Transportation Infrastructure Working Group Recommendations

TIWG FINAL Recommendations Summary

Transportation Infrastructure WG Report

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Requested item Tax Rate Increase	Scenario 1 0 Cents	Scenario 2 1 Cent	Scenario 3 2 Cents	Scenario 4 1.25 Cents	WG Selection	Minority Selection
Bridges, Culverts & Structures [1]	$27.5M	$49.0M	$69.5M	$54.0M	**$54.0M**	**$54.0M**
Sidewalk Rehabilitation [2]	$10.1M	$18.0M	$26.0M	$20.0M	**$20.0M**	**0**
Street Reconstruction Program [3]	$38.0M	$67.0M	$96.5M	$75.0M	**$75.0M**	**0**
Neighborhood Partnering Program [4]	$0.5M	$0.9M	$1.0M	$1.0M	**$1.0M**	**0**
Traffic Signal / ATMS System [5]	$10.1M	$18.0M	$23.5M	$20.0M	**$15.0M**	**0**
Transportation Safety / Vision Zero / … [5]	$10.1M	$18.0M	$28.5M	$20.0M	**$15.0M**	**$10.1M**
Total	**$96.3M**	**$170.9M**	**$245.0M**	**$190.0M**	**$180.0M**	**$64.1M**

Bridges, Culverts & Structures

- Total amount recommended by WG: **$54M**
- Details:
  - With matching funds from CAMPO, fund replacement of top-3 bridges and structures in list of critical bridges and culverts that need replacement
    - Red Bud Trail/Emmett Shelton Bridge, William Cannon Railroad Overpass (both east and west end), and Delwau Lane Bridge
    - Remaining $15.84M will be used for programmatic needs for Bridges, Culverts, and Structures citywide
  - Without CAMPO matching funds, only Red Bud Trail/Emmett Shelton Bridge will be replaced using $50M.
    - Remaining $4M will be used for programmatic needs for Bridges, Culverts, and Structures citywide

Sidewalk Rehabilitation / Replacement

- Total amount recommended by WG: **$20M**
- Details:
  - Allocate 10% of funds equally to each district, then distribute remaining 90% of proposed funds to districts based on Very High & High priorities for all existing sidewalks.
  - Total miles and percentage of needs by district is shown below:

Proposed Distribution of Funds

Sidewalk Rehabilitation & Replacement program would divide 10% of funds equally for each district and then distribute 90% of proposed funds to districts based on Very High & High priorities for all existing sidewalks.

District	Miles of Existing Sidewalk		Total Miles (VH & H)	% of Allocation
	Very High	High		
1	80	42	122	21.59
2	6	16	22	3.89
3	58	41	99	17.52
4	37	33	70	12.39
5	2	23	25	4.42
6	0	1	1	0.18
7	16	31	47	8.32
8	0	1	1	0.18
9	114	42	156	27.61
10	8	14	22	3.89
Total	**321**	**244**	**565**	100.00

Street Reconstruction

- Total amount recommended by WG: **$75M**
- Details:
  - Program projects:
    - Street Rehabilitation: **$30M**
      - 97 Lane Miles for $30M
      - There are about 467 Lane Miles (approximately $125M) of Street Rehabilitation Candidates throughout the City
    - Bus Lane Concrete conversions, etc. **$10M**
      - 20 Lane Miles for $10M
      - There are ~68 Lane Miles (~ $34M) of Concrete Bus Lane Candidates and 5 Lane Miles (~$7.5M) of Concrete Intersection Candidates throughout the City
    - Bucket funding for Utility Participation:**$6M**
      - These funds are proposed for cost participation with utility projects to ensure full pavement restoration after water, wastewater, and/or storm drain improvements are made in streets.
      - 56 Lane Miles for $6M
      - 1,000 Lane Miles (approximately $50M) of Utility Participation Candidates based on Austin Water's 10 year CIP program list

