# Arterial Widening

## *Prioritization Process*

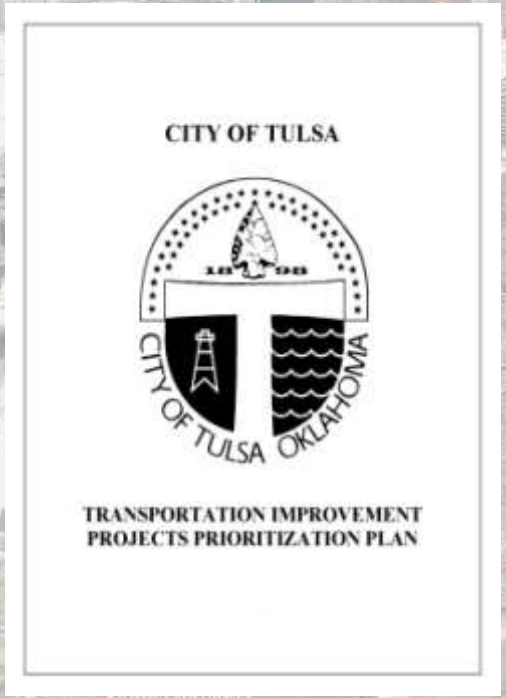
**TULSA CITY COUNCIL**

**Capital Improvement Program Task Force**

**February 7, 2013**

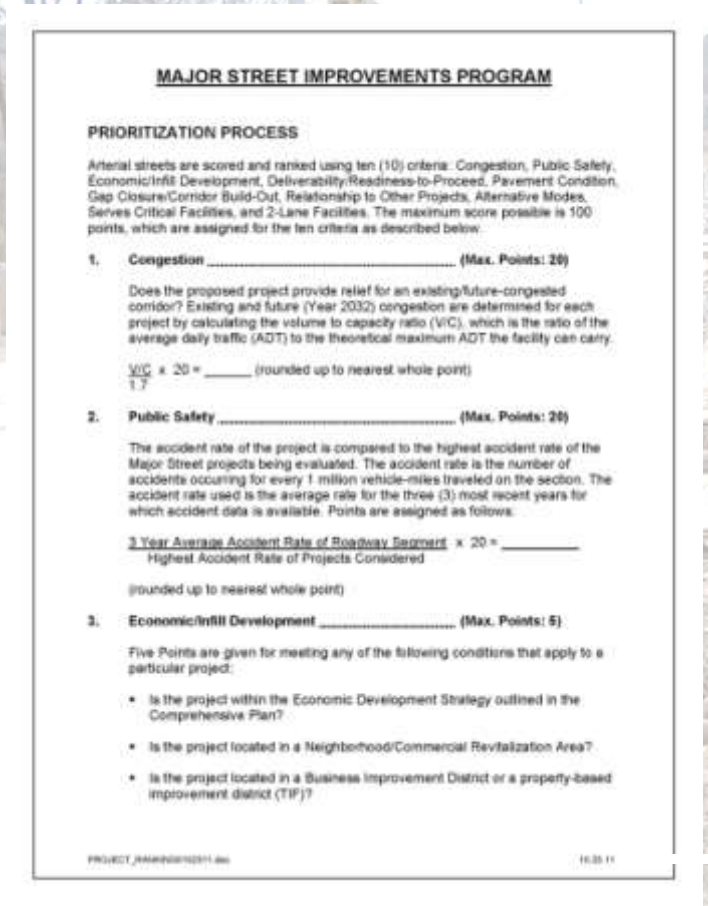
# Arterial Widening

## *Transportation Improvement Projects Prioritization Plan*


CITY OF TULSA

TRANSPORTATION IMPROVEMENT
PROJECTS PRIORITIZATION PLAN

# Arterial Widening



**MAJOR STREET IMPROVEMENTS PROGRAM**

**PRIORITIZATION PROCESS**

Arterial streets are scored and ranked using ten (10) criteria: Congestion, Public Safety, Economic/Infill Development, Deliverability/Readiness-to-Proceed, Pavement Condition, Gap Closure/Corridor Build-Out, Relationship to Other Projects, Alternative Modes, Serves Critical Facilities, and 2-Lane Facilities. The maximum score possible is 100 points, which are assigned for the ten criteria as described below.

1. **Congestion** ..... **(Max. Points: 20)**

   Does the proposed project provide relief for an existing/future-congested corridor? Existing and future (Year 2032) congestion are determined for each project by calculating the volume to capacity ratio (V/C), which is the ratio of the average daily traffic (ADT) to the theoretical maximum ADT the facility can carry.

   $\frac{V/C}{1.7} \times 20 =$ _____ (rounded up to nearest whole point)

2. **Public Safety** ..... **(Max. Points: 20)**

   The accident rate of the project is compared to the highest accident rate of the Major Street projects being evaluated. The accident rate is the number of accidents occurring for every 1 million vehicle-miles traveled on the section. The accident rate used is the average rate for the three (3) most recent years for which accident data is available. Points are assigned as follows:

   $\frac{\text{3 Year Average Accident Rate of Roadway Segment}}{\text{Highest Accident Rate of Projects Considered}} \times 20 =$ _____

   (rounded up to nearest whole point)

3. **Economic/Infill Development** ..... **(Max. Points: 5)**

   Five Points are given for meeting any of the following conditions that apply to a particular project:

   - Is the project within the Economic Development Strategy outlined in the Comprehensive Plan?
   - Is the project located in a Neighborhood/Commercial Revitalization Area?
   - Is the project located in a Business Improvement District or a property-based improvement district (TIF)?

