)	+ Future (70% PAG)	– Future (100% PAG)	O Future (70% PAG)	O	– –	++	++	– – – to O Short term	– – to ++ Long term	$$$$	– – to O
8 LANE + DEDICATED TRANSIT WITH LANDSCAPING (126'-186' R.O.W.)														
Option 8+T A (146' R.O.W.)	– –	O	+ Future (100% PAG)	++ Future (70% PAG)	+ Future (100% PAG)	++ Future (70% PAG)	++	– –	–	O	– – – to O Short term	– – to +++ Long term	$$$$	O to +
Option 8+T B (158' R.O.W.)	+	+	+ Future (100% PAG)	+++ Future (70% PAG)	++ Future (100% PAG)	+++ Future (70% PAG)	+++	– –	+	+	– – – to O Short term	– – to ++ Long term	$$$$	– – to O

LEGEND Best Performance ++++ Neutral O Worst Performance – – – – Highest Cost $$$$$ Lowest Cost $ September 26, 2013

Facilitator/Recorder Initials

Table #

PERFORMANCE MEASURES ASSESSMENT OF STREET CROSS SECTION ALTERNATIVES

For the top performance measures (columns), the facilitator circled the highest rankings with a green marker and the lowest rankings with a red marker. They then looked at the sheet to figure out what cross sections generally ranked higher overall, i.e. had more of the top-ranking circles for the priority performance measures with the fewest bottom-ranking circles. After identifying these, the facilitator reviewed each street cross section alternative by row, placing a circle or mark near the best performing alternatives with the highest positive rankings.

As the facilitators made these marks and identified the cross section alternatives that related to the top performance measure choices, Phil Erickson provided a short presentation describing what they were doing, and introduced Exercise #2.

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The goal of Exercise #2: to pick three street cross section design alternatives that the group felt should be studied further in the next phase of the Broadway project. When Phil completed the Exercise #2 overview, the facilitators pointed out what cross section alternatives they highlighted, and why they chose them (based on the positive and negative rankings for each cross section in the columns of the top performance measures they chose). The facilitator then distributed detailed 11 x17 inch sheets of the individual cross sections highlighted for the group to further review.

Next, the facilitators asked their table groups to discuss the cross section alternatives and how they did or did not agree with the results. If they did agree with all the alternatives highlighted, they would be the group's suggestions to the Citizens Task Force (CTF) and project team for what to take forward for more study and analysis. If they did not agree, then the group was asked to discuss why and what would they change, in order to try to identify 2-3 alternatives they would recommend.

After this discussion was held, the facilitators provided the table groups with acetate strips (for the top selected alternatives, as well as all the other alternatives) that were designed to scale so they could be placed on a to-scale aerial map of the study area. Doing this allowed the table groups to see the potential impacts to buildings, parking, access to adjacent properties, and other aspects of the environment that the cross sections they chose could possibly impact if they were built.

During this step of Exercise #2, the facilitators asked the table groups to keep some the following questions in mind:

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- If the group identifies other cross sections they might be interested in, how do they rank in relation to their top performance measures? Do they represent a performance compromise the group might be willing to accept?
- Did looking at how all the elements work together in the design of the street within the existing context confirm the group's top choices or call these top-ranking sections into question?
- Is the group willing to make tradeoffs among their high-priority performance measures, i.e., would you choose an alternative that ranks higher for two measures but very low for another one?
- Are there other cross section alternatives that the group would like to see that still rank well for the group's performance measures? Would you consider a section that does not rank well for the group's selected performance measures?
- Is the group willing to identify other performance measures as important, because the selected desirable cross section performs well? Is the group willing to compromise performance for the measures you all were originally concerned about?
- Does the group have ideas about modifications they could make to the cross sections so it functions better?

At the conclusion of the exercise and after weighing the above-mentioned questions, the table groups were asked to make a selection of up to three alternatives to advance for further study in the next segment of project work.

Exercise #3: Summary of Key Discussion Items; Prepare for Report Out

At the start of exercise three, the facilitator and recorder reviewed the decisions and key issues discussed during the previous exercises to verify that participants agreed with the decisions and the key issues summary. At the conclusion of exercise three, the facilitator, the recorder, and the group member who volunteered to do the report out worked together with their table group to finalize materials and information for the report out to the larger group. They summarized the results of the group, verifying: 1) the four most important performance measures, 2) three preferred cross section alternatives, and 3) the most discussed topics and any strong non-consensus opinions. The reporter filled out the 11x17 report out sheet and when called upon reported the results out to the larger group. While the table volunteers reported out, the facilitators placed stickers on boards at the front of the room representing the performance measures sheet they worked on at their tables, and representations of the street cross section alternatives they discussed at their tables.

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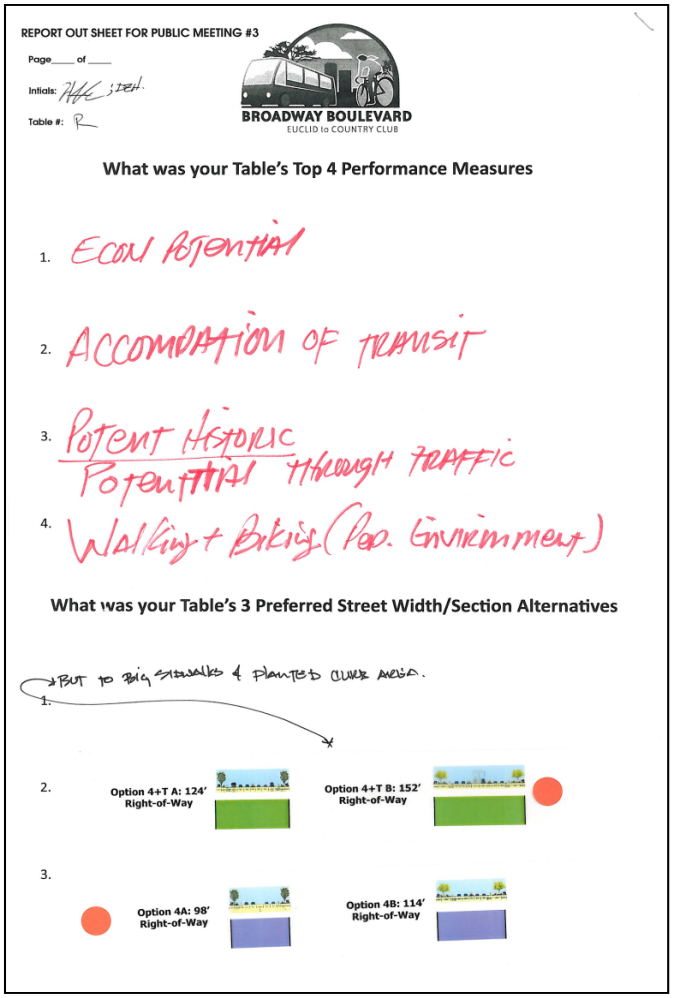


REPORT OUT SHEET FOR PUBLIC MEETING #3

Page____ of ____

Initials: [illegible]

Table #: R

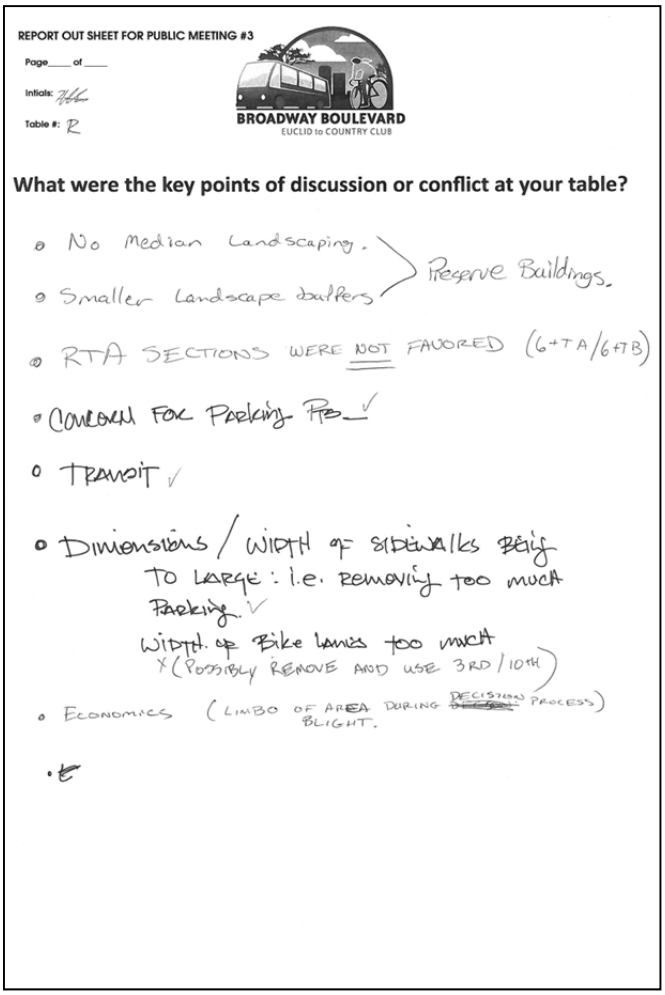
BROADWAY BOULEVARD
EUCLID to COUNTRY CLUB

What was your Table's Top 4 Performance Measures

1. ECON POTENTIAL
2. ACCOMODATION OF TRANSIT
3. POTENT HISTORIC / POTENTIAL THROUGH TRAFFIC
4. WALKING + BIKING (PED. ENVIRONMENT)

What was your Table's 3 Preferred Street Width/Section Alternatives

1. BUT TO BIG SIDEWALKS & PLANTED CURB AREA.
2. Option 4+T A: 124' Right-of-Way; Option 4+T B: 152' Right-of-Way
3. Option 4A: 98' Right-of-Way; Option 4B: 114' Right-of-Way



REPORT OUT SHEET FOR PUBLIC MEETING #3

Page____ of ____

Initials: [illegible]

Table #: R

BROADWAY BOULEVARD
EUCLID to COUNTRY CLUB

What were the key points of discussion or conflict at your table?

- No median landscaping.
- Smaller landscape buffers
  } Preserve Buildings.
- RTA SECTIONS WERE NOT FAVORED (6+TA/6+TB)
- CONCERN FOR PARKING PRES. ✓
- TRANSIT ✓
- DIMENSIONS / WIDTH OF SIDEWALKS BEIG TO LARGE: i.e. REMOVING TOO MUCH PARKING. ✓
  WIDTH OF BIKE LANES TOO MUCH
  X (POSSIBLY REMOVE AND USE 3RD / 10TH)
- ECONOMICS (LIMBO OF AREA DURING ~~[illegible]~~ DECISION PROCESS) BLIGHT.
- ~~E~~

All of the input that was collected at the small group tables, through comment cards, easel pads, and the report outs made by table (transcribed from video recordings) have been recorded, transcribed, analyzed by the project team and assimilated into this report. Digital images of the comments received have been posted to the project website at http://cms3.tucsonaz.gov/broadway/public-meeting-3 and included in the appendix. (Video recordings of the report outs will be available online at the project web site for the duration of the planning and design phase.)

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Workshop Input from Group Exercises and Comment Cards

INTRODUCTION

The Project Team has organized the feedback from the Community Workshop into three sections:

- **Performance Measure Summary**: an overview of the popularity of each performance measure for both individuals and groups, and the reasons why workshop participants believed it was important or not important, what aspects of it were important, and ideas for ways to accomplish the performance measures.
- **Cross Section Alternatives Summary**: an overview of the popularity of each cross section alternative for the groups, and the reasons why workshop participants liked or did not like each cross section.
- **Tradeoffs Summary**: an overview of the tradeoffs among performance measure priorities that were discussed by the groups of participants in order to select their preferred cross section alternatives.

While these summaries present rankings of the most popular performance measures and cross section alternatives, they also include the reasons cited for people's preferences as well as the tradeoffs among priorities that table discussions indicated people are likely willing to make or not make. The project team believes these more nuanced discussions can help the Task Force arrive at recommendations for cross section alternatives to carry forward for analysis.

NOTE: Text in the following sections that is in quotes are comments recorded in the groups' recorder notes, notes from the groups' worksheets, or from comment cards or post-its left with the groups. Group O's input may be incomplete in terms of comments that were written on the large sheet containing the table of cross sections and performance measure assessments that was used in Exercise 2. According to Table O's facilitator, a participant left the meeting with the larger sheet. Still the preferences of Table O are provided on the recorder sheets and the summary sheets from Exercise 3.

