STREETScape improvements - recommendations

The key component of downtown’s public realm, apart from its public spaces, is its street network. Downtown Tempe has one extremely strong street in Mill Avenue, roughly between Third Street and University Drive. A few of the other streets, like West 6th Street, also have good streetscapes and street walls, but most are inconsistent—they may have a couple good storefronts or a hundred feet of good streetscape.

Most of the major streets are too oriented toward moving car traffic as quickly as possible through downtown. These include Mill Avenue south of University, University Drive, Rio Salado Parkway, Ash Avenue, and even 5th Street. These streets are bad for downtown retailers—slower vehicle traffic has been shown to benefit them—bad for pedestrians and cyclists, and bad for attracting potential downtown residents, employers, and employees who want downtown Tempe to “feel urban.” A big part of that feeling is walking comfortably on a street with traffic (that moves at a pace that isn’t life-threatening) and being able to cross the street easily and safely.

Figure 4.3.1 - A map of all of the recommended streetscape improvements.
While improving the streetscape of every block is important over the long term, there are several blocks and corridors that should be a higher priority. Rio Salado Parkway is a major obstacle to creating a single, connected downtown. 5th Street and Farmer Avenue are both important connectors between new development and the downtown core. Many blocks, like 4th Street, could be rebuilt to reconnect the street grid; it’s provided as an example that could be applied to other blocks.
Improving the streetscape and edge treatments on Rio Salado Parkway would encourage pedestrians to walk there and help create an active front door to Tempe Beach Park. As discussed elsewhere in this report, Tempe Beach Park has a weak perimeter, and the intimidating highway one has to cross to use the park is a major obstacle. The new mixed-use development at Rio Salado Parkway and Mill Avenue as well as the former U.S. Airways office building would greatly benefit with this improvement.

For the block of Rio Salado Parkway between Mill and Ash Avenues, the following recommendations are illustrated graphically in Figure 4.3.2, Figure 4.3.3, and in Appendix D:

1. Create a high visibility mid-block pedestrian crossing to improve pedestrian accessibility to Tempe Beach Park.
   a. Utilize the existing median between left turn lanes for a pedestrian refuge zone or landing.
   b. Create a new pavement treatment with pedestrian signage to clearly identify the crossing.

2. Activate both sides of Rio Salado Parkway by providing opportunities for new retail and/or mixed use development to create activity on the sidewalk and along Tempe Beach Park.
   a. Partner with U.S. Airways building's property owners to add freestanding retail/commercial uses in the plaza and a landscape area fronting Rio Salado Parkway.
   b. Convert the vehicular drop-off area in front of the U.S. Airways building to a pedestrian plaza activated by edge uses to create a new, pedestrian-focused entry experience for the office building.
c. Consider incorporating an artful shade structure to protect stored bicycles from direct sunlight.

3. Widen and enhance the sidewalk on the north side to integrate it better with Tempe Beach Park.

4. Improve access and visibility into Tempe Beach Park by removing physical barriers (baseball field, fences and walls).
   a. Remove the stone wall and fence that creates a physical barrier to accessing the park for more than a 300-foot stretch of Tempe Beach Park.
      i. Expand the sidewalk area along Tempe Beach Park to buffer pedestrians from vehicular traffic.
      ii. Create a second row of trees that aligns with the existing street trees to create a walking alley and seating area.
   b. Remove and relocate baseball field, which is a remnant of when Tempe Beach Park functioned more as a recreation park, to better utilize the high-valued real estate frontage for future development. Such development might include a new park restaurant or mixed use development as an activator on the park and street.

5. Integrate the new bike corral into the park's design and remove the fence around it.
   a. Create physical improvements that build a stronger visual connection between the new bike corral and the park, versus something that's attached yet separated.
   b. Remove the fence surrounding the new bike corral to make it more inviting and improve flow into Tempe Beach Park.
   c. Add new native, drought-tolerant landscaping and pervious paving materials to better define the corral as part of a shaded park “room.”
   d. Consider incorporating an artful shade structure to protect stored bicycles from direct sunlight.