## Prioritization Process

**Arterial streets are scored and ranked using ten (10) criteria:**

- **Congestion**
- **Public Safety**
- **Economic / Infill Development**
- **Deliverability / Readiness-to-Proceed**
- **Pavement Condition**
- **Gap Closure / Corridor Build-Out**
- **Other Infrastructure Needs / Relationship to Projects**
- **Alternative Modes**
- **Serves Critical Facilities**
- **Existing Lane Configuration**

**Projects are scored up to a maximum of 100 points.**

# Arterial Widening

**Congestion**

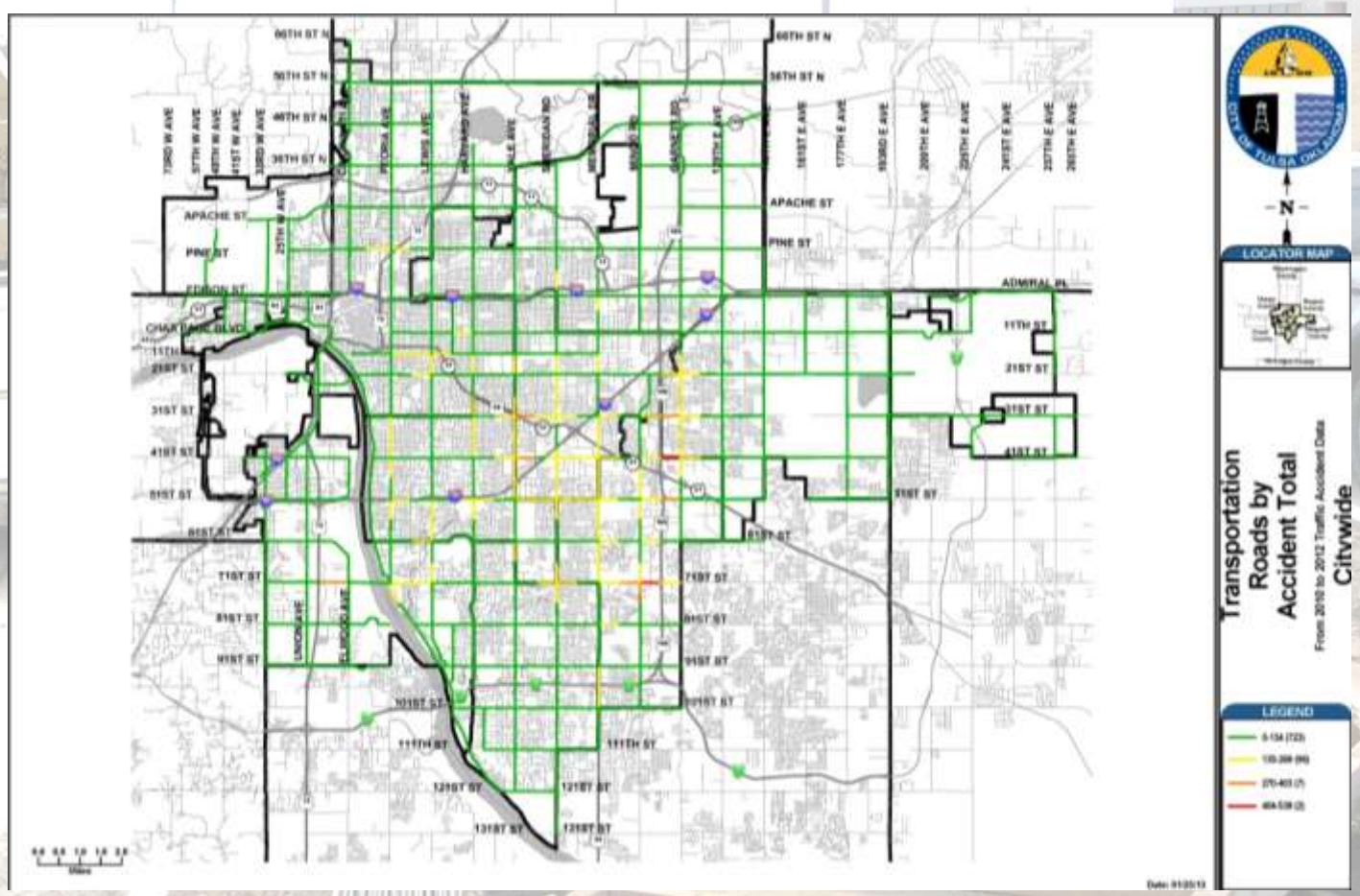
- **Volume to capacity ratio (V/C), level of congestion**
- **V/C is the Average Daily Traffic (ADT) divided by the roadway capacity**

**20 Maximum Points**

# Arterial Widening

**Public Safety**

- **The three most recent years of accident data is used.**
- **Accident rate is number of accidents per million of lane miles traveled**



