2023-2026 Transportation Improvement Program Development

July 2021

Regional Collaboration • Transportation Planning • Multimodal Mobility

METROPOLITAN PLANNING ORGANIZATION

Transportation Improvement Program (TIP)

- Federal and State mandated program of transportation projects
- Contains projects funded with local, State, and/or federal funding sources
- Covers four years of available funding
- Amended on a monthly basis and submitted to the State quarterly
- Adopted and extended every two years
- The TIP must be consistent with the Regional Transportation Plan and the latest Air Quality Conformity Determination

Purpose of the TIP

- Commitment (state and federal obligation) of expected funds
- Reflects regional priorities
- Public Comment and Notice required
- Gives locals the ability to say Yes or No (or Not now)
- Briefly describes projects, activities (scope of work), and costs
  - Preliminary engineering
  - Environmental
  - Final Design
  - Right-of-Way acquisition
  - Utility Adjustments
  - Construction

RTP & Other Plans/Programs

20+ Year Regional Transportation Plan
(2045 RTP)

H-GAC Ten Year Plan/
TxDOT Unified Transportation Program
(UTP)

4 Year TIP
(2021-2024 TIP)

Timeline

TASKS/ACTIONS	DATE
Review active projects and Meet with Project Sponsors (Review project readiness)	June 2021 – October 2021
Staff Develop and financially constrain the draft TIP	November 2021 – January 2022
Draft TIP for information – TAC/TPC	February 2022
Public Comment Period and Public Meeting – Draft Documents	February 2022 - March 2022
Staff analysis and review of public comments	March 2022
Final Draft TIP for information – TAC/TPC	April 2022
Action on final 2023-2026 TIP	May 2022
Submit Final Document to TxDOT	Summer 2022
Anticipate TTC Approval of STIP	August 2022
Anticipate Federal/State Approval of STIP	October/November 2022


Development of Project Evaluation Criteria


TIP Subcommittee
July 7, 2021

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2021 CFP Criteria Comments

- Grade separation projects in expand and manage categories should include separation between
  - Two highways or railroad and a highway or railroad and a major throughfare or an arterial (as classified on a federal functional classification system map)
  - Allow documented challenges of prolonged traffic stops at railroad crossings adversely impacting vehicular traffic.
- Available funding from other undersubscribed investment categories should be moved to Active Transportation category to move projects that are ready for implementation.

2021 CFP Criteria Comments

- The evaluation is very much weighted for urban projects, and I do not believe it reflects the intent of the special committee's recommendations. Of course, urban areas need more projects than rural areas and that will happen. However, the scoring should be fair and allow much needed projects that are not in an urban area to have a chance.

- 15% of the score is given to Multimodal which is highly based on ADA accessible sidewalks, wider sidewalks, bike lanes and paths. This is not fair to rural projects and needs to change. Sidewalks and bike trails are necessary, particularly in urban settings, however there must be a balance between urban and rural, I feel 5% would be more appropriate. The other 10% should be given Functional class / freight network / evacuation routes; and Urban / rural / transitioning areas.

2021 CFP Criteria Comments

- As presented Safety is evaluated based on the number of crashes. This should be modified to reflect the crash rate, severity of the crashes, injuries resulting from the crashes and fatality rate. There is a big difference between a fender-bender on a jam-packed road doing 30 mph or less, and collision between a passenger car and a fully loaded 18-wheel truck going 60 mph+. As written, it is impossible for a rural project to complete due to the absolute number of crashes.

- Under Connectivity to Jobs, I would like to know how the numbers of jobs in a rural area was arrived at?

2021 CFP Criteria Comments

- Could the threshold of $100M for a “major project” be reduced to $50M? Lowering the threshold while keeping the same rigorous criteria could potentially lead to a larger pool of high-quality projects that could be advanced as they become ready for implementation and money is available.
- Safety – Since Safety is already 50% of the B/C score, METRO proposes replacing it with a new factor, “Community Support”, and give it the 10 points currently awarded safety in the planning factors. This would not be the same as the “planning coordination” as these points would be earned based on demonstrated community support for the project.
- Connectivity – Regarding Multijurisdictional Connectivity, many of METRO’s projects serve residents living outside its service area but do not necessarily “serve or connect more than one transit district.” METRO suggests changing the language to “serve or connect residents in multiple service areas.”