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SUMMARY OF EXERCISE 1: PERFORMANCE MEASURE

Summary of Performance Measure Selections by Individuals and Groups

Individual Selections			Group Selections		
rank	Measure	Pct.	rank	Measure	Pct.
1	Historic and Significant Buildings	16%	1	Historic and Significant Buildings	20%
2	Economic Potential	15%	2	Economic Potential	16%
3	Visual Quality	13%	3	Visual Quality	12%
4	Pedestrian Environment	12%	4	Bicycling Environment	11%
5	Bicycling Environment	10%	4	Pedestrian Environment	11%
6	Health Benefits of Walking and Biking	8%	6	Health Benefits of Walking and Biking	9%
6	Traffic Movement	8%	6	Traffic Movement	9%
8	Accommodation of High Capacity Transit	7%	8	Accommodation of High Capacity Transit	7%
9	Ability of City to Maintain	4%	9	Ability of City to Maintain	3%
10	Construction and Acquisition Cost	3%	10	Construction and Acquisition Cost	1%
11	Transit Travel Time	2%	11	Transit Travel Time	0%

START SEARCH HERE

Key takeaways of the relative ranking of performance measures by individuals and groups are:

- The **rank order of performance measures is nearly identical** for individuals and for groups with only a slight variation in terms of Pedestrian and Bicycling Environments for which Pedestrian Environment was ranked 4th by a slight margin above Bicycling Environment by individuals where they were tied for 4th in selection by groups. This seems to indicate a relatively good consistency in terms of the participants at the workshop.
- The **top three performance measures selected are non-transportation measures**; two of these, Economic Potential and Visual Quality, seem to be the most open to interpretation in terms of definition and are also two of the measures who's assessment is more qualitative than quantitative at this point in the design and evaluation of the performance measures, see further discussion of these measures below.
- **Transit Travel Time rated last**, see discussion of this particular performance measure and the Accommodation of High Capacity Transit Measure below. Note that the two transit measures when combined where 10% and 7% of the selected top measures for individuals and groups respectively.
- **Traffic Movement is ranked 6th, tied with Health Benefits of Walking and Biking**, by comparison the Historic and Significant Building measure was selected roughly twice as frequently.

Pedestrian Environment

What it is:

The overall quality of the pedestrian experience on Broadway. This includes improvements that influence the experience of people walking along Broadway such as:

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- Width of the sidewalk and landscape buffer separating pedestrians from the roadway and how the width of the buffer area provides distance and landscape affects pedestrian comfort;
- Ability of sidewalk and buffer width to provide space for shade, lighting, seating, drinking fountains and other features to serve pedestrian needs, and provide for visual interest;
- Degree to which conflicts between pedestrians and vehicles exist at driveways; and,
- Provision of access and mobility for people of all ages and abilities using design elements that go beyond base requirements of the Americans with Disabilities Act (ADA) federal design requirements.

It also includes the ease of walking across Broadway and side streets intersecting with Broadway, which is influenced by both distance and presence of medians that can provide a refuge for crossing pedestrians.

How popular was this measure?

- Pedestrian Environment received 54 individual dots as a top-3 measure, or **12 percent** of the total, ranking **No. 4 overall.**
- Pedestrian Environment received 8 group top-4 performance measure selections, or **11 percent** of the total, tied for **No. 4 overall**.

Aspects deemed important

Crossing in general

- "Crossability of N/S bound [across Broadway]."
- "More crosswalks."
- "Would prefer not widening from existing width but add lighting, better traffic controls, and better pedestrian crossings."
- "Pedestrian access: almost impossible to cross on Broadway."

Safety

- "Ensure safety."
- "Street light, money maintenance, People cannot see pedestrians; City does not do anything when notified."

Aesthetics

- "Picked pedestrian environment. Needs a green space."

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Reasons important

Human scale

- "Concerns for the human-scale of all cross-sections including existing conditions - which is why it became very difficult to stomach any wider cross-sections."
- "I would not like to see a huge 8-lane behemoth which would visually and psychologically bisect the two areas- north of Broadway and south of Broadway."

Tied to livability, placemaking, and economics

- "Less road, more bike/walking. Keep historic buildings and neighborhoods. We live in a 'dense' urban area which should not be built on thoroughfares of cars speeding through and cutting up our history and neighborhoods."
- "Many of the performance measures are linked — bicycling and pedestrian environment = sense of place."
- "Pedestrian Environment ties in to Economic Potential. Walking traffic offers potential to businesses."
- "Pedestrian environment increases economic impact and community: 'place to be not go through'."
- "Foiled against traffic — concern that widening Broadway for vehicular traffic will create a high speed roadway. The belief is this will hurt economic potential, pedestrians, bicyclists, and historic aspect."

Specific vulnerable groups: Students/ADA/disabled/elderly

- "Look for elderly improvements and mobility (scooters in bike lanes)."
- "Pedestrian - ADA compliance needed, personal mobility."
- "Many poor disabled wheelchair ridden folks without cars use Broadway — they will never be able to cross if it gets wider."
- "Main concern is for Tucson High students."

Relationships to other alternative modes

- "Combine pedestrian & walking & biking."
- "Walkability and bikes go hand in hand."
- "On 6th Street there's a lot of people walking because of bus ride."

Why did people not think it important?

- "People are not walking. It's too hot so it's a waste of space." *[CLARIFYING RESPONSE: There is actually quite a lot of walking that occurs within the study area and other areas within a couple of miles of this portion of Broadway. According to the 2010 Census, about 7% of individuals in the study area commute to work on foot; nearly twice the rate of walking to work on a citywide basis. Of all those who use alternative modes to get to work, 15% commute by foot, and is as high as 35% for neighborhoods closest to the university.]*

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- "Questioned whether pedestrians will use areas if built."
- "Not as concerned with sidewalk widths."
- "Sidewalks, yes; Big wide pedestrian areas, no."
- "A quality pedestrian experience doesn't necessary require larger sidewalks + buffers on both sides of the street." *[CLARIFYING RESPONSE: research into what design elements provide an environment that pedestrians find most comfortable and safe does indicate that sidewalk and buffer width, the frequency of trees, and other factors do contribute to a more walkable environment. The wider sidewalks and buffers included in the street cross sections result from national street design guidance from the ITE Walkable Urban Thoroughfares Manual. The ITE Manual recommends a 9.5 foot wide landscape area and an 8 foot wide sidewalk for the type of street and built environment that Broadway is within the planning area. The wider 12 foot width for landscape illustrated in some of the street sections is the result of clearances requested by TDOT for the broader Sonoran Desert trees that are illustrated with those sections.]*

Automatic connection between wide cross sections and negative impact on pedestrian/disabled

- "Strong concerns about the width of the cross-sections and impacts on buildings/ businesses / historic qualities AND impacts on people, differently abled people, and people who ride bikes."

Tools to accomplish

- "Creativity with respect to pedestrian alignment."
- "Can't walk next each other on 6 ft."
- "Pedestrian overpasses like the snake bridge."
- "Please include physical barriers as a possibility to protect pedestrians from traffic in order to keep the width narrower. The wide separation between traffic and pedestrians doesn't have to be as extreme with physical buffer."
- "Pedestrian traffic should draw people and sustain interest."
- "Treat needs a hawk" *[CLARIFYING RESPONSE: A hawk is planned for this intersection. A design is currently being prepared and the project is funded; the decision of the proper time to build the hawk is still being considered; if it is appropriate to wait for full construction of the Broadway project or if the hawk should be initially constructed sooner.]*

Shade

- "Vegetation middle median and on outside- shade for walkers."
- "Too sunny to walk without trees."

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Bicycle Environment

What it is:

The overall quality of the bicycling experience on Broadway. This includes improvements that influence the experience of people bicycling along Broadway such as:

- Degree to which the street design elements allow horizontal and vertical separation of cyclists from vehicular traffic;
- Frequency of points where vehicles cross the bike lane and the ability of the street design to make those potential conflicts evident to cyclists and motorists; and,
- Ability of cross section design to provide space for bike racks, shade, drinking fountains, green pavement (bike boxes and other markings), and other features to serve bicyclists' needs.

It also includes the convenience and quality of bicycle crossings of Broadway and side streets intersecting with Broadway, as well as the safety of cyclists turning left off and onto Broadway.

How popular

- Bicycle Environment received 45 individual dots as a top-3 measure, or **10 percent** of the total, ranking **No. 5 overall.**
- Bicycle Environment received 8 group top-4 performance measure selections, or **11 percent** of the total, tied for **No. 4 overall**.

Aspects deemed important

Safety

- "Safety/utility for bikes."
- "Not a bike rider, but concerned about safety."
- "Bikes & through movement – safety."
- "Commuter vs. casual cyclists – bike safety and concern."
- "Speed limit mentioned."

Connectivity

- "A way to bike and get to downtown."
- "Bike lanes suddenly end and these are recently done things => too bad."
- "Bike lanes have to be useful."

Separation from cars

- "Bike lanes: divide from car lanes with raised reflectors => creates barrier cheaply and visibly; uses less space." *[CLARIFYING RESPONSE: the use of raised reflectors for a bicycle lane separation is not a standard design treatment; the applicability of this concept would need special approval of TDOT's engineering staff.]*

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- "Bicycle buffers as factors for making their final decisions."
- "Needs a buffer zone for bikes."
- "Cycle track very attractive."

Reasons important

Health benefits

- "Health benefits covers bicycling environment - broader umbrella."
- "Overlapping of bike environment, walking, and bike health benefits. Importance of walkability and access to both sides of Broadway."

Livability

- "Strong concerns about the width of the cross-sections and impacts on buildings/ businesses / historic qualities AND impacts on people, differently abled people, and people who ride bikes."
- "Roadways should not take over our lives. Neighborhoods, walking and bicycling accessibility among historic buildings is key. Thoroughfare zipping through neighborhoods break up the urban feel- but we live in an urban area for the feel of neighbors. New visions: walking, biking, public transportation, and keeping our history."
- "Cycling- transit- history- economy."
- "Many of the performance measures are linked - bicycling and pedestrian environment = sense of place."

Less auto dependence

- "I would give priority to walkability, ease of crossing, bicycling, mass transit, preserving businesses, & historic properties….We need to build for a future with fewer automobiles."

Lack of citywide facilities

- "Tucson lacks facilities for bike community. If we put nice bike route, there are enough businesses to support."

Why did people not think it important?

Biking too dangerous on Broadway

- "Dangerous bike lanes - get rid of them." *[CLARIFYING RESPONSE: Broadway is a designated bike route requiring a bicycle lane and the City does not currently plan to change this. At a minimum, the future design will include a bicycle lane and the City would like to improve the quality of the facility with a buffered bicycle lane or cycletrack if feasible.]*
- "Cycling should be moved off of Broadway to a side street." *[CLARIFYING RESPONSE: Broadway is a designated bike route requiring a bicycle lane and the City does not currently plan to change this. At a minimum, the future design will include a bicycle lane and the City would like to improve the quality of the facility with a buffered bicycle land*

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or cycletrack if feasible. In addition, there are parallel bike paths, routes, and bicycle boulevards on minor streets to the north and south of Broadway that provide alternative routes for cyclists that may not be comfortable riding on Broadway.]

It makes road wider

- "Difficult balance to strike—road width vs. bike/ pedestrian facilities which contribute to overall ROW width…. I would favor other modes over automobiles but overall I'd be willing to trade bike/pedestrian width improvements for not widening traffic lanes- maybe 11 ft. lanes?" *[CLARIFYING RESPONSE: Many of the initial street cross sections include traffic lanes that are as narrow as 10 feet, but also 11 foot lanes. Dedicated transit lanes are typically 12 or 13 feet wide. The design team will continue to work with TDOT engineering and design staff to design lane widths that are functional for the expected types of vehicles using Broadway and the target speed for traffic.]*
- "Width of bike lanes too much (possibly remove and use 3rd / 10th)" *[CLARIFYING RESPONSE: See earlier comments regarding provision of bicycle lanes on Broadway.]*
- "Reduce speed limit to reduce bike lane width. Do not use bikes as excuse to demolish buildings on Broadway." *[CLARIFYING RESPONSE: The current street cross section alternatives assume a 30 to 35 mph design speed. Lowering the speed would not affect the minimum width for bicycle lanes on Broadway below that included in the current cross sections.]*

Tools to accomplish

- "Bike lanes: divide from car lanes with raised reflectors => creates barrier cheaply and visibly; uses less space." *[CLARIFYING RESPONSE: See response to this comment earlier in this document.]*
- "Needs a buffer zone for bikes."
- "Cycle track very attractive."
- "Any rail installed must have bicycle friendly tracks even if the tracks already installed have to be pulled up and redone."
- "Cleaning of bike lanes a concern—street sweeper."
- "Bicycling: number of driveways and conflicts, came close to dying on a bike on Broadway."