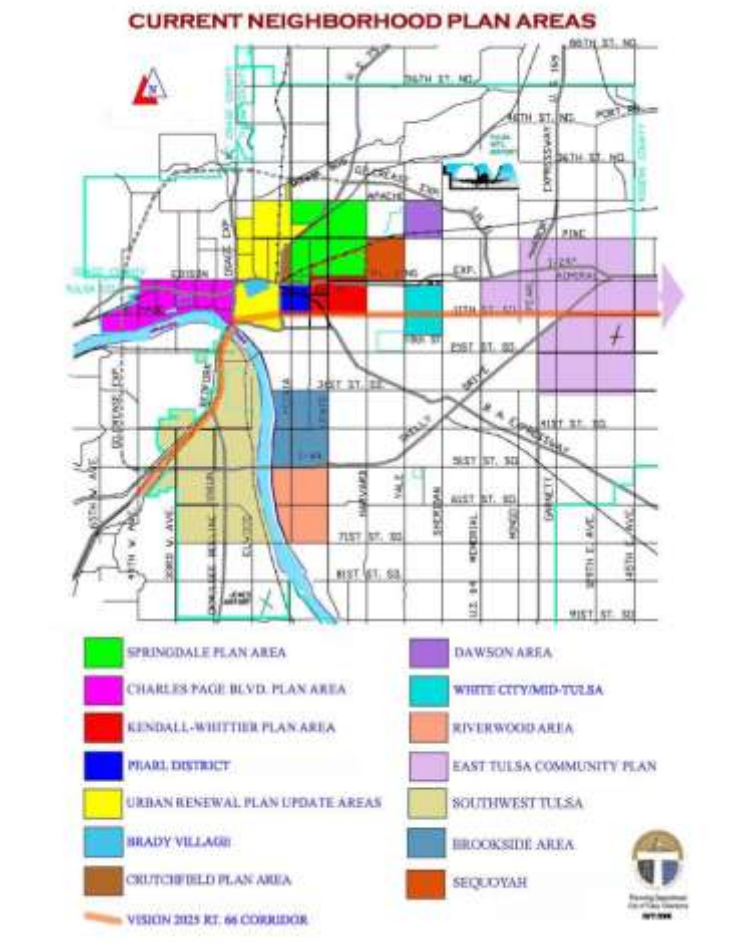

**20 Maximum Points**

# Arterial Widening

**Economic/Infill Development**

- **Is the project within the Economic Development Strategy outlined in the Comprehensive Plan?**
- **Is the project located in a Neighborhood/ Commercial Revitalization Area?**
- **Is the project located in a Business Improvement District or TIF?**