2021 CFP Criteria Comments

- Improves Transit Reliability – This factor is currently limited to the Manage category. METRO suggests that it is an important factor for the Expand category as well.

- Right-of-way – METRO proposes H-GAC recognize right of way costs only incurred as a direct result of the proposed project for purposes of determining total project cost. METRO's position, as noted in prior comments, is to include right of way costs in the B/C analysis only when the project requires additional right of way and only for the additional right of way needed (incremental cost).

2021 CFP Criteria Comments

- Proposed projects resulting in lower possible crashes should score higher points.
- A project that replaces an existing sidewalk beyond the minimum ADA standards should score higher than a project that replaces an existing sidewalk that meetings the minimum ADA standards.
- Reword to reflect description language below. "Providing new transit service".
- What methodology will be used to determine urban/suburban/rural areas in transition? The ACE tool was discussed as a method during the Ped/Bike Subcommittee TIP workgroup meetings, but I'm not sure if this is was the final decision by H-GAC staff.
- I'm good with the Planning criteria, but we need to work with H-GAC on this Resiliency matrix to ensure key areas of Baytown are receiving the correct score.


Active Transportation Project Evaluation Criteria


Item # 4
Susan Jaworski
For H-GAC TIP Subcommittee
July 2021

Regional Collaboration • Transportation Planning • Multimodal Mobility

H-GAC METROPOLITAN PLANNING ORGANIZATION

Purpose

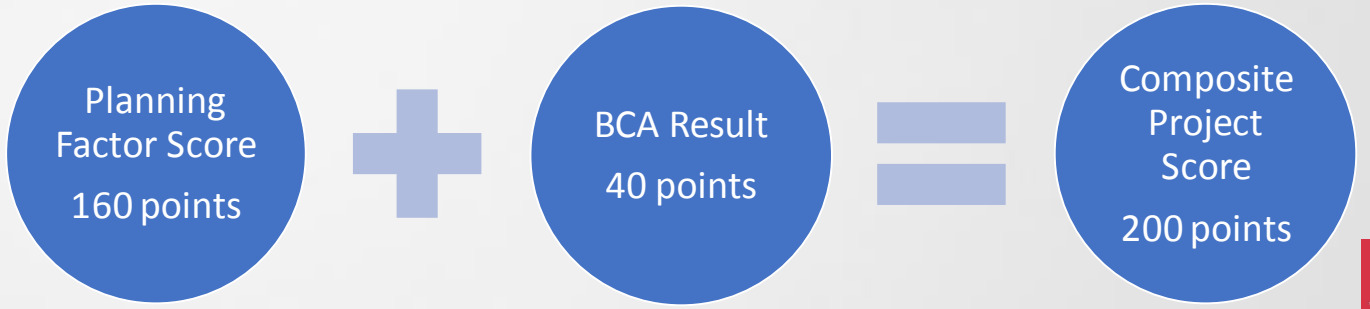
- Ped/Bike Subcommittee identified need to revise evaluation criteria as part of 2045 Active Transportation Plan process
- Increase applicability of evaluation criteria to active transportation projects
- Anticipation of active transportation projects becoming eligible for CMAQ funding
- Align with current focus of service area members
  - Safety
  - Equity
  - Geographical Equity
  - Connectivity

Process

- Ongoing collaboration engagement
- Ped/Bike Subcommittee
  - April 15, 2021
  - April 29, 2021
  - June 17, 2021
- Ped/Bike Subcommittee TIP Project Prioritization Workgroup
  - April 20, 2021
  - April 21, 2021
  - April 28, 2021
  - April 30, 2021
  - May 3, 2021
  - May 11, 2021
  - May 12, 2021
  - June 1, 2021
  - June 9, 2021