6. Allow Rio Salado Parkway to be limited to pedestrian traffic for major events, and to be used for event programming.
   a. Allow some event facilities to be placed in the street to reduce abuse of the grass turf and landscaped areas in the park.
   b. Remove the raised curb adjacent to the left turn lanes create a more plaza-like treatment, continuing the pavement pattern in front of the U.S. Airways building to delineate left turn lanes.
Farmer Avenue is the western edge of downtown Tempe. It has popular new restaurants and housing that's relatively dense compared to Tempe's more suburban areas. The corridor of undeveloped land west of the railroad tracks might be the best opportunity to create an edge of dense development that transitions into this less dense housing, which creates a buffer between downtown and suburban Tempe. Dense housing or office development on or near Farmer Avenue will also support the proposed street car.

In order for Farmer Avenue to realize its potential, it needs a stronger connection to Mill Avenue via 5th Street (discussed below) and a much stronger streetscape. The City of Tempe and the Downtown Tempe Authority should create a consistent pedestrian experience and an “eclectic” streetscape that builds upon the art in the Farmers Arts District, reaching from the Maple Ash Farmer Wilson artist community to Tempe Town Lake.

For the blocks of Farmer Avenue between Rio Salado Parkway and University Drive, we recommend the following:

1. Incorporate “sharrows” markings on the street and appropriate signage to indicate a shared roadway between bicycles and vehicles

2. Consider adding artful shade structures, as appropriate, centered between each street tree along the curb or attached to existing/future buildings to increase shade coverage. These structures along the curb should not supersede locations for street lights.

Figure 4.3.4- A street section of the recommended streetscape improvements for Farmer Avenue from 1st Street to 5th Street.
For the east side of Farmer Avenue from 1st Street to 5th Street, the following recommendations are illustrated graphically in Figure 4.3.4, Figure 4.3.5, and in Appendix D:

1. Create a consistent public sidewalk experience.
   a. Expand sidewalks to a minimum of ten feet wide. Taking any obstructions into account, create a minimum seven-foot-wide unobstructed walking path.
   b. Create a planting zone against the curb, with a minimum width of three feet and maximum width of five feet that includes street trees, lighting, signage, and the option of incorporating various types of pervious paving and native, drought-tolerant plantings.
   c. Install pedestrian street lamps, located 50 to 65 feet apart, on center.

2. Create new parallel parking spaces on the street interrupted by street trees planted every two parking spaces.
   a. Plant new street trees, located in tree grates against the curb or within the eight-foot-wide parking zone through curb extension bulb outs (including protruding triangles wedges that exist today), floating bulb outs, in structural tree grates with a cage around the trunk, or planters.
   b. Incorporate special paving treatment to define parallel parking spaces, similar to the Encore on Farmer senior housing project.

3. Support opportunities to incorporate rotating public art as a major component of the streetscape experience.
   a. Consider painting an artful pattern over the driving lanes of the street from 1st to 5th Streets.
   b. Work with property owners to allow artists to create murals on blank building walls, property walls, fences, utility boxes, fire hydrants, etc. of existing development.
   c. New development should consider opportunities to allow for artful treatment or overlay on portions of façades. Avoid creating long blank walls facing the street, especially at the street level.
   d. Where building setbacks allow, incorporate sculptures and other freestanding art installations.
For the west side of Farmer Avenue from 1st Street to 5th Street, the following recommendations are illustrated graphically in Figure 4.3.4, Figure 4.3.5, and in Appendix D:

1. Incorporate pedestrian lighting behind the sidewalk, spaced 50 to 65 feet on-center.

2. Where existing sidewalk dimension are set along the curb and parallel parking exists, add new street trees within the eight-foot wide parking zone, spaced no less than every two parking stalls in curb extension bulb outs, floating bulb outs, structural tree grates with a cage around the trunk, or planters.