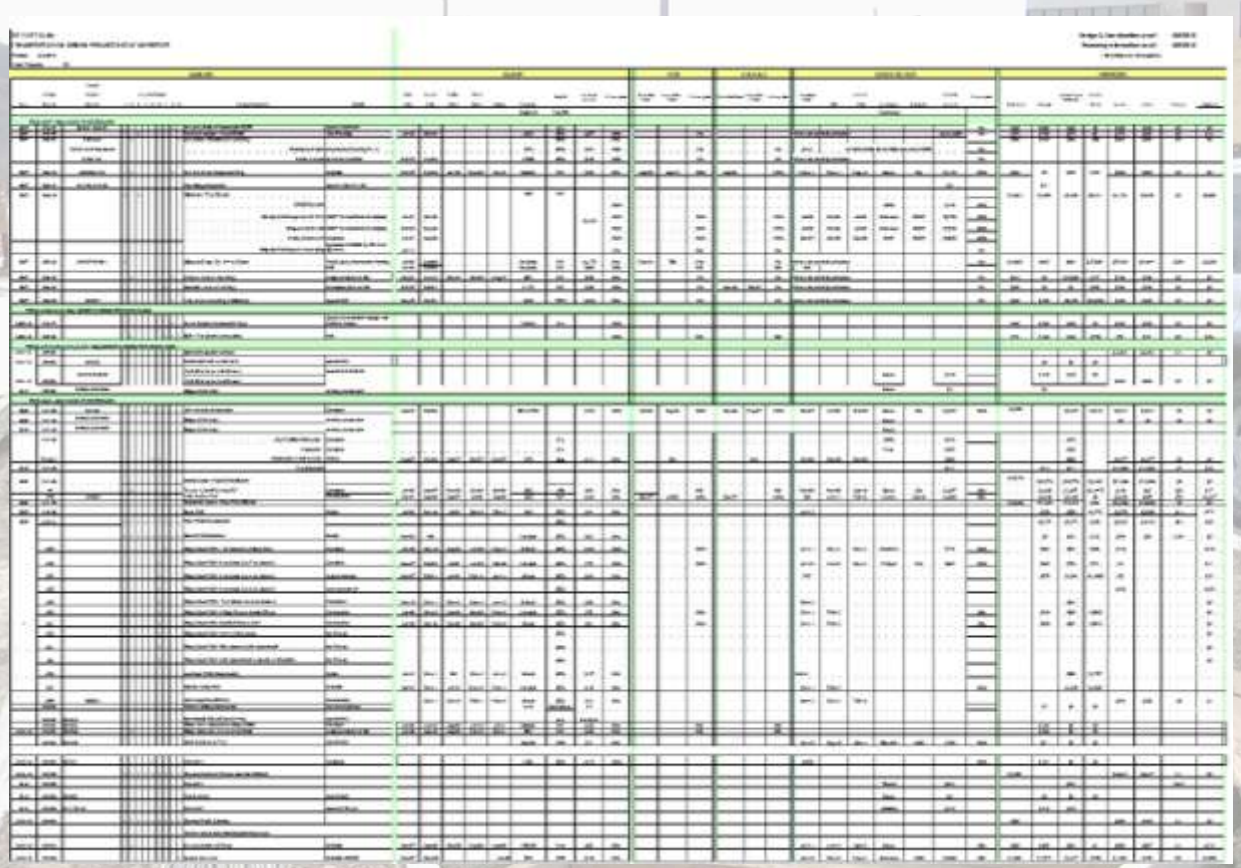
**5 Maximum Points**



# Arterial Widening

**Deliverability / Readiness-to-Proceed**

- **Has the design been completed? Right of Way Acquired? Utilities relocated?**
- **Are matching funds available?**
  - **-Federal**
  - **-State**
  - **-Local Government**



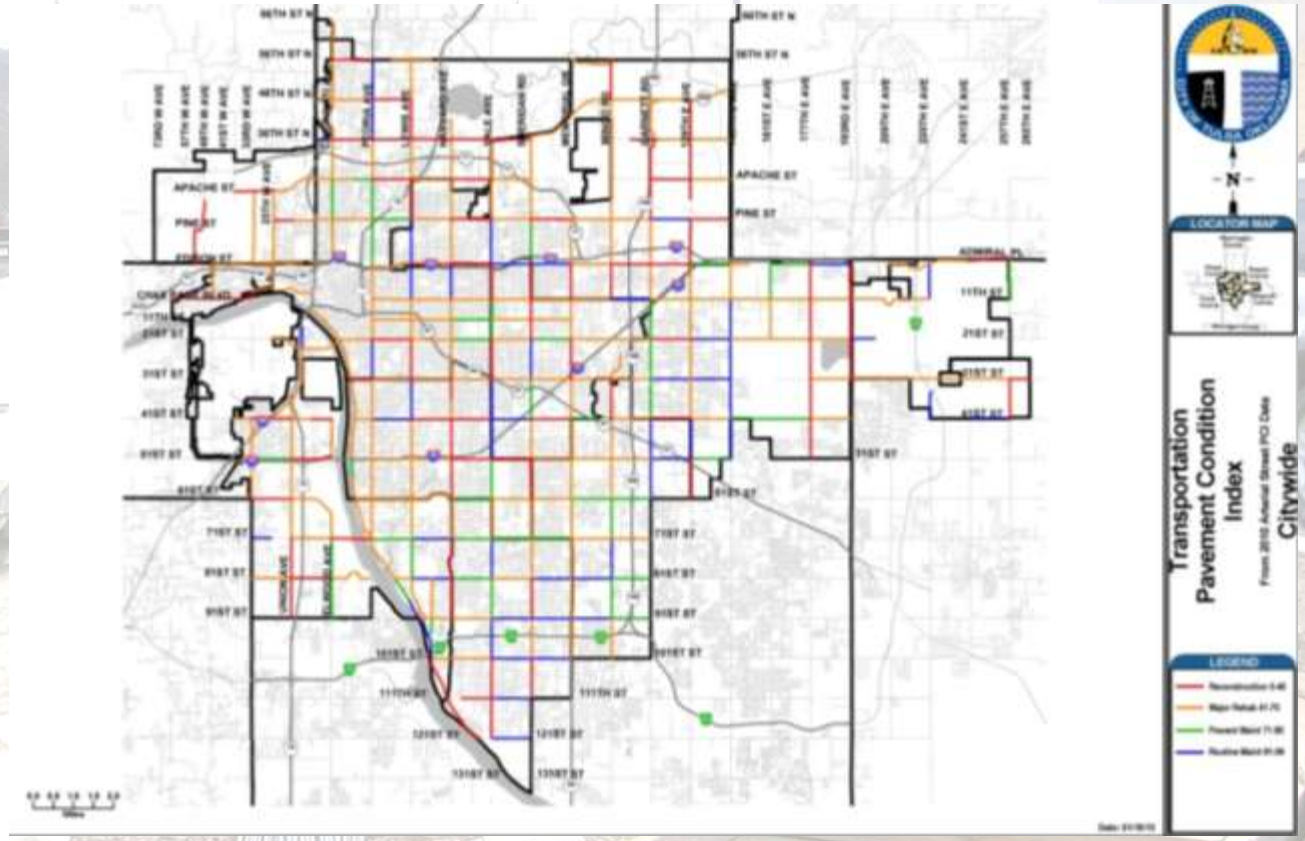
**5 Maximum Points**

# Arterial Widening

**Pavement Condition**

- **Existing pavement condition of the street is evaluated**

**5 Maximum Points**



# Arterial Widening

**<u>Gap Closure / Corridor Build-Out</u>**

- **Both adjoining street segments completed – 10 points**
- **One adjoining street segment completed – 5 points**
- **No adjoining street segments completed – 0 points**