Recommendations

- Scoring split - 80% planning factors and 20% Benefits Cost Analysis (BCA)
- Caveat that at least 65% of available TASA (Category 9) funds are designated solely for active transportation infrastructure projects
- CMAQ set-aside amounts:
  - CMAQ funds less than $45 million, then at least 15% set aside for active transportation projects
  - CMAQ funds greater than $45 million, then at least 20% set aside for active transportation projects
- Planning factors updated
- BCA revisions



Planning Factors

- Sliding scale of points for multiple Planning Factors
- Consistent usage of publicly available tools (e.g. H-GAC's ACE tool, etc.)
- Overall Categories:
  - Connectivity (including Planning Coordination) – 39% (Max 62 points)
  - Safety – 25% (Max 40 points)
  - Equity – 24% (Max 39 points)
  - Barrier Elimination – 8% (Max 13 points)
  - Innovation – 4% (Max of 6 points)

Connectivity

Connectivity	Will the project connect to an existing ped/bike facility?	Yes	12	H-GAC ACE Tool, LCN Tool, Bikeway/Sidewalk Viewer Mapping, GIS, etc.
		No	0	
Connectivity	Will the project improve ADA accessibility, functionality, and comfort?	Yes	12	Project scope and design
		No	0	
Connectivity	Is there local support for the project or is it part of a regional or local plan (e.g. Livable Centers Study, Complete Communities Study, Long Range Transportation Plan, neighborhood strategy, voter approved bond, Vision Zero, Safe Routes to School, or similar safety goals, etc.)?	Yes	15	H-GAC ACE Tool or LCN Tool or letters of support or voter approved bond or reference document
		No	0	

Connectivity

Connectivity	Is the project contributing to an existing or potential transit facilities (e.g. Transit Oriented Development (TOD), mobilty hub, transit route, transit stop, etc.)?	Yes - Within 0.10 mile	8	GIS Mapping or feasibility studies or planning documents or voter approved bonds
		Yes - Between 0.11 mile and 0.25 mile	5	
		Yes - Between 0.26 mile and 1 mile	3	
		Yes - Between 1.01 mile and 3 miles	1	
		No	0	

Connectivity

Connectivity	Does the project promote active transportation investments in areas with high activity and/or high amenity but low connectivity?	Yes - Project has high activity index score (80-100) and high connectivity index score (0-20)	10	H-GAC ACE Tool (Activity index and connectivity index)
		Yes - Project has medium high activity index score (60-80) and medium high connectivity index score (20-40)	5	
		Yes - Project has medium low activity index score (40-60) and medium low connectivity index score (40-60)	3	
		No - Project has low activity index score (0-40) and low connectivity index score (60-100)	0	

Connectivity

Connectivity	For rural areas only - Is the project in close proximity to regionally or locally significant modes (e.g. transit, main routes/roads, etc)?	Yes - Within 0.10 mile	5	H-GAC ACE Tool
		Yes - Between 0.11 mile and 0.25 mile	4	
		Yes - Between 0.26 mile and 1 mile	3	
		Yes - Between 1.01 mile and 3 miles	2	
		No	0	

Safety

Safety	Will the project add design elements to improve safety (e.g. pedestrian scale lighting, landscaping, bike amenities, public artwork features, wayfinding, etc.)?	Yes	14	Project scope
		No	0	

Safety

Safety	Is the project in close proximity to active transportation related high crash locations?	Yes - Within 0.10 mile	13	H-GAC regional crash dashboard; TxDOT top 100 list; other supporting documentation
		Yes - Between 0.11 mile and 0.25 mile	10	
		Yes - Between 0.26 mile and 1 mile	8	
		Yes - Between 1.01 mile and 3 miles	5	
		No	0	
Safety	Does the project actively reduce crashes in those locations?	Yes	13	Supporting documentation
		No	0	