Through Traffic Movement

What it is:

The effectiveness of moving through vehicular traffic along Broadway in the project area, which affects a variety of other transportation, environmental, and economic factors.

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How popular

- Through Traffic Movement received 37 individual dots as a top-3 measure, or **8 percent** of the total, ranking tied for **No. 6 overall.**
- Through Traffic Movement received 7 group top-4 performance measure selections, or **9 percent** of the total, ranking tied for **No. 6 overall**.

Reasons important

Project value
- "'We need to make it count' meaning we need to widen the road and get value out of the project."

Accommodate growth
- "The only reason traffic has decreased is depressed economy. As affluence increases we will have more cars and need 6 lanes. Increase makes Tucson economically viable and not striving to be at the bottom of the economic totem pole. This is a decision for 40 years, not today only."

Functionality of vehicular mobility
- "I drive and expect roads to be functional."

Why did people not think it important?

Downtown bottleneck
- "Again the concern for a bottleneck downtown comes up."
- "New performance measures "Road to Nowhere / bottleneck @ Euclid" (5 dots)."
- "There is a severe bottleneck where the street curves at Hotel Congress. Traffic stalls here. People can't decide which lanes to choose so they cut each other off. It sounds like rush people west to gather at this bottleneck. Downtown is narrow - 2 lanes. Can downtown absorb and handle this mass migration west? 2nd. I don't see a crowded Broadway outside of morning and evening rush hour times. The street is plenty big right now. I live right off of Broadway/Highland."

Nuisance of through traffic
- "Favoring narrow width, because it would have lesser through traffic and reliance on cars."

Auto dependence
- "Favoring narrow width, because it would have lesser through traffic and reliance on cars."
- "Cars are less important for the city."

Adverse effects of speed of vehicles
- "Speed of traffic a concern; pedestrians crossing road a hazard."

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- "We live in a 'dense' urban area which should not be built on thoroughfares of cars speeding through and cutting up our history and neighborhoods."
- "Vehicle speed horrifying in 30 mph zone"

Loss of place

- "I would not like to see a huge 8-lane behemoth which would visually and psychologically bisect the two areas- north of Broadway and south of Broadway. We need to build for a future with fewer automobiles."
- "Roadways should not take over our lives. Neighborhoods, walking and bicycling accessibility among historic buildings is key. Thoroughfare zipping through neighborhoods break up the urban feel- but we live in an urban area for the feel of neighbors. New visions: walking, biking, public transportation, and keeping our history."
- "Do we want to create a sense of place & unique identity or just move cars from the mall to downtown."

Tools to accomplish

- "Speed limit 30 mph!"
- "Provide other accesses to Downtown or the freeway."
- "Keep the 4 lanes with progressive traffic technology."
- "What consideration has been given to roadway changes elsewhere in the vicinity, such as a) the new widening of Kino + overpass at 22nd street, b) the near total blockage for westbound traffic after Broadway underpass?" *[CLARIFYING RESPONSE: Impacts from other planned improvements in the area have been and will continue to be considered in the design and assessment of the Broadway project.]*

Transit Travel Time

The time it takes to travel the length of the Broadway project by transit.

How popular

- Transit Travel Time received 7 individual dots as a top-3 measure, or **2 percent** of the total, ranking **No. 11 (last) overall.**
- Transit Travel Time received 0 group top-4 performance measure selections, or **0 percent** of the total, ranking **No. 11 (last) overall**.

Discussion

There were very few comments made about transit travel time. "Some comments were made for importance of transit." *[CLARIFICATION – this is a quote from a recorder sheet, which does not include any of the detail of the comments made about importance of transit.]*

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Accommodation of High Capacity Transit

The ability of the roadway and roadside design to accommodate future high capacity transit. This can ultimately improve performance of design concepts in relation to other transit performance measures through a future improvement project.

How popular

- Accommodation of High Capacity Transit received 31 individual dots as a top-3 measure, or **7 percent** of the total, ranking **No. 8 overall**.
- Accommodation of High Capacity Transit received 5 group top-4 performance measure selections, or **7 percent** of the total, ranking **No. 8 overall**.

Reasons important

Like light rail
- "Phoenix light rail is fabulous."

Flexibility is important
- "Interested in making sure that whatever we put in can accommodate future transit later, if not planned for today. Don't want to have to undo things later."

Economic development
- "If you create corridor, everything will come."

Reduce auto dependency
- "I'm interested in accommodating high capacity transit because we need to be supporting what ever will reduce the automobile traffic through town and I think reliable rapid transit (buses) will help move people out of their cars."

Why did people not think it important?

Don't believe it will happen
- "City has no money, for transit/streetcar loop."

Danger
- "I object to buses in center lanes—it would involve more people having to cross lanes to get to bus stops. Senior citizens should be able to walk to buses from curb to be safe. Big safety issue exists on Broadway senior housing." *[CLARIFYING COMMENT: Putting transit in the middle of a street does not increase the distance of street crossings required to utilize transit. For example, if a bus stop heading to your destination is on the same side of a street as your home you do not need to cross the street on your initial trip. But on your return trip you would need to cross the full width of the street because the stop would be on the other side. If the bus stopped in the middle of the street you would*

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cross ½ of the street for each of your trips, a total of a full street crossing in either case.]

Think it should happen on another street, not Broadway

- "Streetcar discussion to get transit off Broadway."

Tools to accomplish

- "Dedicated transit lanes."
- "Why not bus pullouts with differentiation between express and local buses, thus spreading flow? Please revisit the question." *[CLARIFYING COMMENT: this would be done with the options that have dedicated transit lanes adjacent to the bicycle lane and it is a concept that could be included in the alternatives that do not have dedicated transit lanes, this can be explored in the next phase of the project.]*
- "Mass transit viability can be improved by creating 'places' worth being in."

Potential Historic and Significant Buildings Impacts

The number of historic and significant structures lost due to direct impact and loss of usefulness resulting from reductions to parking, setbacks, site access, and other conditions.

How popular

- Potential and Historic and Significant Buildings Impacts received 72 individual dots as a top-3 measure, or **16 percent** of the total, ranking **No.1 overall**.
- Potential and Historic and Significant Buildings Impacts received 15 group top-4 performance measure selections, or **20 percent** of the total, **83 percent of tables (all but 3)**, ranking **No. 1 overall**.

Aspects deemed important

Lack of specificity of which aspects of historic buildings should not be impacted.

Reasons important

Future options

- "Historic properties cannot come back."
- "Once you have torn down any historic buildings, you can never put it back. The Old Pueblo is its historic history. Without the building, it's just Phoenix Jr."
- "Unique!"
- "Irreplaceable!"

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District character and Collective history

- "Different districts, retain character."
- "History building the sense of place, the context of the community. Building now, unique architecture, identity and sense of place."
- "Do not destroy our history for an inner city highway."
- "First Assembly Church there since 1930's - identifies a community, provides services and you can walk to and from the church. Plus a lot of history in the building."
- "People who choose to live in this City like historic stuff."

Useful land uses

- "When you tear things down to walk to, there is no destination for people to walk to" *[CLARIFYING COMMENT: If the land that remains following the widening of a street can be reused there will be something to walk to in the future once new development occurs.]*

Tied to general livability

- "Neighborhoods, walking and bicycling accessibility among historic buildings is key. Thoroughfare zipping through neighborhoods break up the urban feel- but we live in an urban area for the feel of neighbors. New visions: walking, biking, public transportation, and keeping our history."

Tied to economics

- "Protection of buildings promotes investment" *[CLARIFYING COMMENT: First, the historic district designations that currently exist in the planning area and future historic district(s) that may be created along Broadway do not "protect" historic buildings, they "encourage preservation" of historic buildings. The designation of a structure as a historic district contributing structure does not restrict a property owner from remodeling or tearing down the structure, but it does provide some economic incentives, through tax considerations and loans, that encourage preservation. Resolving the design of Broadway and finishing the construction of the future street will promote investment regardless of building protection, although the extent of new investment may vary and further assessment of design options will consider this as the Broadway project moves forward.]*

Why did people not think it important?

- "Not up to code structures; cannot be maintained - tear them down."
- "Be selective when saving some historic buildings."
- "Some disagreement on historic/architectural merit."
- "Get rid of old dilapidated buildings – old is not always financially valuable historic."
- "Don't think every building needs to be kept. Thinks the historic value should be kept."

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Tools to accomplish

Narrow cross section

- "Keep to only 4 lanes! We don't need to take down historic buildings."

Visual Quality

The ability of Broadway's design to enhance the visual quality along it. This includes the width and design of median and streetside landscaping and number and location of placemaking features such as public art, wayfinding, lighting, and furniture. It also includes Broadway's relationship with and impacts to the existing and future visual character of adjacent uses.

How popular

- Visual Quality received 57 individual dots as a top-3 measure, or **13 percent** of the total, ranking **No. 3 overall**.
- Visual Quality received 9 group top-4 performance measure selections, or **12 percent** of the total, ranking **No. 3 overall**.

Aspects deemed important

There was much discussion about what visual quality means. The two most popular interpretations were:

Historic preservation

- "Keep look and feel of old neighborhood."
- "Visual Quality / Potential Historic - can't be split."
- "Some concern was addressed with visual quality and historic and significant buildings impacts and how they both are representative of the same thing. It was felt that these two should not have been divided into 2 measures."

Green space/landscaping

- "Needs green space."
- "Vegetation middle median and on outside- shade for walkers."
- "We need enough of a buffer to accommodate lots of trees for shading to the urban heat island. We should allow for variation in the path of the roadway…possibly allow for curving."

There were also comments about the following aspects of visual quality:

Views

- "Does visual quality require landscaping? Does it include the ability to see the architecture and mountains beyond?"

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More than just landscaping
- "Table concerned that "visual quality" refers to only planters and landscape."

Reasons important

Visual quality as aspect of community identity
- "Beautify the community for destination."
- "Broadway is unique, has community and business. Interest in beautifying."

Visual quality as way to mitigate current negative visual conditions
- "Eye sores; beautify."
- "The street is ugly...is blight because businesses have left."
- "Concerns for properties not maintained."

Relationship to economics of Broadway
- "Business economy is promoted by visual."

Tools to accomplish

There was discussion about how to provide landscaping within a narrower right-of-way:

Private property landscaping
- "If possible, put landscape on private property."
- "Can businesses support their own landscaping?"

Vary landscaping according to where there is space
- "Vary median width."
- "Put plantings where ROW is large, less where narrow, minimize demolitions to a minimum."

Non-linear landscaping
- "Why does landscaping have to be linear, i.e., continuous and on both sides of the street; space it out and consider areas where it can be massed."

Rain gardens
- "I love the rain gardens on 9th/10th St. in Rincon Heights. Though it is true some need more maintenance. No problems seeing them at night or safety issues. In fact, the one by my house prevented 2 possibly more serious accidents. Plus, great wildlife habitat for birds, bees, butterflies..."

Walking and Bicycling Health Benefits

The degree to which the Broadway improvements can support increased frequency and length of walking and biking trips and the resulting positive effect on public health.

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How popular

- Walking and Bicycling Health Benefits received 37 individual dots, or **8 percent** of the total, ranking **No. 6 overall.**
- Walking and Bicycling Health Benefits received 7 group top-4 performance measure selections, or **9 percent** of the total, ranking **No. 6 overall**.

Reasons important

One reason it appears groups picked this measure is that groups were able to satisfy walking and biking in one measure. Otherwise, there was also discussion about broader health and safety issues.

Relationship to broader health
- "Proximity to widened road to house may upset asthma condition."

Relationship to safety
- "Health benefits => ensuring human safety."

Strategic performance measure picking
- "Seems that some groups chose this one because either they wanted both the pedestrian and bike measures and were able to "spend" one of their four on one and get two or they saw an overlap between the benefits of both pedestrian and bike environment."
- "If we make walking & biking a priority, we can forget bicycling environment and pedestrian environment."
- "We had much discussion on how pedestrian and bicycle access should not be separated. In our frustration with the criteria overlap, we agreed to choose "Walking & Biking Health Benefits" instead of "Pedestrian Environment" or "Bicycle Environment"."