3. For areas where building setback depth allows, follow the streetscape standards as defined for the east side of Farmer Avenue.
5th Street (Farmer to College Avenues)

5th Street is a major connection between several of downtown's most important assets. It connects the residential neighborhood to the west to the center of downtown, and the center of downtown to the Tempe Transportation Center and Sun Devil Stadium. It will also be a main pedestrian corridor if the proposed streetcar is built according to plan, as there are planned stops on 5th and Mill Avenue, and 5th and Ash Avenue. If the City and the DTA are committed to Tempe as a convenient and pleasant place to walk and bike, 5th Street should be a high-priority corridor for demonstrating that commitment.

The City of Tempe and the Downtown Tempe Authority should prioritize the pedestrian experience by reducing the proportion of space dedicated to vehicles and increasing the space for walking, biking, and skateboarding.

For the blocks of 5th Street between Farmer and College Avenues, the following recommendations are illustrated graphically in Figure 4.3.6, Figure 4.3.7, and in Appendix D:

1. Shift a single travel lane and parallel parking toward the roadway’s center line, eliminating the center turn lane and growing the pedestrian and bicycle zones against the sidewalk.
   a. Restripe the road to move the car travel lanes on either side of the roadway’s center line.
   b. Move the parallel parking away from the curb and directly against the travel lane.
   c. Plant trees every two parking spaces, within the eight-foot-wide parking zone in floating bulb outs, structural tree grates with a cage around the trunk, or planters.

![Figure 4.3.6: A street section of the recommended streetscape improvements for 5th Street from Farmer Avenue to College Avenue.](image-url)
2. Move the bike lane toward the existing curb and created a landscaped buffer zone between the bike lane and parallel parking spaces to create a protected bike lane.

   a. Create six-inch raised curbs with periodic breaks to maintain existing drainage and to create a defined edge between parking and the landscape zone.

   b. Within the landscape zone

      i. Move parking meters.

      ii. Incorporate native, drought-tolerant plantings in pots and planter boxes.

      iii. Paint a pattern on the street to delineate the bike lane.

      iv. Add trees in boxes and shade structures to improve shade for bicyclists as well as pedestrians.

      v. Create bicycle corrals and bicycle parking racks.

      vi. Incorporate pedestrian furniture and lighting.

      vii. Incorporate art.

3. Rework the intersection at Mill Avenue to introduce bulb outs and reduce the distance pedestrians have to walk to cross the street.
4th Street (Mill to Maple Avenues)

4th Street, west of Mill Avenue, is an opportunity to restore the street grid in downtown Tempe by extending 4th Street from Mill Avenue through to Maple Avenue. However, the change does not mean that the street could not be closed for special events by keeping the street at the same grade as the sidewalk and plaza.

For 4th Street from Maple Avenue to Maple Avenue, we recommend the following:

1. Remove the existing fountain and structure to allow 4th street to fully extend to Maple Avenue.
2. Preserve the existing head-in parking east of the alley.
3. From the existing alley west, convert the existing and unused plaza space (including the area that had the fountain) into the new street extension.
4. Create a consistent street tree along the edge of the curb for the new street extension.
5. Create a new plaza pavement treatment through the entire width of the street from Mill Avenue to the first parking entrance on Maple Avenue across from the Hackett House.
   a. Create a six-inch apron to raise the street to the same height as the sidewalk.
   b. Provide bollards to demarcate pedestrian spaces versus vehicular spaces (street, parking, and drop off areas).
6. Allow Hayden Station to reach south to the backside of the sidewalk (no parking to disrupt the pedestrian experience).
7. Create a new infill commercial use in front of the parking deck and across from the Hackett House to better activate the frontage along the new street extensions to allow one way access north and east. This could be a modular or temporary building.
STREETSCAPE IMPROVEMENTS - IMPLEMENTATION

In general, the order in which streetscapes are improved should be tied to adjacent real estate development. However, the City of Tempe has allocated funds toward improving 5th Street; given its importance in the overall street network, addressing it first is a good idea. With a separated bike lane and plenty of shade, it is a good template for other high-traffic, multi-modal corridors in Tempe.