**10 Maximum Points**

# Arterial Widening

**Other Infrastructure Needs/ Relationship to Other Projects**

- **Bridges needing replacement due to hydraulic or structural issues**
- **Major storm lines need to be constructed**
- **Water or wastewater needs to be extended**
- **Is the adjacent section funded for construction, etc**

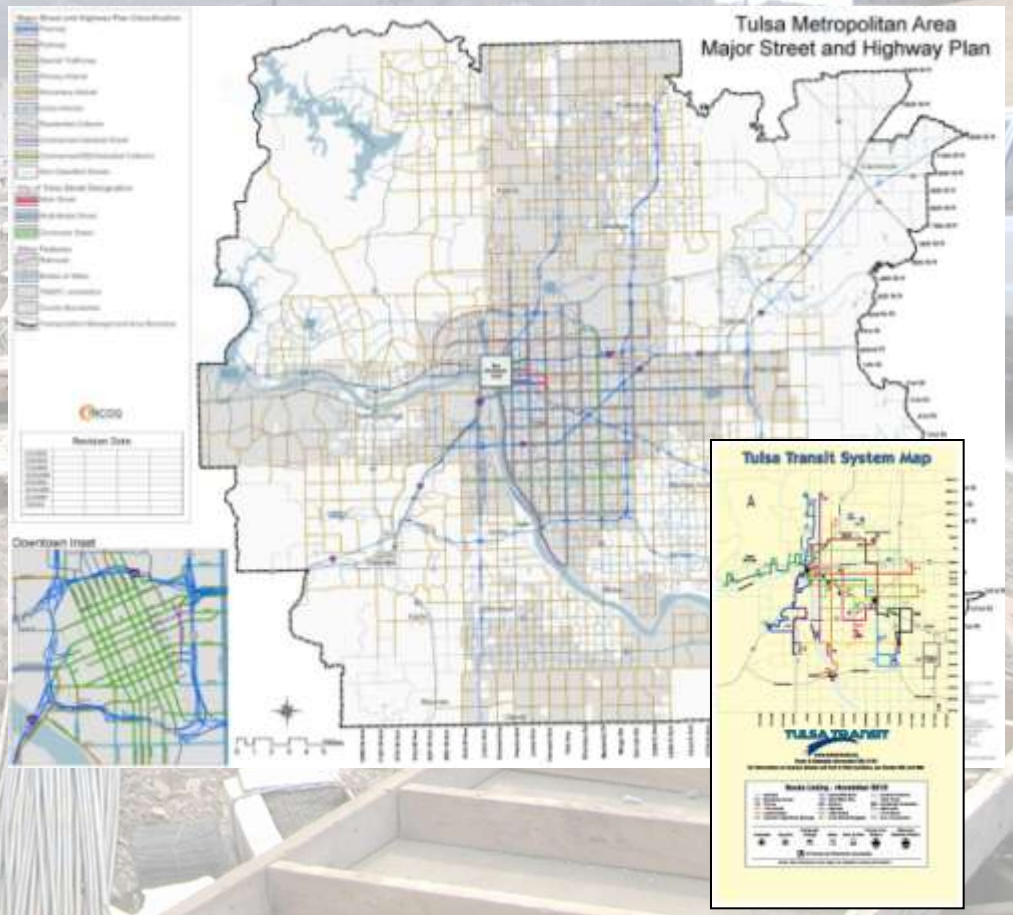
**10 Maximum Points**

# Arterial Widening

**Alternative Modes**

- **Designated as multi-modal, main street, or commuter in the Major Street and Highway Plan.**
- **Existing or proposed designated bikeway**
- **Street is on an existing MTTA transit route.**
- **Widening project would improve access for pedestrians, bicyclists, or transit.**