Equity

Equity	Is the project in an area with a higher populaton of zero car households?	Highest	12	H-GAC ACE Tool or LCN Tool
		High	10	
		Medium	8	
		Low	5	
		None	0	

Equity

Equity	If the area is within a vulnerable population or environmental justice community, has the area benefited from active transportation projects in the past decade?	Yes - Received more than $25 million in funds	0	Programming and construction documents
		Yes - Received between $10 million and $24 million in funds	1	
		Yes - Received between $5 million and $9 million in funds	2	
		Yes - Received less than $4 million in funds	3	
		No	5	

Equity

Equity	Is the project benefiting a vulnerable population community?	Highest	12	H-GAC ACE Tool or LCN Tool
		High	10	
		Medium	8	
		Low	5	
		None	0	
Equity	Is the project in a rural or suburban area?	Rural - 0.0 to 0.4 on activity population density	10	H-GAC ACE Tool (activity population density)
		Suburban - 0.41 to 0.80 on activity population density	5	
		Urban - 0.81 or higher on activity population density	0	

Barrier Elimination

Barrier Elimination	Does the project provide safe and convienent routes across barriers (e.g. freeways, high use roads, wide roads, railroads, waterways, etc.)?	Yes	13	GIS mapping
		No	0	

Innovation

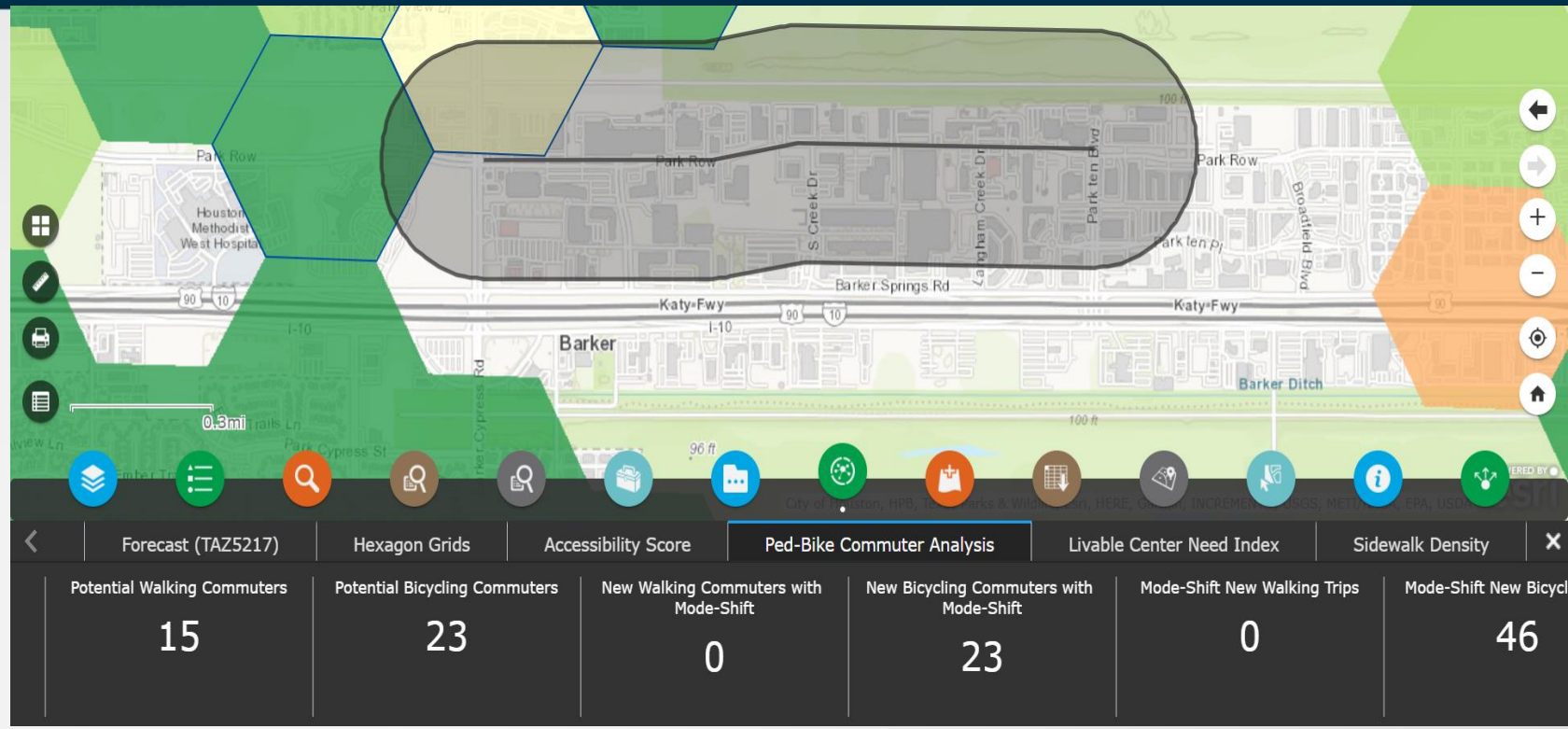
Innovation	Will this project implement innovative ideas that will improve regional connectivity and access (e.g. bike highway network, technology, etc.)?	Yes	6	Supporting documentation
		No	0	