Why did people not think it as important?

Health is less important than Broadway functionality
- "Do we want them to consider health over functionality => functionality should come first. I picture design people not being health people."

Economic Potential

The suitability of parcels along Broadway to provide for current commercial or residential use, repurposing, adaptive reuse, and a future mix of commercial, residential, and open space uses that improves the economic value of uses along Broadway.

How popular

- Economic Potential received 66 individual dots, or **15 percent** of the total, ranking **No. 2 overall**.

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- Economic Potential received 12 group top-4 performance measure selections, or **16 percent** of the total, ranking **No. 2 overall**.

Aspects deemed important

Preservation of businesses

- "Preservation of businesses." *[CLARIFYING RESPONSE: preservation of businesses is likely to improve economic potential in the near-term (roughly up to 3 to 5 years after construction of the project). Following that reinvestment in the corridor and the extent of business turn over that is typical of any commercial district will not necessarily mean that an alternative that preserves businesses would outperform other alternatives in terms of economic potential.]*

Future potential of new businesses and development

- "Economic potential is tied to the amount of the parcel that's left." *[CLARIFYING RESPONSE: this is true, in the longer run (roughly 3 to 5 years after construction of the project) when reinvestment in vacant and other parcels would likely begin to occur.]*
- "Thinks the Economic Potential is untapped right now."
- "Lack of available real estate on Broadway. Willing to take risk (family oriented salon) great investment opportunity for small businesses to buy property. Economic Vitality: you can build and make your own."
- "Broadway from Campbell to Snake Bridge is begging to be full of boutiques and galleries, in the existing buildings."

Impact of construction on existing businesses

- "Concern that construction would put people out of business." [INFORMATIONAL RESPONSE: see information from MainStreet program regarding resources to assist businesses along Broadway in preparing for construction of the street project (http://www.rtamobility.com/MainStreet.aspx).]

Long-term impact of widening process on businesses

- "Economics (limbo of area during decision process; blight) some businesses have already lost due to past widenings."
- "Business and are leaving because of street widening. Businesses feel its a done deal so already leaving."

Relationship to downtown

- "Continuation to the Downtown- it would complement university area."

Relationship to other performance measures

- "Other measures will lead to economic development."
- "Economic change will follow the aesthetics."
- "Walking traffic offers potential to businesses."

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Reasons important

There was less discussion on why economic potential is an important performance measure in choosing a design for Broadway in the first place, surprising because it was the 2nd most popular performance measure. Perhaps because economics is assumed to be a fundamental part of any place. Some reasons mentioned included:

- "Tax base."
- "Driver of other measures."

Why did people not think it as important?

Broadway project will not have a large effect on economics
- "Widening or not widening will not resolve."

Tools to accomplish

Carrots
- "Incentives needed for retail."
- "Can grants be given to businesses to 'spruce up' their properties instead of spending money to bulldoze them."

Concern about street design getting in the way of business activity
- "Concern with blocking business frontage."
- "Wide roadways kill pedestrian and bicycle access and isolate the north and south sides of the road."

Construction and Acquisition Cost

The total cost of the construction of improvements and the cost of purchasing property, relocation, and other costs associated with acquisition of property for the Broadway improvements.

How popular

- Construction and Acquisition Cost received 15 individual dots, or **3 percent** of the total, ranking **No. 10 overall.**
- Construction and Acquisition Cost received 1 group top-4 performance measure selections, or **1 percent** of the total, ranking **No. 10 overall**.

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Aspects deemed important

Property acquisition

- "Acquisition cost - how will it affect businesses; what is it going to cost, both to the RTA and the individual."
- "Minimize taking of property and focus funds on construction."

Relationship of construction cost and 1989 alignment

- "Concerned about the cost of construction. Don't have, live in the past, don't have to abide by something decided previously?"
- "$42 M is budgeted for land acquisition or 58% of the project budget, the roadway plan should minimize the taking of property vs. buying as much land as dollars allow; funds should be spent on 'meaningful' concrete and asphalt and not on acquiring private property."

Reasons important

- "Concern about cost and unnecessary construction."

City's Ability to Maintain Improvements

The assessment of relative cost and benefit, and ability of city budget to support costs for the operations and maintenance of the Broadway improvements.

How popular

- City's Ability to Maintain Improvements received 19 individual dots, or **4 percent** of the total, ranking **No. 9 overall**.
- City's Ability to Maintain Improvements received 2 group top-4 performance measure selections, or **3 percent** of the total, ranking **No. 9 overall**.

Aspects deemed important

- "Take care of weeds."

Reasons important

- "If you are going to create all of this you better maintain that."

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Tools to accomplish

Carefully design medians and landscape buffers

- "Adding median adds costs of maintenance for landscaping, etc."
- "No median landscaping."
- "Smaller landscape buffers."

SUMMARY OF EXERCISE 2: CROSS SECTION ALTERNATIVES

Top Cross Sections Identified for Further Study		Selections by Table																	
Street Cross Section Alternative	**% of Total Selections**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**
4+T SATA – existing width	18%	■		■		■			■		■	■	■			■		■	
4A – 98' width	27%	■	■	■		■		■		■	■	■	■	■	■	■	■		■
4B – 114' width	18%		■	■	■	■		■			■			■	■		■		
4+TA – 124' width	12%						■		■			■		■				■	
4+TB – 152' width	14%				■		■		■			■			■		■		■
6A – 120' width	2%									■									
6B – 152' width	6%				■		■										■		
6+TA – 146' width	2%	■																	
6+TB – 154' width	2%									■									

Key takeaways of the relative ranking of the street cross section alternatives are:

- The top three cross sections identified are also the narrowest in terms of right-of-way width; although the tables' discussions of why they made these selections is not always based on width.
- In terms of ratings for the top 5 performance measures identified in Exercise One of the workshop, Option 4B performed well (received green squares) for three categories. Despite not having performed as well on the performance measures identified in

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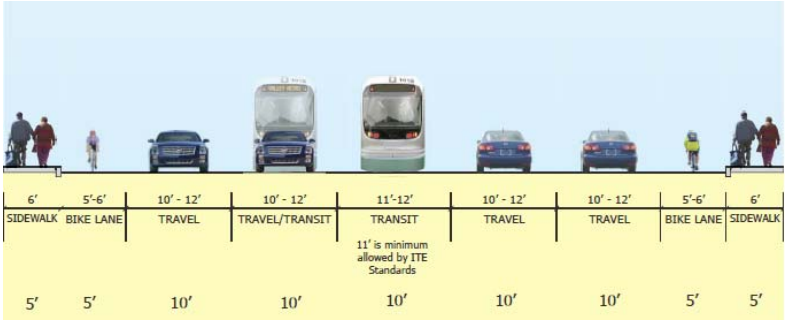
Exercise One, alternative 4A was most frequently selected as a recommended alternative, suggesting an overall preference for the narrowness of this section with some improvements for pedestrians.

- Alternative 4+T SATA was tied for being the second most frequently selected, but its selection conflicted with top performance measures identified in Exercise One of the workshop. Nonetheless, it performed very well for the top-ranked *Potential Historic and Significant Buildings Impacts* performance measure. Again, this suggests a preference, by many, for the narrowness of this section despite the poorer performance in other categories such as *Pedestrian* and *Bicycling Environment.* It should be noted that there were comments expressing disagreement with some of the evaluations of this alternative, which is examined in more detail below.
- Alternative 6+TA was tied with alternatives 6A and 6+TB as the least frequently selected cross section alternative, which was in line with its poor performance in 4 of the 5 top performance measures.
- Some groups mentioned the potential for conversation of six-lane alternatives into four-lane plus transit lane alternatives. This was particularly the case for alternatives 6B and 4+TB which have the same total width at 152 feet. All three of the tables that selected 6B also selected 4+TB

The remainder of this section, and the section assessing the tradeoffs that the groups discuss or appear to be willing to accept, provide additional nuances to the cross section selections and why selections were made.

Option 4+T SATA

What it is



A street cross section prepared by the Southern Arizona Transit Advocates which would utilize the existing 70'-80' typical Broadway right of way:

- Provides 4 Travel Lanes, one of which is shared with future transit while the other direction of transit travels in the median/continuous left turn lane.
- Provides 5' wide bicycle lanes.
- Provides 5' wide sidewalks in narrower segments of Broadway and 6' wide sidewalks with 3' buffer in wider segments.

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How popular was this cross section?

Option 4+T SATA was selected for further study by 9 groups, or **18 percent** of the total, ranking **tied for No. 2 overall**.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the following performance measures: *Historic and Significant Buildings*, *Construction and Acquisition Costs*, and *Ability of City to Maintain Improvements*. Based on total selections of performance measures in Exercise One of the workshop, groups selected Option 4+T SATA at a higher rate than expected for what they identified as top performance measures.[1]

Why did people like it?

- Positive reaction to not widening the existing right-of-way.
- This cross section was seen as the only street section that would preserve historically significant structures *[CLARIFYING RESPONSE: This is not the case, as all cross sections will likely impact at least some existing parking layouts and access points which could affect the viability of existing buildings and uses, and future street alignment regardless of width could impact historically significant structures. Also, while a historically significant structure may not be impacted by the street project, there is no restriction for a property owner remodeling or demolishing a historic district contributing structure in current Tucson land use policy and standards for properties along this portion of Broadway.]*
- Cycling down the street would be more comfortable due to the narrower overall street width. *[CLARIFYING RESPONSE: The narrower street is unlikely to benefit cyclist comfort. The factors that have been shown through research to affect cyclist comfort in riding in a bicycle lane include: traffic speed and volume (all alternatives will be designed to the same speed, including design techniques to manage the speed of traffic. Also, overall daily traffic volumes would likely vary marginally across the alternatives), frequency of right turning traffic (all alternatives will include access management and provision of right turn lanes where needed, there will likely be minimal variation in this regard across alternatives); and bicycle facility width and presence of a physical buffer also affect cyclist comfort. The 5' wide bicycle lane provided in this alternative is the narrowest bicycle facility used in the alternative cross sections, and therefore this section performs at the lowest level for the alternatives in terms of cyclist comfort.]*

[1] The project team used the assessments of the cross section alternatives for each performance measure and the popularity of the performance measures to model the likely overall popularity of the sections. For a given cross section, the team averaged the popularity (percentage of overall selections) of the measures on which the section received one of the highest scores to produce an "expected" popularity. Because of the coarseness of this model, this prediction should be treated as a rough estimate.

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- Transit seen as potentially improving pedestrian crossings, since center-running transit stops could act as pedestrian refuges.

Why did people not like it?

- Pedestrian safety would depend on stop locations and speed of transit.
- Some concern of lack of dedicated turn lane for property access. *[CLARIFYING RESPONSE: All cross section alternatives with the exception of 4A have medians that limit left turns between intersections or specifically designed U-turn locations; this is done to improve safety and improve the flow of through traffic.]*

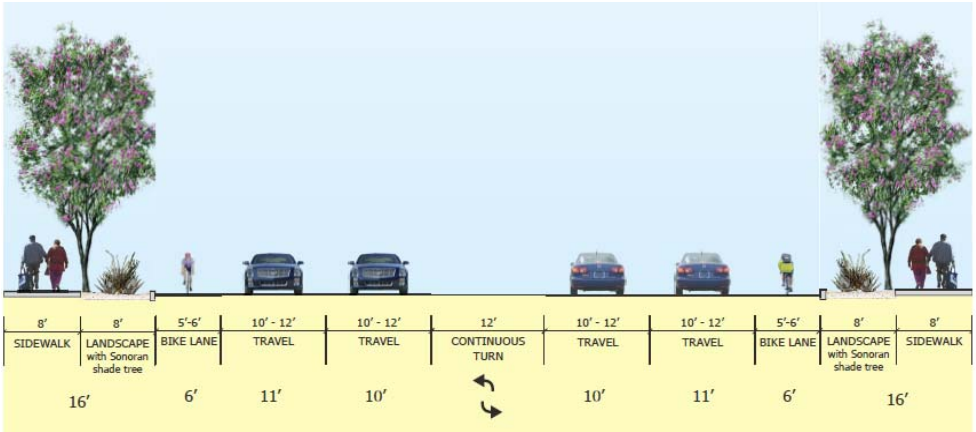
Additional findings and discussion

Overall, comments indicated confusion about why the section is rated as low as it is in the assessment of performance measures. Some questioned the ratings of specific performance measures, such as *Accommodation of High Capacity Transit*. Several expressed the opinion that the evaluation was biased against this alternative.