Street Reconstruction

- Total amount recommended by WG: **$75M**
- Details:
  - Street Reconstruction projects improves/replaces the following infrastructure assets:
    - Approx. 5% - 10% of the total cost of the street goes towards sidewalks
    - Approx. 50% - 70% of the total cost of the street goes towards pavement improvements
    - Approx. 25% - 40% of the total cost of the street goes towards drainage improvements
  - Program projects:
    - Named reconstruction projects: **$29M**
      - Covers Group 15C , Group 44 (Stassney Lane) and Group 45 (residential streets)
        - Group 15C projects may consist of, but subject to change:
          - Basswood Ln (Norwood Hill to Pendleton); Beechmoor Dr (Basswood to Norwood Hill); Claymoor Dr (Norwood Hill to Ameswood); Norwood Hill Rd (Medford to Springdale); Overbrook Dr (51st to Manor); Overdale Rd (Overbrook to Darlington); Pendleton Ln (Tipton to Basswood); Rexford Dr (Glouchester to Preswyck)
        - Group 45 projects may consist of, but are subject to change:
          - Bellaire Dr (Elmhurst Dr to Taylor Ganes St); Lupine Ln (Upland Dr to Loma Dr); Oak Heights Dr (Bellaire Dr to Taylor Gaines St); Old East Riverside Dr (Summit St to Riverside Dr E); Summit St (Riverside Dr E to Lupine Ln); and Taylor Gaines St (I 35 SVC Rd to Parker Ln)
        - Disclaimer: List may change based on named reconstruction projects with investments from previous bond programs and coordination with utilities that provide cost participation resulting in biggest opportunity for public benefit. These projects, however, have significant amount of design already completed.

Traffic Signals / ATMS

- Total amount recommended by WG: **$15M**
- Details:
  - Traffic Signals & Signal Systems:
    - New signal installations: **$2.5M**
      - Covers new signals, PHB's, flashing beacons and school zones
      - 77% coverage of overall current need for 168 new traffic signals and 158 PHB's
    - Communications Systems: **$2.0M**
      - Expands communication system to additional signal infrastructure (90% coverage)
      - Provides redundant communications to improve reliability and resiliency
    - Modifications & Upgrades: **$1.5M**
      - Includes signal upgrades over 5 years that lead to greater safety (e.g., adding protected left turns)
    - Controllers: **$1.0M**
      - Updates signals controller that is nearly 20 years old to a modern hardware / processor platform
    - Firmware: **$0.8M**
      - Update current, 20-yr old software platform for all signals to modern software platform
    - Conflict Monitor MMU: **$0.7M**
      - Provides next generation conflict monitors to all signals
    - Battery Backup Systems & Signal Cabinets **$0.6M**
      - 50 new and replace 15 battery backup systems; replace 30-yr old cabinets

Traffic Signals / ATMS

- Amount recommended by WG: **$15M**
- Details:
  - Safety Improvements:
    - Emergency Vehicle Preemption: **$3.0M**
      - Reduce response times and increase safety of first responders at all 1,000+ City-maintained signals
    - Power Source Modernization: **$0.55M**
      - Upgrade connections to Austin Energy power to meet current safety standards
    - Accessible Pedestrian Signals: **$0.5M**
      - Assist visually impaired individuals at approximately 56 identified locations
    - Retroreflective Backplates: **$0.25M**
      - Install at approximately 75 signals downtown, typically results in 15% crash reduction
  - Mobility Improvements:
    - Aerial Detection: **$1.0M**
      - Replace loop detection at up to 40 signals to facilitate adaptive signal control
    - CCTV Cameras: **$0.5M**
      - Deploy cameras to roughly 100 signals, upgrade 10, rehab 19 to enhance situational awareness
    - Transit Signal Priority: **$0.1M**
      - Improved reporting on TSP performance to enable signal optimization

Transportation Safety / Vision Zero

- Amount recommended by WG: **$15M**
- Details:
  - Safety Improvements:
    - Major Intersection Safety Projects: **$11.0M**
      - Strategic implementation of critical safety improvements at major intersections identified as high crash locations, at an anticipated 2 to 3 project locations per year
    - Pedestrian Safety Improvements: **$3.5M**
      - High impact, cost-effective pedestrian safety treatments at an anticipated 20 to 30 locations per year
    - Speed Management: **$0.5M**
      - Utilize a toolbox of speed management methods at an anticipated 3 to 10 locations per year