This plan recommends the following streetscape improvements be undertaken on the following schedule:

<table>
<thead>
<tr>
<th>Street</th>
<th>Schedule for Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rio Salado Parkway (south side)</td>
<td>In conjunction with the ongoing redevelopment of the former Monty’s restaurant and the planned improvements to the driveway plaza of the former U.S. Airlines building</td>
</tr>
<tr>
<td>Rio Salado Parkway (north side)</td>
<td>Along with redesign to Tempe Beach Park</td>
</tr>
<tr>
<td>Farmer Avenue</td>
<td>At the same time as the planned mixed-use development between 1st and 5th Streets</td>
</tr>
<tr>
<td>4th Street</td>
<td>When the fountain and metal structure are removed</td>
</tr>
<tr>
<td>Ash Avenue</td>
<td>When the streetcar is built; if streetcar isn’t built, as soon as that is known</td>
</tr>
<tr>
<td>Mill Avenue (west side, south of University)</td>
<td>As soon as possible</td>
</tr>
<tr>
<td>Mill Avenue (east side, south of University)</td>
<td>Along with planned mixed-use development and conference center</td>
</tr>
</tbody>
</table>

Financing Streetscape Construction

To speed up the pace that streetscapes are improved, the Downtown Tempe Authority should consider using section 63-20 of the Internal Revenue Service code. This allows nonprofit corporations like business improvement districts to issue bonds backed by the credit of the assessments they make on property owners. Because the assessments supersede any liens apart from taxes, business improvement districts are able to obtain investment-grade ratings for these bonds, and the investments are attractive to bond buyers.

Privately financing streetscape improvements may allow the work to be done less expensively, as it avoids public procurement, bidding, and contracting requirements.
Rio Salado Parkway  
(Ash Avenue to Mill Avenue)

<table>
<thead>
<tr>
<th>R.O.W. WIDTH</th>
<th>100'</th>
<th>BIKE LANE</th>
<th>5' BIKE LANE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN SPEED</td>
<td>35 MPH</td>
<td>TRANSIT LANE</td>
<td>11' WIDE TRANSIT LANE (STREETCAR) WITH 12' WIDE PLATFORM</td>
</tr>
<tr>
<td>PAVEMENT WIDTH</td>
<td>55</td>
<td>LANDSCAPE / PLANTING ZONE</td>
<td>6' WIDE LANDSCAPE ZONE AGAINST CURB WITH TREES IN GRATES OR PERVEROUS PLANTING AREA; SELECT NATIVE TREES PROVIDING AMPLE SHADE AND NATIVE, DROUGHT TOLERANT PLANTINGS</td>
</tr>
<tr>
<td>TRAFFIC FLOW</td>
<td>TWO LANES, TWO WAY WITH CENTER TURN LANE</td>
<td>LANDSCAPE / PLANTING ZONE</td>
<td></td>
</tr>
<tr>
<td>PARKING</td>
<td>N/A</td>
<td>LANDSCAPE / PLANTING ZONE</td>
<td></td>
</tr>
<tr>
<td>SIDEWALK WIDTH</td>
<td>8' TO 22' WIDE; REQUIRE 20' MINIMUM FOR NEW DEVELOPMENT</td>
<td>LANDSCAPE / PLANTING ZONE</td>
<td></td>
</tr>
<tr>
<td>LIGHTING</td>
<td>PEDESTRIAN LIGHT FIXTURES, SPACED 60' O.C. ALONG CURB IN THE LANDSCAPE ZONE</td>
<td>LANDSCAPE / PLANTING ZONE</td>
<td></td>
</tr>
</tbody>
</table>
Farmer Avenue
(1st Street to 5th Street)