It should be noted that one of the positive comments about the cross section alternative indicated that it was the only cross section which would preserve historically significant structures.

Participants indicated that the section was worthy for further study because of the perceived benefits of utilizing the existing right-of-way. Other comments agreed with studying this option further, but under the condition that the bicycling and pedestrian environment could be improved.

Option 4A



98’ Right Of Way

- Provides 4 Travel Lanes and one 12’ Continuous Turn Lane
- Provides 6’ Bike Lanes

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- Provides 8' Sidewalks and 8' Landscaping

How popular was this cross section?

Option 4A was selected by 14 groups, or **27 percent** of the total, ranking **No. 1 overall**.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the following performance measures: *Historic and Significant Buildings, Economic Potential, Construction and Acquisition Cost,* and *Ability of City to Maintain Improvements*. However, based on total selections of performance measures in Exercise One of the workshop, groups selected Option 4A at a much higher rate than would be expected for what they identified as their top performance measures.

Why did people like it?

Bicycles

- 6' bike lane seen as comfortable.

Traffic

- Continuous turn lanes appear to be safer for making turns. *[CLARIFYING RESPONSE: a raised median with left turns and/or U-turns at controlled locations is safer than a continuous left turn lane. Evaluations conducted on streets where the continuous left turn lanes are replaced with a raised median report reduced crash rates of between 19 and 47%, based on research funded by the Federal Highway Administration.]*

Landscaping

- Positive reaction to trees and landscaping.

Overall

- Relatively inexpensive to construct and maintain, but improves functionality.
- Takes up the least amount of right of way while providing landscape and improved bike lanes. *[CLARIFYING RESPONSE: the 6' wide bicycle lanes in this alternative are a marginal improvement compared to the existing 5' wide lanes, and are TDOT's desired minimum treatment for major arterial streets. So, at best, the 6' wide lanes are a minimal improvement compared with existing conditions]*
- Creates a better bike and pedestrian community.
- Could allow for public art. *[CLARIFYING RESPONSE: all street cross section alternatives allow for some installation of public art, and 1% of construction cost is expected to contributed to public art for whatever street improvements are built through this project.]*

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Why did people not like it?

Bicycles

- No vehicle separation seen as bad for bicyclists, and that painted bike lanes by themselves do not encourage more bicyclists.
- Some concern that vehicular speeds might compromise safety. *[CLARIFYING RESPONSE: all street section alternatives and future alignments will be designed to the same speed, including design techniques to manage the speed of traffic, so vehicular speeds will be roughly constant for all alternatives.]*

Business

- Some concern that trees would block signs, and that businesses do not have a lot of options [if this alignment is chosen?] *[CLARIFYING RESPONSE: combination of landscape design and signage regulations allow for visibility of businesses.]*

Width

- Concerns that the 98' width would impact some historic buildings.

Landscaping

- 8' seems to be excessive to some.

Overall

- Need increased vehicular separation for comfort/safety [unclear if this refers to bikes or pedestrians].
- Ratings for future traffic increases appears to be uncertain and exaggerated. [*CLARIFYING RESPONSE:* The traffic projections being used for the Broadway Project are based on the most recent PAG population predictions and traffic modeling. To address concerns that these data are too high, a second set of projections 30% lower than the official projections is being evaluated as well. Also, in the next phase of the project the evaluation will include determining the extent to which the projections would have to be lowered for alternatives with fewer traffic lanes to produce an acceptable level of mobility performance.*]*

Additional findings and discussion

Option 4A was the most popular cross section identified, but based on performance measures indicated as most important by groups, it was selected at a much higher rate than expected. It should be noted that many of the comments dealt with the bicycling and pedestrian environment, which are better served by other alternatives. Nonetheless, the alternative's narrow width was seen as a favorable attribute.

Comments about this alternative were wide-ranging and sometimes contradictory. The very aspects which were liked would be pointed out to be disliked by other group members, such as the 6' bike lane or the 8' landscape widths.

Many comments suggested modifications, such as adding a median instead of a continuous turn lane; adding transit lanes; minimizing the landscaped area or sidewalk; making provisions for certain existing businesses; and widening bicycle lanes while narrowing landscaping.

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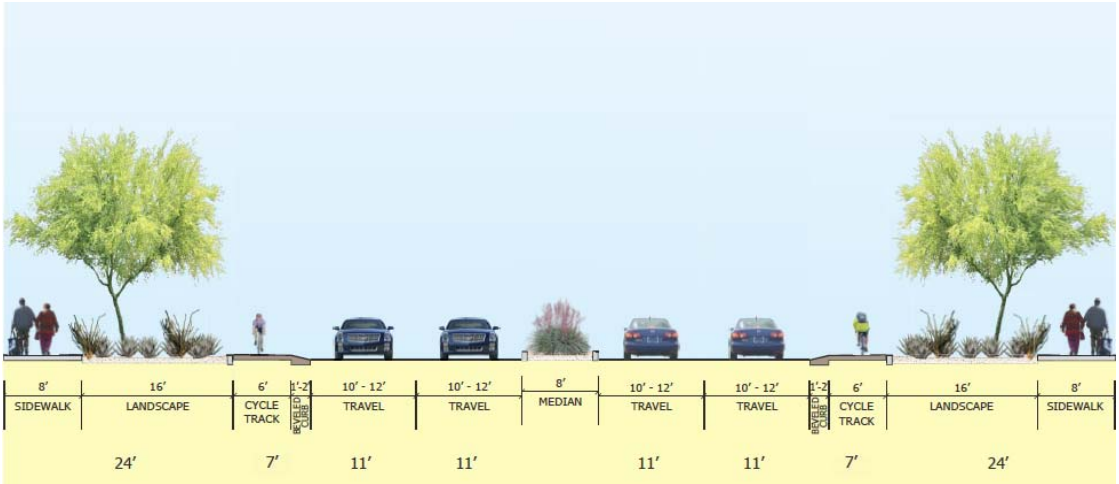
Option 4B



114' Right Of Way

- Provides 4 Travel Lanes and one 8' Median
- Provides 7' Cycle Tracks
- Provides 8' Sidewalks and 16' Landscaping

How popular was this cross section?

Option 4B was selected by 9 groups, or **18 percent** of the total, ranking **tied for No. 2** overall.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the following performance measures: *Pedestrian Environment, Bicycling Environment, Visual Quality,* and *Health Benefits of Walking and Bicycling.* However, based on total selections of performance measures in Exercise One of the workshop, groups selected Option 4B at a higher rate than would be expected for what they identified as top performance measures.

Why did people like it?

Bicycles

- Cycle Track seen as improving bicyclist safety and less interference from cars (a "straight shot").

Landscaping and Pedestrian Environment

- Landscaping seen as providing a more appealing pedestrian environment.
- Increased room for pedestrians.

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- A positive effect of landscaping is decreasing urban heat island effect.

Why did people not like it?

Transit

- Some concern that Option 4B does not have a dedicated transit lane.
- Some concern that vehicular speeds might compromise safety. *[See earlier clarifying response regarding consistency of design speed across street section concepts.]*

Bike

- Concern that traffic speeds will impact bike safety regardless of cycle track.

Business

- Some concern that lack of continuous left turn lane will impact business access.

Width

- Concerns that the 114' street width will impact historic buildings

Landscaping

- 16' seems to be excessive to some. *[CLARIFYING RESPONSE: The 16' width is a result of the use of a Sonoran Desert shade tree and its broad form, as well as the desire of TDOT's desired approach to not have trees overhang bicycle facilities. This will be explored in future development of design concepts to see if the width can be reduced while still allowing for shade trees.]*
- Concern that landscaping will affect visibility.

Overall

- Increasing street width seen as a waste of money.
- Concern for street noise.

Additional findings and discussion

Option 4B was tied for second most popular cross section identified. Most of the favorable comments dealt with improvements to the pedestrian and bicycling environment. Many comments in particular held a favorable view of the cycle track option.

However, there was some criticism about the width of the landscape and some requests to narrow this aspect of the design.

Additional comments raised concern that Option 4B did not include dedicated transit, and there was some interest in studying future transit such as light rail. There were suggestions that the median could be retained for transit use.

It can be noted that 4B also rates high or relatively high for 4 out of the top 5 most popular overall performance measures: Potential Historic and Significant Buildings Impacts, Pedestrian Environment, Bicycling Environment, and Visual Quality.

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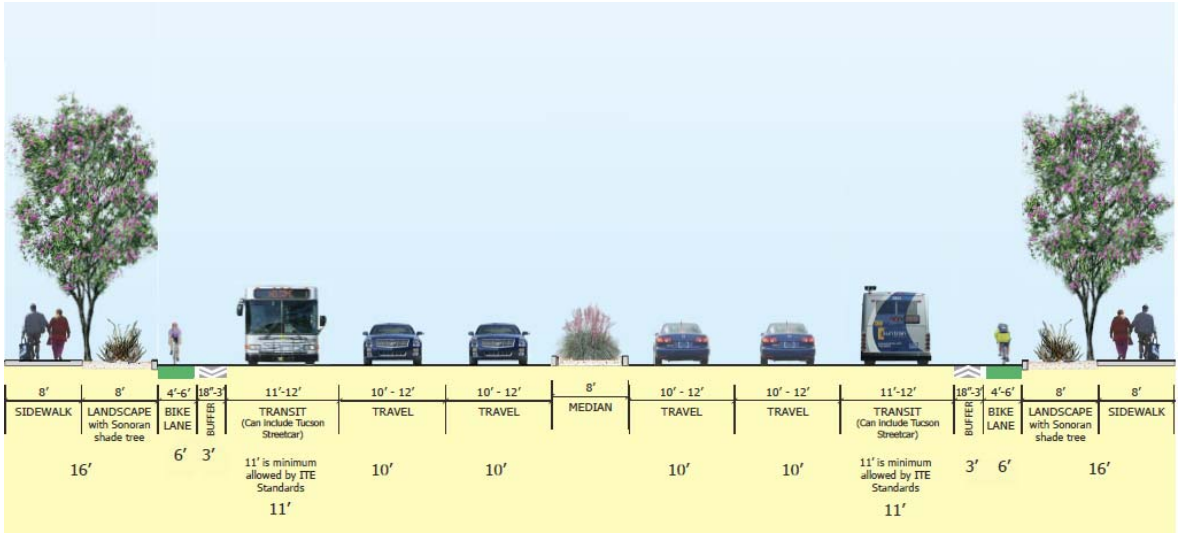
Of further interest is that many comments indicated preference for Option 4B not because of its narrow width, but because the option was perceived to be flexible for future transit, had ample room for pedestrians, bicycles, and landscaping, and had the potential of creating "more community."

Option 4+TA



124' Right Of Way

- Provides 4 Travel Lanes and one 8' Median
- Provides 11' Side-running Dedicated Transit Lanes
- Provides 6' Bicycle Lanes with 3' Buffer
- Provides 8' Sidewalks and 8' Landscaping

How popular was this cross section?

Option 4+TA was selected by 6 groups, or **12 percent** of the total, **No. 5 overall**.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the Visual Quality performance measure in Exercise One of the workshop. Groups selected Option 4+TA at an expected rate based on groups' identified top performance measures.

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Why did people like it?

Balance

- This section was seen by many as an acceptable compromise between transit, pedestrian and bicycling environment, landscaping, and street width considerations.

Pedestrian Environment

- Seen as still being easy to cross as a pedestrian.

Landscaping

- Favorable reaction to landscaping width.

Transit

- Favorable reaction to dedicated transit lanes.

Why did people not like it?

Width

- Seen as too wide.
- Median seen to add width without increasing functionality. *[CLARIFYING RESPONSE: replacement of continuous left turn lanes with raised medians is shown to improve safety, see earlier response.]*
- Concerns about impact to historic buildings.

Business

- Concern that some businesses would disappear.

Pedestrian

- 4 lanes+2 transit seen as prioritizing traffic over people.
- 4 lanes+2 transit seen as discouraging pedestrians.

Landscaping

- Landscaping as depicted seen as "barren."

Overall

- Criticism about no sense of place and having little context with existing environment.

Additional findings and discussion

Many of the favorable comments for Option 4+TA indicated that the section was a good compromise between transit, traffic, pedestrian, and bicycling needs. Most of the negative comments dealt with concerns over width and impacts to historic buildings and existing businesses.