**10 Maximum Points**

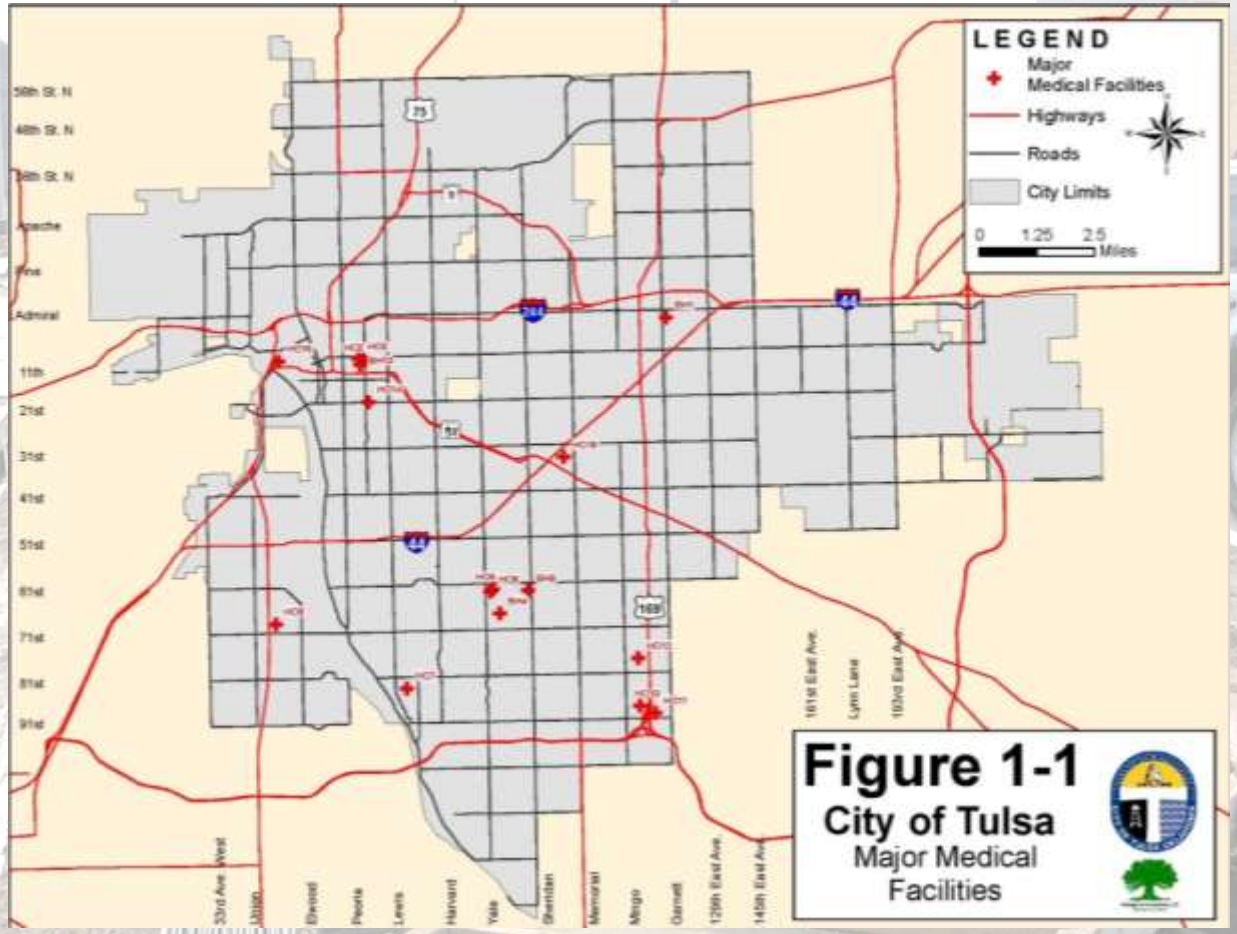


# Arterial Widening

**Serves Critical Facilities**

- **Directly serves critical facilities in the community (i.e. public safety facilities, hospitals, schools, etc.)**

**5 Maximum Points**



# Arterial Widening

**Existing Lane Configuration**

- **If the existing street segment is 2 lanes, is the segment over capacity?**
- **Is the existing number of lanes equal to the number of lanes called for in the Major Street and Highway Plan?**