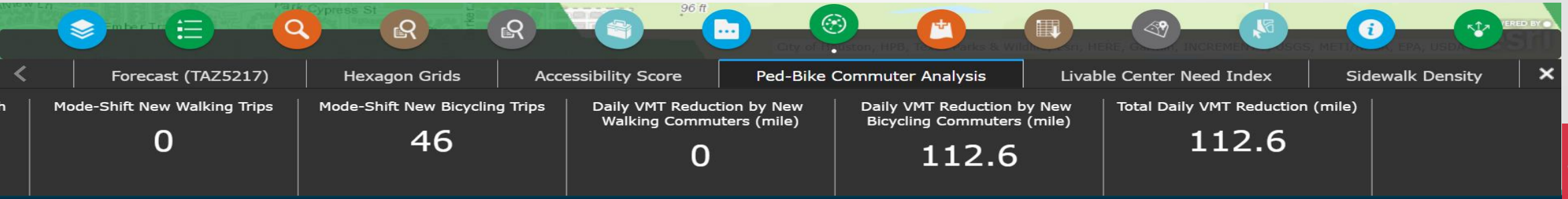
Benefits Cost Analysis

- Remove the delay benefits template
- Revise the 2018 safety benefits template
- Replace the 2018 emissions benefits template with recommended version