Compared with other sections, there were few comments suggesting changes to the depicted cross-section, with the exception of a comment indicating preference for narrower travel lanes. The current section uses 10 foot lanes for mixed flow vehicles and 11' for dedicated

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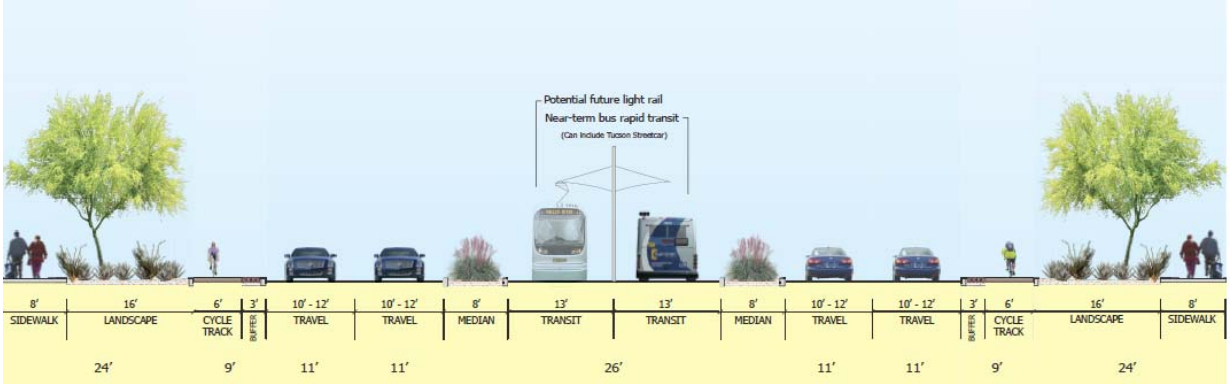
transit lanes. *[CLARIFYING RESPONSE: These lanes are the minimum recommended by the Institute of Transportation Engineers'* Walkable Urban Thoroughfares Manual *a national street design guidance document for context sensitive design of major urban streets. The design team will continue to work with TDOT engineering and design staff to design lane widths that are functional for the expected types of vehicles using Broadway and the target speed for traffic.].*

Option 4+TB



152' Right Of Way

- Provides 4 Travel Lanes with 8' Medians separating a Dedicated Transit Median
- Provides a 26' Dedicated Transit Median
- Provides 6' Cycle Tracks with 3' Buffer
- Provides 8' Sidewalks and 16' Landscaping

How popular was this cross section?

Option 4+TB was selected by 7 groups, or **14 percent** of the total, **No. 4** of overall selections.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the *Pedestrian Environment, Bicycling Environment, Accommodation of High-Capacity Transit,* and *Health Benefits of Walking and Bicycling* performance measure in Exercise One of the workshop. Groups selected Option 4+TB at a higher than expected rate based on groups' identified top performance measures.

Why did people like it?

Dedicated Transit Median

- Favorable reaction to dedicated transit lanes. Perceived as safer, and also allowing for higher transit speeds.

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- Landscaped side medians "more aesthetic," and additional width could allow for future changes.

Bicycling Environment

- Bicycle improvements as depicted could lead to increased bike ridership (juxtaposed against comment that building more travel lanes would lead to more cars).

Business

- Improved pedestrian and bicycle access seen as potentially attractive for businesses.

Why did people not like it?

Bicycling Environment

- Concern that bicycles and light rail are incompatible [*CLARIFICATION: unclear but comment likely related to a concern with bicycles crossing rails.]*

Landscaping

- Landscaping as depicted is too wide. *[CLARIFYING RESPONSE: see earlier response regarding 16 foot wide landscaping in discussion of section 4B.]*

Width

- Alternative seen as a "swath of destruction" in terms of impacts to existing and historic buildings.
- Some concerns that the Dedicated Transit Median does not offer any benefits compared to impacts of existing and historic buildings.
- Concern that the corridor does not have the uniform width along its length to consistently accommodate this alternative.

Business

- Some perception that the cost of losing businesses outweigh any other benefits this alternative might offer.

Additional findings and discussion

Many of the favorable comments for Option 4+TB dealt with the dedicated transit lanes, which were seen by some as improving safety and transit travel times. Some also commented that the included planted medians could increase aesthetics.

Most of the negative comments related to the overall width of the cross section and its impacts to existing businesses and historic buildings.

Suggestions for modifications to this section included an overall "compressed" section, but maintaining the characteristics depicted, if possible.

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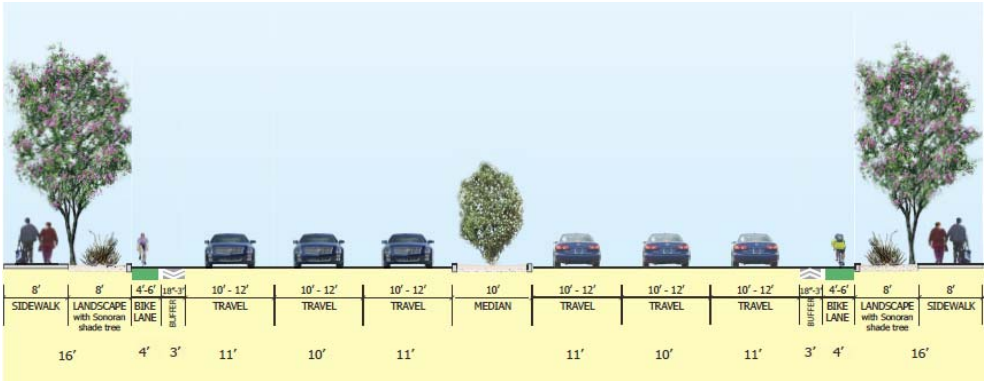
Option 6A



120' Right Of Way

- Provides 46Travel Lanes with 10' Center Median
- Provides 4' Bike Lane with 3' Buffer
- Provides 8' Sidewalks and 8' Landscaping

How popular was this cross section?

Option 6A was selected by 1 group, or **2 percent** of the total, tying with Options 6+TA and 6+TB for **No. 7,** or last place, of overall selections.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the *Visual Quality* performance measure and not at the lower end for any of the performance measures. Groups selected Option 6A at a much lower rate than would be expected for what they identified as top performance measures.

Why did people like it?

Width

- While the width of this alternative was primarily seen negatively, comments did indicate that there was a preference for a 6-lane street over an 8-lane street.

Landscaping

- Positive reaction to trees in the center median.

Why did people not like it?

Width

- Overall, Option 6A was seen to be too wide.

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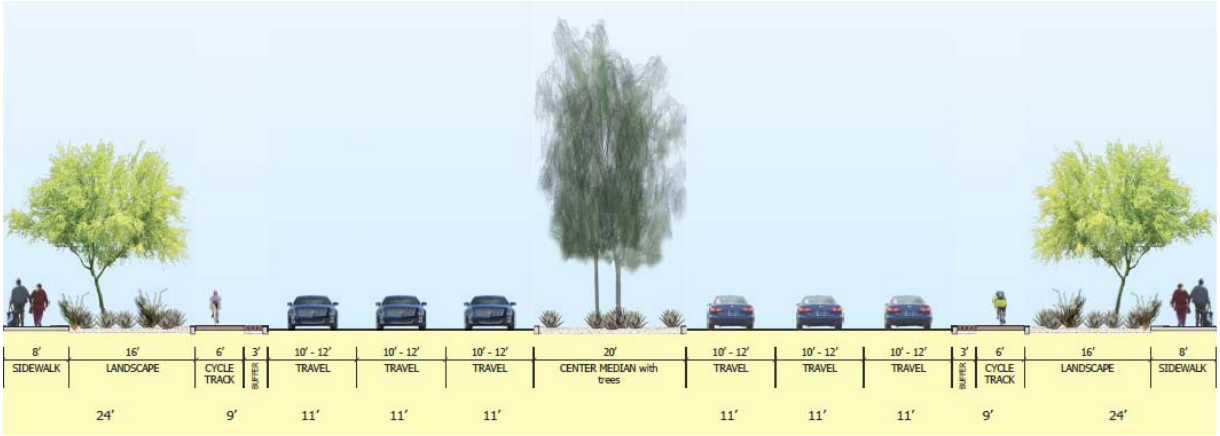
- Center median seen as unnecessary. *[CLARIFYING RESPONSE: see earlier clarifications related to medians increasing safety.]*

Additional findings and discussion

There were several comments suggesting modifications to Option 6A. Some examples are to change two of the 6 lanes to dedicated transit lanes and reducing the sidewalk size in lieu of wider bike lanes.

Option 6B



152' Right Of Way

- Provides 6 Travel Lanes with 20' Center Median
- Provides 6' Cycle Track with 3' Buffer
- Provides 8' Sidewalks and 16' Landscaping

How popular was this cross section?

Option 6B was selected by 3 groups, or **6 percent** of the total, ranking **No. 5 overall**.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the *Pedestrian Environment*, *Bicycling Environment*, and *Health Benefits of Walking and Bicycling* performance measure in Exercise One of the workshop. Groups selected Option 6B at a slightly lower rate than would be expected for what they identified as top performance measures.

Why did people like it?

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- 6B is the most important one on this table.

Width

- While the width of this alternative (152') was primarily seen negatively for this alternative, comments did indicate that there was a preference for a 6-lane street over an 8-lane street.

Transit

- While this alternative did not depict dedicated transit lanes, one comment stated that it could allow for it. *[CLARIFYING RESPONSE: In fact, alternative 4+T-B is also 152' wide and alternative 6B could be converted to the design of 4+T-B with reconstruction of the median and adjacent lanes.]*

Landscaping

- Positive reaction to the visual quality of trees in the median.

Median

- Median was perceived to increase safety.

Why did people not like it?

Width

- 6 lanes seen as too wide and would impact businesses.

Landscaping

- The amount of landscaping discussed as being too much.

Additional findings and discussion

There were several comments suggesting modifications to the section in order to emulate Speedway Boulevard (from Park to Campbell), which would reduce the width of the cross-section.

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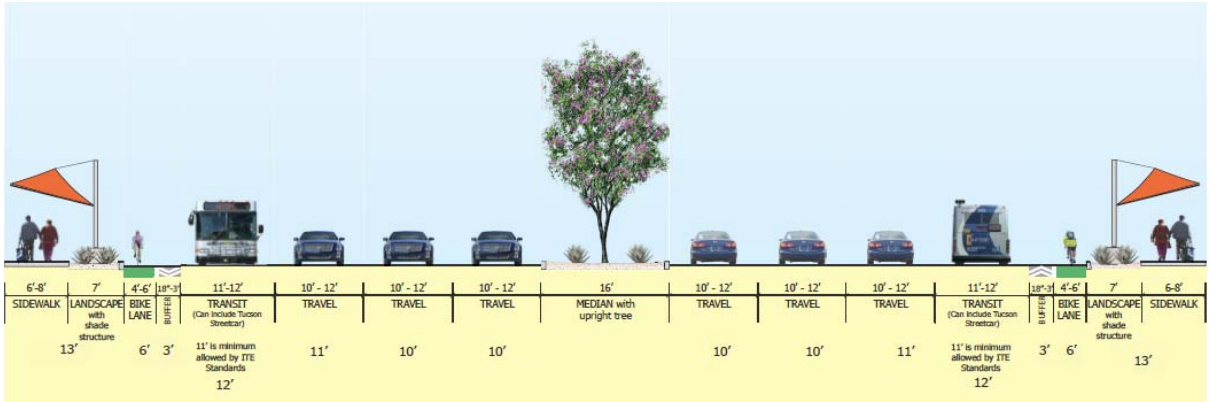
Option 6+TA



146' Right Of Way

- Provides 6 Travel Lanes with 16' Center Median
- Provides 2 Dedicated Transit Lanes
- Provides 6' Bike Lane with 3' Buffer
- Provides 6' Sidewalks and 7' Landscaping with Shade Structure

How popular was this cross section?

Option 6+TA was selected by 1 group, or **2 percent** of the total, tying with Options 6A and 6+TB for **No. 7,** or last place, of overall selections.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the *Traffic Movement*, *Transit Travel Time,* and *Accommodation of High Capacity Transit,* and *Ability of City to Maintain Improvements* performance measure in Exercise One of the workshop. Groups selected Option 6+TA at the expected rate for what they identified as top performance measures.

Why did people like it?

Transit

- Positive response to dedicated transit lanes.

Overall

- The configuration and amenities seen as favorable, but did not outweigh concerns about width.

Why did people not like it?

Width

- Negative comments nearly all included that this alternative is too wide.

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Construction and Acquisition Cost

- Many concerns that this alternative would cost too much.