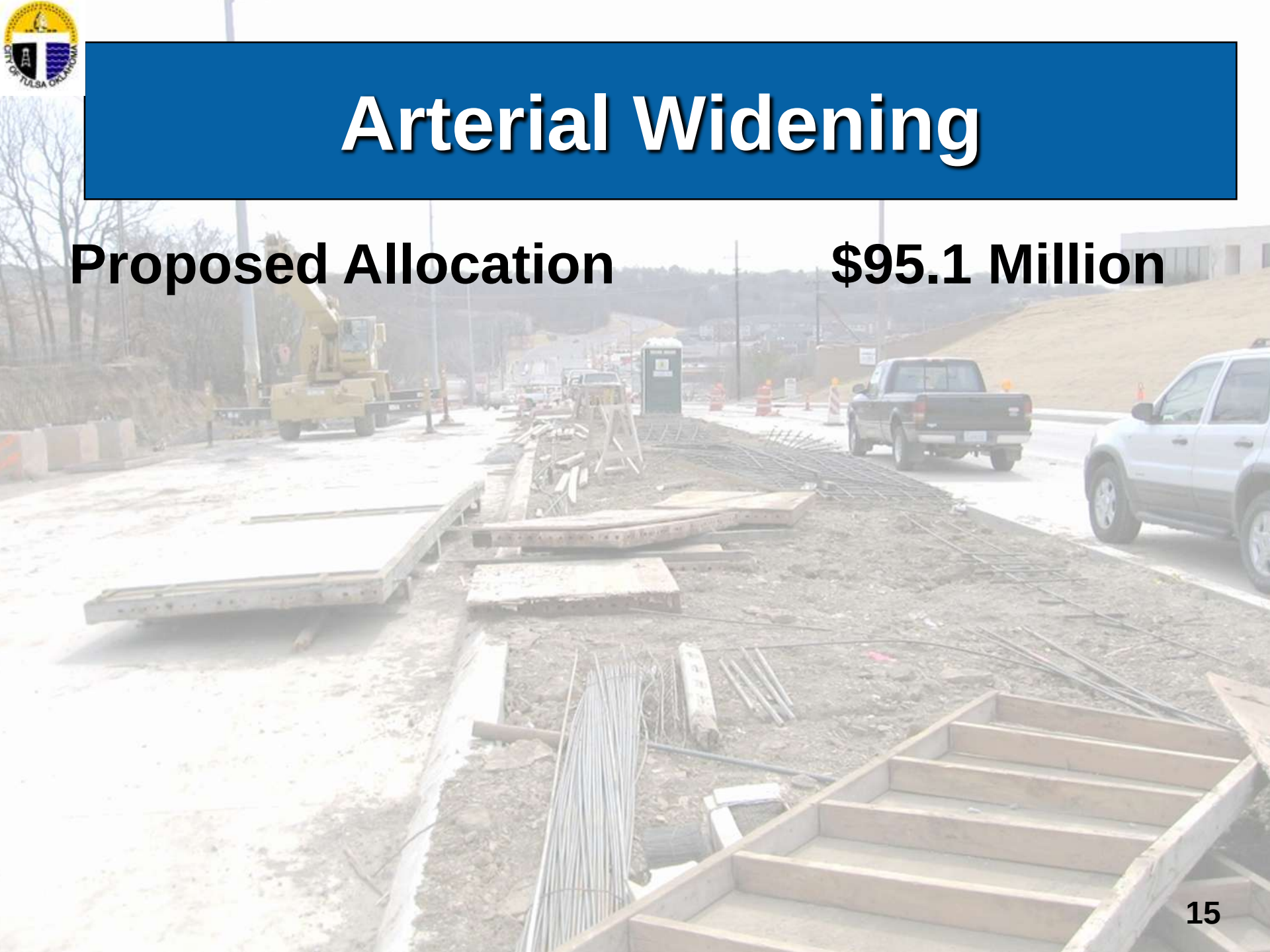
**10 Maximum Points**

# Top 50 Arterial Street Widening Candidate Sections

| RANK | Centerline | Street Pre-Direction | Street Name | Street Type | Street Post-Direction | W or N Terminus | E or S Terminus | TOTAL POINTS - 100 points | RANK |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 363 | S | Yale | Ave | | 81st Street | 91st Street | 77 | 1 |
| 2 | 384 | E | 81st | St | S | Sheridan Rd | Memorial Dr | 67 | 2 |
| 3 | 669 | S | Yale | Ave | | 96th Street | 101st Street | 65 | 3 |
| 4 | 1978 | S | Peoria | Ave | S | 61st Street | Riverside Pkwy | 62 | 4 |
| 5 | 313 | E | 61st | St | S | Peoria Ave | Lewis Ave | 61 | 5 |
| 6 | 370 | S | Delaware | Ave | | 81st Street | 91st Street | 60 | 6 |
| 7 | 397 | S | Mingo | Rd | | 71st Street | 81st Street | 58 | 7 |
| 7 | 229 | E | 51st | St | S | Garnett Rd | BA Expressway | 58 | 7 |
| 9 | 360 | E | 81st | St | S | Harvard Ave | Yale Ave | 57 | 9 |
| 10 | 113 | E | Pine | St | | Mingo Rd | U.S. 169 | 56 | 10 |
| 11 | 572 | E | 41st | St | S | Garnett Rd | 129th E Ave | 55 | 11 |
| 11 | 365 | E | 91st | St | S | Harvard Ave | Yale Ave | 55 | 11 |
| 13 | 298 | S | Harvard | Ave | | 61st Street | 71st Street | 53 | 13 |
| 13 | 645 | S | 129th | Ave | E | 51st Street | 61st Street | 53 | 13 |
| 15 | 2488 | N | 129th | Ave | E | Pine Street | Admiral Pl | 52 | 15 |
| 15 | 379 | S | Sheridan | Rd | | 81st Street | 91st Street | 52 | 15 |
| 15 | 2786 | S | Garnett | Rd | | I-244 | Admiral Blvd | 52 | 15 |
| 18 | 637 | E | 61st | St | S | Lewis Ave | Harvard Ave | 51 | 18 |
| 18 | 2462 | S | Garnett | Rd | | Admiral Blvd | 11th Street | 51 | 18 |
| 20 | 277 | S | Memorial | Dr | | 61st Street | 71st Street | 50 | 20 |
| 20 | 392 | E | 91st | St | S | Memorial Dr | Mingo Rd | 50 | 20 |
| 22 | 376 | E | 91st | St | S | Yale Ave | Sheridan Rd | 49 | 22 |
| 22 | 580 | S | Memorial | Dr | | 31st Street | 41st Street | 49 | 22 |
| 22 | 163 | E | 21st | St | S | Garnett Ave | 129th E Ave | 49 | 22 |
| 25 | 371 | E | 91st | St | S | Delaware Ave | Harvard Ave | 48 | 25 |
| 25 | 2785 | E | Pine | St | | Memorial Dr | Mingo Rd | 48 | 25 |
| 25 | 663 | S | Harvard | Ave | | 71st Street | 81st Street | 48 | 25 |
| 28 | 2194 | S | Riverside | Dr | | 31st Street | 41st Street | 47 | 28 |
| 29 | 671 | E | 101st | St | S | Sheridan Rd | Memorial Dr | 45 | 29 |
| 30 | 389 | E | 91st | St | S | Sheridan Rd | Memorial Dr | 44 | 30 |
| 30 | 603 | S | Yale | Ave | | 31st Street | 41st Street | 44 | 30 |
| 32 | 2836 | | Riverside | Dr | | Houston Ave | Denver Ave | 43 | 32 |
| 32 | 2181 | S | Riverside | Dr | | 51st Street | 61st Street | 43 | 32 |
| 34 | 53 | N | Harvard | Ave | | Mohawk Blvd | 36th Street North | 42 | 34 |
| 34 | 417 | S | Sheridan | Rd | | 91st Street | 101st Street | 42 | 34 |
| 34 | 423 | S | Yale | Ave | | 101st Street | 111th Street | 42 | 34 |
| 37 | 2797 | S | Riverside | Dr | | 61st Street | 71st Street | 41 | 37 |
| 38 | 307 | E | 71st | St | S | Elwood Ave | Riverside Dr | 40 | 38 |
| 38 | 2170 | S | Delaware | Ave | | 101st Street | 121st Street | 40 | 38 |
| 38 | 318 | S | Union | Ave | | 51st Street | 61st Street | 40 | 38 |
| 41 | 114 | E | Pine | St | | U.S. 169 | Garnett Ave | 39 | 41 |
| 41 | 416 | E | 101st | St | S | Yale Ave | Sheridan Rd | 39 | 41 |
| 41 | 52 | E | 36th | St | N | Lewis Ave | Harvard Ave | 39 | 41 |
| 44 | 2800 | S | Riverside | Dr | | 41st Street | 51st Street | 38 | 44 |
| 44 | 2792 | W | 71st | St | S | US-75 | Elwood Ave | 38 | 44 |
| 44 | 2679 | W | Charles Page | Blvd | | 25th W Ave | Union | 38 | 44 |
| 44 | 620 | S | Memorial | Dr | | 41st Street | 51st Street | 38 | 44 |
| 44 | 387 | S | Memorial | Dr | | 81st Street | 91st Street | 38 | 44 |
| 49 | 2807 | S | Riverside | Dr | | 21st Street | 31st Street | 37 | 49 |
| 49 | 156 | E | 11th | St | S | 129th E Ave | 145th E Ave | 37 | 49 |
| 49 | 486 | E | Pine | St | | 129th E Ave | 145th E Ave | 37 | 49 |