Benefits Cost Analysis - Safety

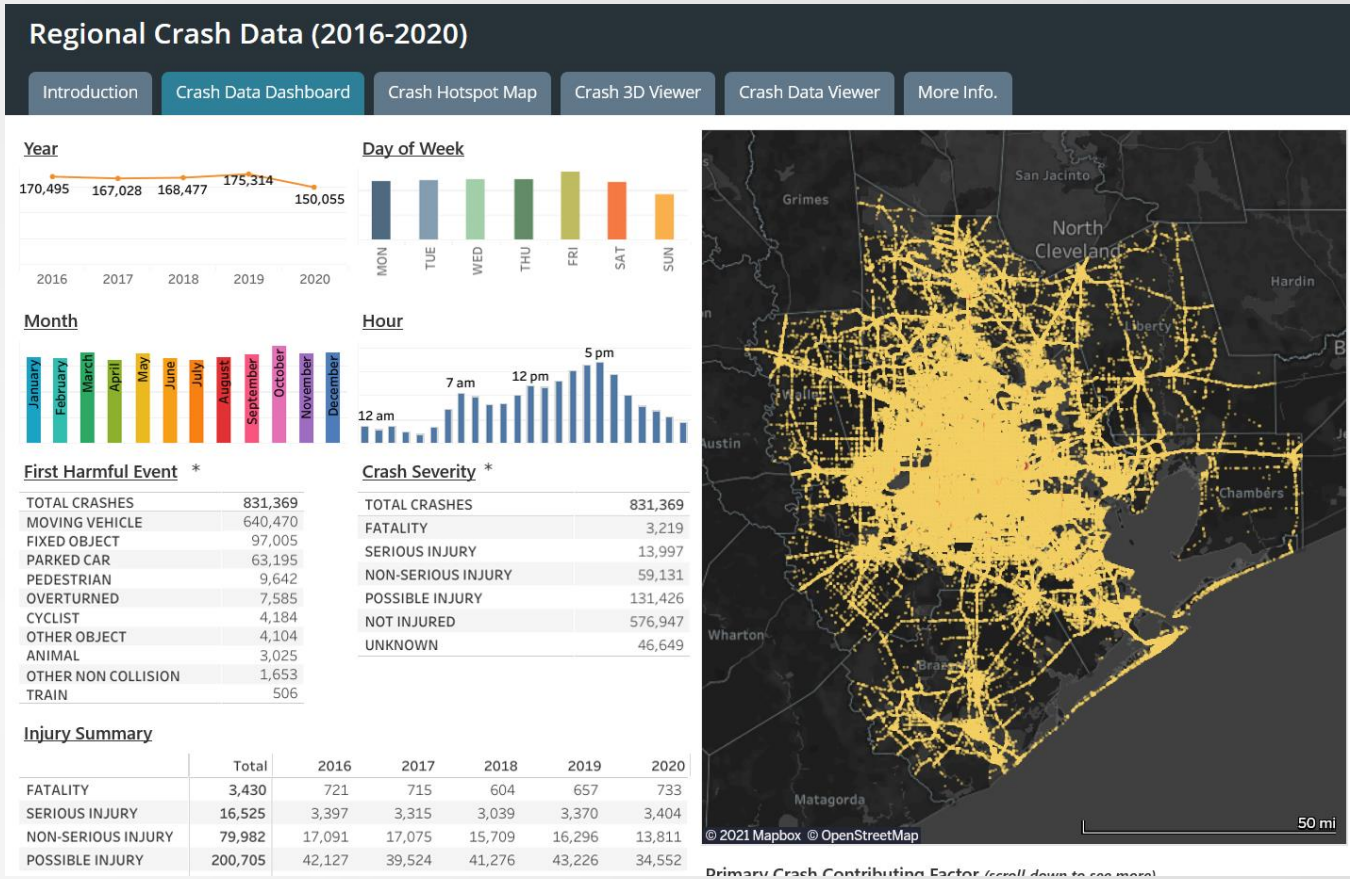
- Similar process as 2018
- Daily travel demand using ACE tool for inputs of new commuters and VMT





Benefits Cost Analysis - Safety

- Regional Crash Data
  - Uses most current 5 years of crash data instead of 3 years
  - Uses location specific crash data instead of county crash data
  - Ped/Bike crashes only (all severities/injuries)
  - Crash project area buffer



Benefits Cost Analysis – Emissions Template

- Use general average speed of 25 mph for roadways
- Removed freeway emission factors from calculators
- Revise/modify types of improvement
- Updated value of emissions to most recent available for NOx and VOC.
- Change in service life
- Uses inputs from ACE tool (e.g. household info, etc.)

Type of Improvement	MOSERS Min Service Life	MOSERS Max Service Life	Safety Analysis (H-GAC) Service Life
Install new Sidewalks	10	12	10
Sidewalk improvements	10	12	10
ADA Ramps	10	12	10
Paved Shoulder/Shared Use path	10	12	20
On Street bicycle lane	10	12	20
Pedestrian/Bicycle Bridge/Underpass	10	12	30
Off street hike & bike trails	10	12	20

Service life source: Texas Guide to MOSERS for the MOSERS service life and HSIP for the original 2018 Safety Analysis service life calculations.

2018 Emissions template used VMT-based calculations for emission reductions.