

**JOINT MEETING OF THE RTP AND TIP SUBCOMMITTEES  
HOUSTON-GALVESTON AREA COUNCIL  
3555 TIMMONS LANE, 2<sup>ND</sup> FLOOR CONFERENCE ROOM B/C  
November 13, 2017  
9:30 a.m.**

**TENTATIVE AGENDA**

1. Introductions
2. Adoption of Agenda

**INFORMATION**

**3. Investment Priorities**

*Staff will provide an update on the Investment Priority Matrix including feedback received during discussions with relevant TAC and TPC subcommittees. The Matrix is intended to identify regional priorities for the next RTP and Call for Projects.*

**4. Announcements**

- TAC Meeting – November 15, 2017, 9:30 a.m. at Houston TranStar, 6922 Katy Rd, Houston, TX 77024
- TPC Meeting – November 17, 2017, 9:30 a.m., Conf. Room B/C
- Conformity Public Meetings – December 12, 2017, 12:30 p.m. and 5:30 p.m., Rm B
- Joint TIP/RTP Subcommittee Meeting – December 13, 2017, 9:30 a.m., Conf. Room B/C

**5. Adjourn**

**JOINT MEETING OF THE REGIONAL TRANSPORTATION PLAN (RTP)  
SUBCOMMITTEE AND TRANSPORTATION IMPROVEMENT PROGRAM (TIP)  
SUBCOMMITTEE**

---

**MEETING SUMMARY**

Thursday, October 19, 2017 – 1:32 P.M.  
Houston-Galveston Area Council of Government Offices  
3555 Timmons Lane, Suite 120, Houston, Texas 77027  
(Meeting Held – Second Floor, Agency Conference Rooms 2-B and C)

---

**MEMBER PRESENT (see the sign-in sheet for details)**

Adam France – City of Conroe  
Charles Airiohuodion – TxDOT-Houston  
Christopher LaRue – The Woodlands Township  
Ken Fickes – Harris County  
Lloyd Smith – Harris County PID  
Paulette Shelton – Fort Bend County  
Scott Ayers – TxDOT Beaumont  
Trent Epperson – City of Pearland

**ALTERNATE PRESENT**

Jeffrey Weatherford – City of Houston  
Megan Campbell – TxDOT-Houston  
Priya Zachariah – METRO  
Trey Haskins – Brazoria County

**STAFF PRESENT**

David Wurdlow - Houston-Galveston Area Council  
Kari Hackett – Houston-Galveston Area Council  
Thomas Gray – Houston-Galveston Area Council  
Troi-Lyzette Perry – Houston-Galveston Area Council  
Vishu Lingala – Houston-Galveston Area Council

**ITEM 1. Introductions**

**ITEM 2. Adoption of Agenda**

Agenda was adopted by the Committee.

**ITEM 3. Investment Priorities**

The staff provided an update on the Investment Priority Matrix including feedback received during discussions with relevant TAC and TPC subcommittees. The Matrix is intended to identify regional priorities for the next RTP and Call for Projects.

Staff also reviewed wording in the 2045 RTP Strategies with the Committee and requested additional feedback from the Committee by Friday, October 27, 2017.

**ANNOUNCEMENTS**

**ITEM 4.**

- a. Joint TIP/RTP Subcommittee Meeting – November 13, 2017, 9:30 a.m., Conf. Room B/C
- b. TAC Meeting – November 15, 2017, 9:30 a.m., TranStar, 6922 Katy Rd., Houston, TX 77027, Conf Room 120A, 1<sup>st</sup> Floor

**Meeting adjourned at 3:32 P.M.**

## **TIP/RTP Joint Subcommittee Meeting**

Thursday, October 19, 2017

1:30 pm. – 3:30 pm.

H-GAC Office – 2<sup>nd</sup> Floor

Conference Rooms B and C

### **Summary**

David Wurdlow led the meeting discussion with a PowerPoint Presentation about H-GAC's TIP and Ten-Year Plan, and Annual and Cumulative Funding Balances (est.) for the following funding sources: STP-MM, CMAQ, TAP, CMAQ Flex, STP Reconciliation, Flexible Funding, Cumulative Balance, and Category 2 (Highway only), Cumulative Balance for the time periods of 2016 through 2027.

Approximately \$2 billion of new funding remains available for commitment over the next 10 years, with the majority available in the latter half of the period. This includes approximately \$1.6 billion of flexible federal funding (STP, CMAQ, TAP/TA-SA, etc.) and an additional \$400 million within Category 2. These estimates reflect the latest available letting caps and adopted UTP funding allocations from TxDOT.

David also talked about the proposed vision for the 2045 RTP: The Houston-Galveston region will have an integrated multimodal transportation system, achieved through coordinated public and private investments, that supports a desirable quality of life, enhanced economic vitality and increased safety, access and mobility.

### **Proposed Goals – 2045 RTP:**

David Wurdlow also talked about the Proposed Goals for the 2045 RTP which includes:

- Improve Safety
- Move people and goods efficiently
- Achieve and maintain State of Good Repair
- Strengthen Regional Economic Competitiveness
- Conserve and Protect Natural and Cultural Resources

### **Proposed Strategies – 2045 RTP:**

1. **Maintain** – Asset Management: improve and preserve the condition of existing transportation infrastructure at the least practicable cost...
2. **Manage** – System management and Operations by maximizing the efficiency and effectiveness of the transportation system through data, technology and policy solutions which focuses on reliability, continuity and transparent dissemination of information.
3. **Expand** – Multimodal Network Capacity by adding capacity across all modes of travel with a primary focus on the connections between different networks and services that generate opportunities for competition and provide users with greater choices.