Overall

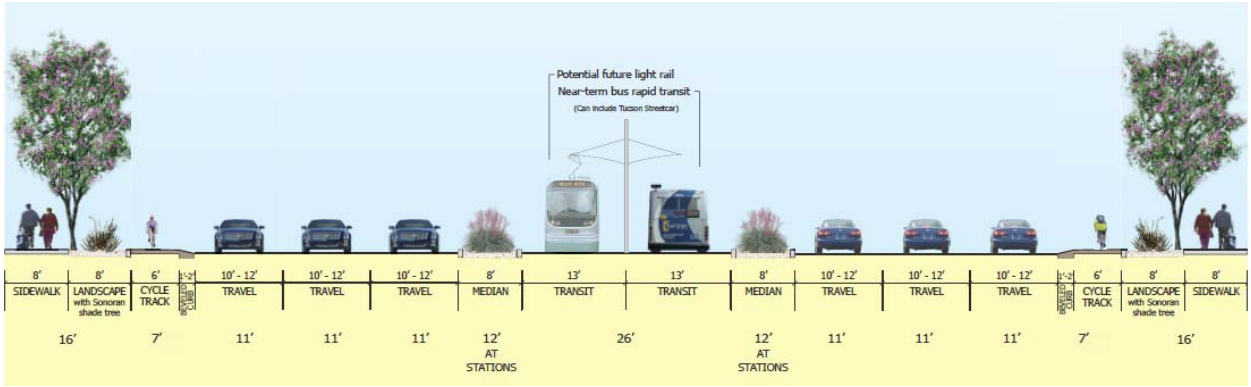
- Many concerns that this alternative does not fit with the character of existing neighborhood, despite how highly the cross section ranked in terms of performance measures.

Additional findings and discussion

Although there were a few positive comments about the types of improvements depicted, they were far outweighed by comments concerning width. However, it should be noted that Options 4+TB, 6B, and 6+TB depict sections that are wider than Option 6+TA. Overall, this suggests that it is the number of lanes and not the overall width that raises the most concern.

Groups' tendency to favor other alternatives other than Option 6+TA is understandable, as this section ranked poorly compared to other alternatives in 4 out of the top 5 performance measures: *Potential Historic and Significant Impacts, Visual Quality, Economic Potential,* and *Pedestrian Environment*.

Option 6+TB



154' Right Of Way

- Provides 6 Travel Lanes
- Provides 26' Dedicated Transit Median
- Provides 6' Cycle Track with 1' Beveled Curb
- Provides 8' Sidewalks and 8' Landscaping

How popular was this cross section?

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Option 6+TB was selected by 1 group, or **2 percent** of the total, tying with Options 6A and 6+TA for **No. 7,** or last place, of overall selections.

How did this cross section correlate with identified performance measures?

This cross section ranked highly with the *Traffic Movement, Transit Travel Time, and Accommodation of High Capacity Transit,* and *Ability of City to Maintain Improvements* performance measure in Exercise One of the workshop. Groups selected Option 6+TB at a less than expected rate for what they identified as top performance measures.

Why did people like it?

Traffic

- This alternative was seen to improve traffic flow.

Overall

- The configuration and amenities seen as favorable, but did not outweigh concerns about width.

Why did people not like it?

Width

- Negative comments nearly unanimous about this alternative being too wide

Construction/Acquisition/Maintenance Cost

- Many concerns that this alternative would cost too much, and would be difficult to maintain.

Overall

- Many concerns that this alternative did not fit with the character of existing neighborhood, despite how highly the cross section ranked in terms of performance measures.
- Perception that 8 lanes far more than is required for the corridor.

Additional findings and discussion

Although there were a few positive comments about the types of improvements depicted, they were far outweighed by comments concerning width. As with option 6+TA, 8 lanes was seen as more than is required.

One suggestion for modification was to remove the center transit median entirely [Note: This would create a section comparable to Options 6A/6B].

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INPUT PART 3: TRADEOFFS SUMMARY

One of the most important aspects of the design of context sensitive complete streets is the balancing of various transportation uses, and other non-transportation goals for the reconstruction of an urban street. This is particularly the case for urban streets with existing development that is valued by members of the community. Balancing the trade-offs between varied goals and deciding which goals to emphasize will be a challenge for the CTF as they move forward in developing the design concepts for improvements to Broadway Boulevard. This section of the public input summary describes the tradeoffs that groups discussed during the workshop and provides an assessment of what this input means in terms of the CTF's need to select a set of alternatives for further design and assessment and highlights key issues that should be explored as the project moves forward.

Transportation vs. place

The most discussed tradeoffs were among transportation aspects of the Broadway design (such as pedestrian environment, bicycle environment, the transit measures, and traffic movement) and more place-based aspects (such as historic and significant buildings, visual quality, and economic potential). There is one performance measure that is very directly a combination of transportation and place-based aspects of Broadway's design—health benefits of walking and biking. In these tradeoffs, groups largely came down on the side of the place measures.

Some groups, for instance, chose place-based performance measures and sections that scored well for these measures. For example, Table B selected largely non-transportation measures and the sections they selected (4A, 4B and 4+TA) performed well for these measures and not as well for transportation measures. This group discussed mobility, but its performance measure and sections selections reflect priority on place, historic structures, and short-term economic potential. Still, alternative 4+TA performs relatively well for many of the transportation performance measures.

In many cases, though, choosing both transportation and place performance measures forced a tradeoff in selection of cross sections, largely because better multi-modal facilities generally need more width, increasing the likelihood of additional right-of-way purchase and potential jeopardy for the existing built fabric and existing businesses.

Here are some specific tradeoffs discussed:

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Pedestrian environment vs. buildings/businesses/economic potential

Many groups wrestled with the tradeoff between a good pedestrian environment and preservation of existing buildings and businesses.[2] Table P struggled with balancing pedestrian and bike mobility and the business/economic prerogatives of not widening the right-of-way (ROW). *"Difficult balance to strike—road width vs. bike/ ped facilities which contribute to overall ROW width,"* one comment stated. *"I would favor other modes over automobiles but overall I'd be willing to trade bike/ped width improvements for not widening traffic lanes—maybe 11 ft. lanes?"* The group's selected sections seemed to prioritize pedestrian environment (4-A, 4-B, 4+TB, and 6B); three of these being the highest ranked for pedestrian environment.

In many cases, groups were able to balance these priorities with the four-lane street sections, which both had a pedestrian realm that scored neutral (marked with the symbol '○') to high (marked with a range of one to three '+' symbols depending on the alternative), and also scored high in the place related measures. 4B had a top score in the pedestrian measures. For Table L, for example, saw shade as an important consideration—a balance of shade and landscape was needed, but the group felt that the existing ROW is the preferred one, and should not go wider. The group chose 4+T SATA and 4A.

Some groups tried to suggest changes to cross sections to achieve more balance between the pedestrian environment and historic/economic goals – either narrow cross sections with requests for better pedestrian facilities or good pedestrian cross sections with requests to narrow them. Table J preferred not widening from existing width but wanted to add lighting, better traffic controls, and better pedestrian crossings. The group addressed this tradeoff by selecting option 4+T SATA (existing ROW) only if both the pedestrian and bicycling can be improved. It also asked if landscape buffer could be narrowed and *"Please include physical barriers as a possibility to protect pedestrians from traffic in order to keep the width narrower. The wide separation between traffic and peds doesn't have to be as extreme with physical buffer."*

Table R had a similar approach. *"Wide pedestrian area is good, yes, but that would wipe out business,"* participants said. The group chose Option 4A for more study with some consideration for reduced landscaping.

Table B illuminated the connection made by many participants between pedestrian environment and place aspects. Perhaps this was why many sought to balance this tradeoff. *"Many of the performance measures are linked - bicycling and pedestrian environment = sense of place,"* said someone from Table B.

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[2] *CLARIFYING NOTE: designing the street improvements to avoid impacts to existing buildings, whether historic district contributors or not, does not ensure the preservation of these buildings. The property owner can modify or demolish historic contributing buildings given existing land use regulations.*

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What does it mean?

- There is a need to explore design solutions that achieve a better pedestrian environment in an efficient amount of width.
- Further define the potential effects of access and parking impacts to the viability of historic and significant properties.
- Define the viability of providing public pedestrian access within the space between the roadway and existing buildings, and if it is viable for the access to be on private property.
- Explore alternatives to trees within the public right of way for providing shade to pedestrian areas.
- There is a lack of belief in the assessment of pedestrian environments. Further definition of local pedestrian supportive environments and examples from similar desert climates may be needed.
- Define the potential for high-quality pedestrian environment to contribute to the economic potential for the study area.

Bike mobility vs. buildings/businesses/economic potential

Some participants saw a tradeoff between the room needed for a safe, quality bike facility on Broadway and the preservation of buildings and businesses[3]. Table O chose Bicycling Environment as one of its performance measures, but the group decided to make significant "sacrifices" to the bicycle environment in the cross section selections (4+T SATA and 4A) as a tradeoff for better historic/economic/cost to maintain performance. The table's participants made some comments related to providing parallel bike boulevards instead; or, replacing the landscaping with bike lanes.

At Table L, one person supported separating bikes from cars for safety, but another stated: *"reduce speed limit to reduce bike lane width. Do not use bikes as excuse to demolish buildings on Broadway".*[4] The table seemed to trade the bike environment for economic potential in its performance measure selections.

Table D, however, appeared to do the opposite – trade Historic and Significant Buildings for Bicycling Environment, choosing the three best-performing sections for bicycling environment (4B, 4+TB, and 6B).

What does it mean?

- Clarify that the City requires a six-foot bike lane on Broadway Boulevard at a minimum; alternative parallel routes do not negate this requirement.

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[3] *CLARIFYING NOTE: designing the street improvements to avoid impacts to existing buildings, whether historic district contributors or not, does not ensure the preservation of these buildings. The property owner can modify or demolish historic contributing buildings given existing land use regulations.*

[4] *CLARIFYING RESPONSE: a reduction in vehicle speed below the assumed 30 to 35 mph design speed for the alternatives does not reduce bike lane width below the 6 feet desired minimum.*

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- Explore options for minimizing the width of bicycle lanes in relation to the pedestrian realm and vehicle lanes.
- Define the potential for high-quality bicycle access to contribute to the economic potential for the study area.

Dedicated transit vs. buildings/businesses/economic potential

In general, transit was strongly considered as a reason to sacrifice some of the building fabric/existing businesses. Several tables had conversations about this tradeoff. One person from Table H indicated that better transit was the sole reason that historic buildings should be disturbed – *"Why would we destroy historic buildings when there is no benefit of dedicated transit lanes?"*

Noted discussions amongst participants at Table M included: *"sense of place; want a good looking street with character rather than a straight street that would not draw people; Broadway amazing place now – group leaned toward historic buildings more than transit."* This is reflected by their selection of cross sections that perform better for historic buildings than for high capacity transit (4A and 4B) although they did select the narrowest dedicated transit lane option (4+TA) which achieves a balanced neutral performance for high capacity transit and historic and significant buildings.

Table H, meanwhile, said: *"Would hate to see the businesses go, but they've been there for many years and don't really have much eye appeal. Many may be willing to make improvement [for better transit]"*.

The way this group seemed to address this tradeoff is to try to satisfy both at the detriment of vehicular traffic performance, choosing one top section for each Accommodation of High Capacity Transit and Historic and Significant Buildings, and a compromise option performing in the middle for each (Option 4+TA), which *"doesn't take out as many of the businesses, adds transit and bike lanes."* They also selected 4+T SATA and 4+TB the other narrower alternatives that seek to accommodate high capacity transit.

It's also important to note that many saw transit as a spatial issue because of the focus on accommodation of high-capacity transit rather than transit travel time. Table F seemed to try to balance the flexible accommodation of high-capacity transit and other place-based aspects. The group really liked 4+TB, noting it *"provides for bus and rail transit, it's wide enough for more aesthetic* [design within the right-of-way]*, and additional width allows for changes".*

What does it mean?

- The potential for a "hybrid" approach to allow for the provision of dedicated transit needs to be explored; provide a dedicated lane where space allows and at transit stops, and transition to mixed flow where a narrower street achieves other goals.

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- Define potential policy tradeoffs if Broadway is defined as a transit-emphasis street where some lesser level of vehicular performance is acceptable in order to achieve better transit performance.
- Define the level of traffic growth reduction that would be needed for 4+T approach to perform at same level as six mixed flow lanes and 6+T options for vehicle mobility, if these larger cross sections are selected for further design and assessment.