<table>
<thead>
<tr>
<th>R.O.W. WIDTH</th>
<th>52'-6&quot; TO 56'</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN SPEED</td>
<td>25 MPH</td>
</tr>
<tr>
<td>PAVEMENT WIDTH</td>
<td>20'</td>
</tr>
<tr>
<td>TRAFFIC FLOW</td>
<td>ONE LANE, TWO WAY</td>
</tr>
<tr>
<td>PARKING</td>
<td>8' WIDE PARALLEL PARKING SPACE</td>
</tr>
<tr>
<td>SIDEWALK WIDTH</td>
<td>6'-6&quot; TO 10&quot; WIDE; REQUIRE 10' MINIMUM FOR NEW DEVELOPMENT</td>
</tr>
<tr>
<td>LIGHTING</td>
<td>PEDESTRIAN LIGHT FIXTURES, SPACED 60' O.C. ALONG CURB IN THE LANDSCAPE ZONE</td>
</tr>
</tbody>
</table>

BIKE LANE
SHARROW (10' WIDE LANE, EACH WAY SHARED WITH VEHICULAR TRAFFIC)

LANDSCAPE / PLANTING ZONE
5' PLANTING ZONE BETWEEN EACH PARALLEL PARKING SPACE FOR TREES IN STRUCTURAL GRATE OR RAISED 6' PLANTER; ALLOW 3 TO 4' WIDTH AGAINST CURB ONLY WHEN A MINIMUM 10' WIDE SIDEWALK EXISTS; SELECT NATIVE TREES PROVIDING AMPLE SHADE AND NATIVE, DROUGHT-TOLERANT PLANTINGS
5th Street
(Farmer Avenue to College Avenue)

<table>
<thead>
<tr>
<th>R.O.W. WIDTH</th>
<th>62' TO 100'</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESIGN SPEED</td>
<td>30 MPH</td>
</tr>
<tr>
<td>PAVEMENT WIDTH</td>
<td>22'</td>
</tr>
<tr>
<td>TRAFFIC FLOW</td>
<td>ONE LANE, TWO WAY</td>
</tr>
<tr>
<td>PARKING</td>
<td>8' WIDE PARALLEL PARKING SPACE</td>
</tr>
<tr>
<td>SIDEWALK WIDTH</td>
<td>16' - 20' WIDE; REQUIRE 20' MINIMUM FOR NEW DEVELOPMENT</td>
</tr>
<tr>
<td>LIGHTING</td>
<td>PEDESTRIAN LIGHT FIXTURES, SPACED 60' O.C. ALONG CURB IN THE LANDSCAPE ZONE</td>
</tr>
</tbody>
</table>

BIKE LANE
11' WIDE PROTECTED BIKE ZONE, WITH MINIMUM 6' WIDE CLEAR BIKING PATH; 8' RAISED CURB SEPARATING BIKE LANE FROM PARKING LANE

LANDSCAPE / PLANTING ZONE
3 TO 8' WIDTH AGAINST CURB; 5' PLANTING ZONE SEPARATING BIKE & PARKING LANES, WITH TREE IN STRUCTURAL GRATE OR RAISED 6' PLANTER & INTERSPERSED POTTED PLANTS; SELECT NATIVE TREES PROVIDING AMPLE SHADE AND NATIVE, DROUGHT-TOLERANT PLANTINGS
5th Street
(Farmer Avenue to College Avenue)

- **Pedestrian Crosswalks**
- **Planted Median with Trees & Native Plantings**
- **New Shady Trees**
- **Protected Bike Buffer (6" raise island or striped area)**
- **Planted Island with Trees & Native Plantings to Buffer Bike Lane from Vehicular Traffic**
- **Existing Pedestrian Street Light**
- **Painted Bike Lane**
- **New Pedestrian Crossing**
- **Parallel Parking**
- **Existing Palm Trees in Landscape Setback**
- **Existing Mid-Block Crossing at Maple Avenue**
- **Existing Street Trees**
- **New Shade Trees in 6" Raised Planters or Structural Tree Grates, Positioned Between Parking Spaces**
- **Raised 6" Floating Curb to Separate Parking from the Bike Lane, with Breaks to All Existing Drainage to Be Maintained**
- **Bike Corrals in End Islands**

**Road Diet: Restripe Existing Street to Remove Center Turn Lane and Allow for the Creation of Protect Bike Lanes and New Landscape Features**

**Pedestrian Refuge Area, Reducing Distance to Cross the Street**