# Arterial Widening

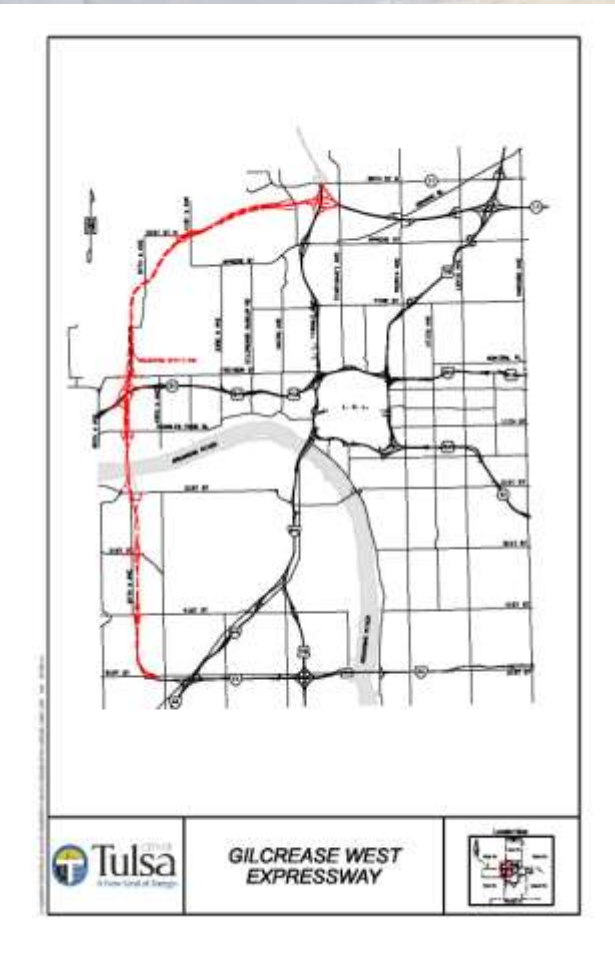
**Proposed Allocation** **$95.1 Million**



# Gilcrease Local Match

## Proposed Allocation $7.5 Million

- Continued construction of the Gilcrease Expressway
- Federal STP Funds require 20% Local Match or $1.5 million a year to receive $6.0 million in Federal funds.



# Summary

| | |
|---|---|
| **Proposed Widening** | **$ 95.1 Million** |
| **Gilcrease Expressway Local Match** | **$ 7.5 Million** |

# Thank you...
# Questions?

**CITY OF TULSA ENGINEERING SERVICES:**

**Project Manager – Brent Stout, PE, Lead Engineer, Project Planning and Coordination**

**Section Manager - Matt Liechti, PE, Manager, Project Planning and Coordination**

**Director of Engineering Services - Paul Zachary, PE**