Traffic movement vs. buildings/businesses/economic potential

Traffic movement seemed to be the first thing sacrificed for a higher performance in terms of potential impact to of existing buildings and businesses. Almost all groups were not willing to trade the loss of existing buildings and businesses for more auto capacity. In some cases, participants wanted to see less auto capacity.

Participants saw a direct adverse effect of more lanes and traffic on the sense of place along Broadway. Table Q: "*Concern that widening Broadway for vehicular traffic will create a high-speed street. The belief is this will hurt economic potential, pedestrians, bicyclists, and the historic aspect of the study area*." Three individuals at the table felt that sense of place was quite important. Mobility took a back seat to maintaining a sense of place. The group was willing to compromise between transit accommodation and historic aspects with their selection of alternative 4+TA. Table M: *"Wider roads encourage faster traffic that is detrimental to businesses, pedestrians, bikes, sense of place, visual quality, and historic context. The existing ROW or just slightly larger not to exceed 98' ROW is preferred. I am concerned with wider roads having a negative impact on people in all ways."* Again, this group selected alternative 4+TA, which may be because of its better performance for accommodation of high capacity transit.

Others, however, did try to balance this tradeoff. Table I, for example, tried to evenly balance traffic and historic buildings. The group chose 4A, 6A, and 6+TB (without the 26' transit in the middle & with three lanes). There were statements of *"Don't think every building needs to be kept"* and that those with historic value should be kept.

This tradeoff also meant, for some participants, varying the street design to both the nuances of the traffic needs and 'sense of place'. Table A commented that we should *"consider wider east quadrant (Campbell to Country Club) and narrower west quadrant - different needs of traffic volumes."*

What does it mean?

- Potentially identify one street design alternative for future study that maximizes the capacity of a four-lane cross section through access management, signal improvements, and other intersection design features. In addition, identify the decrease in traffic growth that would be needed for the resulting four-lane design to perform similarly to larger 6 or 6+T design concepts.

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- Further design development of selected street design alternatives should consider the potential for:
  - Varying the number of lanes and other design treatments in relation to the varied levels of demand along Broadway and the variation in historic/significant buildings and placemaking that exist along Broadway.
  - Assessing both the safety and congestion benefits and impacts of providing additional traffic lanes at intersections rather than for entire segments of Broadway.
- Further definition of potential for speed management to reduce speeding and reduced congestion, pavement materials, and other measures for reducing noise impacts.

Tradeoffs among transportation modes

In general, participants discussed the tradeoffs among different transportation modes much less than they did the tradeoffs among aspects of mobility and place.

Traffic movement vs. multi-modal mobility

Some tables wanted to push for a reduction of lanes from the current four/five lane configuration, to both save buildings and businesses and add multi-modal mobility features. A participant at Table E, for example, said, *"Cross section alternatives do not seem to give an option for sacrificing an automobile lane for an alternative mode of transportation. There is an assumption of keeping the four lanes we now have even if we add enhancements or extra lanes for wide sidewalks, bike lanes, or special rapid transit lanes. What about narrowing auto lanes, if necessary, to accommodate extra width for landscaping, or bike/pedestrian/people-moving transit?"*

Others tried to balance different types of mobility within the constraints of not affecting existing buildings and businesses. At Table Q, "one individual kept going back to keeping the ROW width and playing with lane and buffer widths to achieve the balance of mobility and pedestrian/visual aesthetics." Through negotiations the table agreed to move forward with the 4+TA section, but the group also chose the 4+T SATA section – they commented that it maintains existing ROW, and even though it scored poorly in all but one of the performance measures the group identified it as being most important.

Bike mobility was also cited as something that vehicle mobility should be traded for. "Can we have fewer lanes?" asked someone from Table E. *"'Why can't we use what we already have? Narrow lanes, keep businesses, with more bikeability.' The example of Mountain Avenue was given, where vehicle lanes were taken away to give bike lanes."*

What does it mean?

- Review and clarify minimum acceptable mixed flow traffic lane width; is something narrower than 11 feet possible?
- Review other street width design criteria and clarify potential ranges and reference related design standards and safety research.

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Other tradeoffs discussed

A variety of other tradeoffs were discussed by participants, involving both performance measures and other aspects of the planning and design of Broadway.

Landscape vs. other things

Landscape was often identified as something to reduce, or to eliminate to reduce the width of the cross section. Many groups who struggled to fit multi-modal facilities within the existing or other narrow cross-section targeted landscape. Table R, for example, selected 4A, but minus the eight-foot landscape area. Table O wanted to replace the landscaping in the 98-foot 4A section with a [better] bike lane.

Table D had much discussion about the tradeoff between the benefits of landscape and the space it takes up. One key discussion point was landscaping for beautification with a minimal impact of space. One person wrote, *"I love the rain gardens on 9th/10th St. in Rincon Heights. Though it is true some need more maintenance. No problems seeing them at night or safety issues. In fact, the one by my house prevented two possibly more serious accidents. Plus, great wildlife habitat for birds, bees, butterflies..."*

Some groups made suggestions on how to reduce the space needed for landscape. Table D chose 6B but with the caveat – *"I hate this: Is six lanes and that's no good because they are taking space from business, for trees? Not a good idea."* The group chose Option 6B – but without landscape – *"similar to Speedway, Park to Campbell Cross Section."* Table G, likewise, said *"landscape is calming and provides shade for pedestrians,"* but in their selection of Option 4B, suggested to reduce landscape area to 12' in order to make room for a future light rail line. Table C recommended that "*to obtain more landscaping in a smaller area, to consider using trees with grates (a public art opportunity)."*

Members of Table A and Table O suggested addressing the landscape/historic building tradeoff by putting landscape on private property and/or property owners maintaining it.[5]

What does it mean?

- Clarify the purpose of landscape, particularly trees, as infrastructure for pedestrians.
- Revisit dimensions of landscape space, tree species selections, and relationship of bicycle lanes to tree canopy (current city practice is to design facilities so that trees do not overhang bicycle lanes).
- Clarify the difficulties of relying on landscaping within private property to provide shade for pedestrians (1. this is not a current city standard, and 2. revisions to development

[5] *CLARIFYING NOTE: current land use regulations do not provide the opportunity to require private property owners to provide landscaping that shades public sidewalks.*

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standards to accommodate such a provision are challenging) and other potential pluses and minuses of this kind of approach for providing shade.

Preserving existing business and buildings vs. potential for new growth

This tradeoff gets at the balance between short-term and long-term economic growth. This topic was primarily discussed at Table F. That group saw 4+T A as a *"modest compromise with width & overall potential/opportunity to provide new motivation & impact to business/visual/access."* The group chose 4B, 4+TA, 4+TB to *"find a sweet spot; compromises with economic potential."*

What does it mean?

- Continue to develop an economic framework for the properties along Broadway that provides policy recommendations for supporting the desired range of economic futures for Broadway.
- Provide information from research and case studies of impacts to businesses and buildings resulting from major urban street reconstruction projects.
- Provide additional information to the CTF and public about the range of possibilities for improving economic vitality along Broadway, from both public policy, private development, and small business owners' perspectives.

Cost vs. more multi-modal features

Some participants discussed the tradeoff between multimodal features like sidewalks, landscape, transit lanes and bike facilities and the higher costs associated with including more of these. Table M stated that 4A is *"relatively cheap, protects context, but still improves functionality."* The group chose both 4A and 4B to include even tradeoff of pedestrian environment and cost.

What does it mean?

- Give strong consideration to capital and maintenance costs of potential street improvements as the design concepts are developed in the next phase of the project.

Doing it right vs. not doing it at all

Several groups framed the Broadway project in terms of wanting to do it right or else not do it at all. Comments noted at Table K described the participants having an *"All or nothing attitude…Some* [participants] *thought: Broadway isn't broken—don't fix it. Traffic projections of the past have not panned out. Climate change (rainfall, temperature) is likely to discourage non-vehicular traffic. Growth sustainability is dependent on water supply and we are at the end of the CAP straw."* Others thought "*we need to make it count' meaning we need to widen the road and get value out of the project."* This group remained polarized on this issue, splitting with a five votes (narrower) to two votes (wider). Ultimately, the group

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selected the 4+T SATA, 4A, and 4+TA alternatives, three of the narrowest cross sections, their selection of 4+TB was a tradeoff between their transportation related performance measures and their non-transportation measures.

Table A wondered why bother expanding if not more than four lanes: *"As existing, waste of time and money."* Interestingly, the group then selected the two narrowest alternatives 4+T SATA and 4A, and one of the widest 6+TA. Table F said, *"very seldom buy a house & say 'I wish I had less space'. If it's worth doing, it's worth doing right. Tucson has historically not considered growth….If you are going to spend money, you need to do something."* This is reflected by the group's selection of alternatives 4+TA, 4+TB, and 6B that add lanes either for transit or through traffic.

What does it mean?

- Continue a planning, design, and decision-making process that allows for informed decisions and definition of improvements that balance and address the range of desired project performance measures so that the CTF can recommend a set of improvements that *"do it right."*

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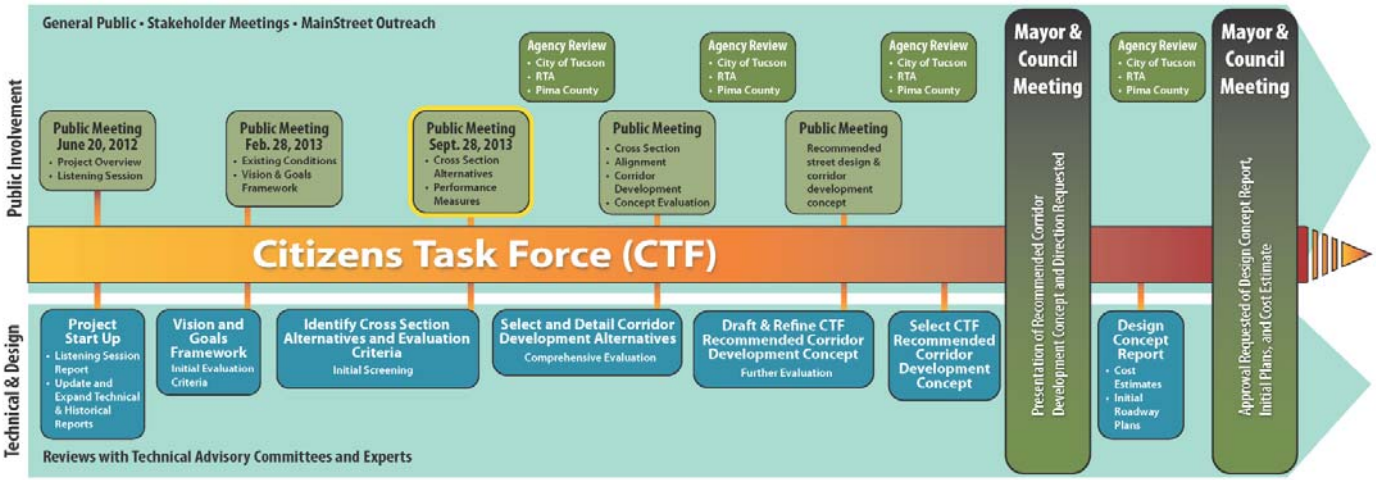
Next Steps

The public input received at the September 26, 2013 Planning Update Community Workshop Event will be critical in helping the CTF and the project team decide on the three to four street width (cross section) design alternatives that will be advanced for further study and analysis as well as stakeholder agency review. The advanced analysis of these cross section alternatives will help the CTF and project team to develop initial draft corridor concepts, which will be presented to the public for their input at next public meeting #4.

As the CTF moves further into the planning and design phase, the public and stakeholders will have more opportunities to provide input at key points in the design process that will help inform the roadway's design and "final" alignment. A framework of these strategic decision points in relationship to the key Planning & Design phase work can be seen in the diagram below.



The ultimate products of this process will be a Mayor and Council-approved Design Concept Report (DCR) and initial construction plans (15%-30%). The DCR will define many of the physical aspects of the selected corridor development approach.

This event report, all current and future CTF meeting summaries, and the results of all activities associated with the public involvement process will be made available to the general public and decision makers via the project website and regular updates. The goal is to create a way for anyone in the community to gain a better understanding of the input and processes used to develop the DCR and plans. It will also give decision-makers from all sponsoring agencies a tool with which to see how the equitable and community-supported recommendations, which this public process seeks to produce in the end, was developed.

Please visit www.tucsonaz.gov/broadway for more detailed information.

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