David, then elaborated on each of these strategies listed above through various mobility investments areas, such as highways and thoroughfares, transit and pedestrian/bike. David continued his presentation with discussion about proposed solicitation strategy through the

Traditional Call for Projects for various types of major investment projects and other investments.

1. Traditional Call for Projects
  - Major investments (greater than \$100 million); and
  - Other Investments as indicated in the Matrix
2. Annual/Biennial Program Calls for Projects as indicated in the Matrix
3. Future Programs: Areas of priority investment that require additional planning work prior to the commitment of funding to specific implementation projects or programs. Funding would be set aside for future project calls based on the completed planning work and resulting recommendations.

Category Worksheets – the purpose is to provide clarity to prospective sponsors and promote transparent program administration:

- Program description/objectives
- Selection process
- Project eligibility
- Funding participation/ (Base and Match funds)
- Evaluation Measures (BCA and other Criteria)

Discussion & Feedback was provided by the joint subcommittee members on the following topics:

- Design Cost Eligibility
- Funding for project Overruns/Change Orders
- Min/Max Funding Brackets

Some Subcommittee members wanted to include design costs and expressed concern with the proposed lack of federal participation in project cost overruns. Transit providers were concerned that vehicle replacements were identified as the only eligible state of good repair/asset management activity.

H-GAC received several comments from committee members on 2045 RTP investment priorities matrix since the last subcommittee meeting on October 19, 2017. A summary of these comments is listed in the following tables:

Table 1: Summarized Investment Matrix comments

<b>Investment Matrix Comments</b>			
<b>#</b>	<b>Mobility</b>	<b>Comments Received</b>	<b>H-GAC Response</b>
1	Manage	Rename RTP Goal from “System Management and Operations” to “Maximize Efficiency/Effectiveness”	No change at this time. Discuss the comment with the RTP Subcommittee.
2	Maintain	Rename RTP Goal from “Asset Management” to “Maintain and Preserve”	No change at this time. Discuss the comment with the RTP Subcommittee.
3	Maintain	Add vehicle rehabilitation and facility maintenance in transit investment area	Updated Matrix and related worksheet to include vehicle overhaul in addition to vehicle replacement.  Additional areas of eligibility are not proposed at this time. Staff proposes to consider an expansion of highway funding support for transit State-of-Good-Repair investments under a future project call pending development of transit asset management plans and performance measure targets.
4	Expand	RTP Goal Statement: Add capacity, focus on interconnections between modes, opportunities for greater choice for users	Change made to remove “generate opportunities for competition and” from the goal statement.
5	Expand	Add opening new facilities in transit investment area	No change necessary. New and expanded passenger facilities are already addressed within in the Matrix and potentially as major investments (projects where total investment is >\$100m).
6	Transit	Add single point information database containing regional transit resources	No change necessary. Key recommendation from RCTP. H-GAC has committed planning resources within the current UPWP. No existing plan for implementation or ownership/operations. Investment Matrix is about competitive capital funding decisions

Table 2: Summarized Investment Priorities Worksheets comments

<b>Investment Priorities Worksheet Comments</b>			
<b>#</b>	<b>Investment Category</b>	<b>Comments Received</b>	<b>H-GAC Response</b>
1	Transit - Regional Fare Collection	Benefit > cost in evaluation criteria	No change necessary. Benefit/Cost analysis measure is not yet defined, pending additional planning work and development of recommendations.
		Add design costs to eligible projects	No change necessary. Regional Fare Collection is identified as a future investment program and will require additional planning work prior to the determination of eligible costs.
2	Transit - Transit Priority Infrastructure	Add passenger shelters to eligible projects list	No change necessary. Passenger shelters would be eligible under this investment category as part of stop consolidation. Shelters would also be eligible under the transit Passenger Facilities and Ped/Bike “First Mile/Last Mile” categories, as well as when included as reasonable accommodations within an eligible roadway project.
		Add Rural-Small urban connectivity an evaluation criteria	No change recommended. Transit priority infrastructure is intended to prioritize transit service within congested mixed traffic. Where such conditions exist within rural and small urban environments the connectivity, vehicular LOS, job access and Title VI factors would likely apply.
3	Transit - Vehicle Replacement	Needs to add transit facility, vehicle rehabilitation	Updated Matrix and related worksheet to include vehicle overhaul in addition to vehicle replacement.  Additional areas of eligibility are not proposed at this time. Staff proposes to consider an expansion of highway funding support for transit State-of-Good-Repair investments under a future project call pending development of transit asset management plans and performance measure targets.
		Add TDCs to eligible 20% local match	No change necessary. H-GAC intends to continue current policy. Vehicle replacement/overhaul does not appear to directly support the existing TDC priority areas (transit service expansion, regional congestion/emissions reduction).

		Consider decreasing minimum funding to \$100,000	No change recommended. Administrative costs of working through H-GAC or TxDOT would likely make individual projects of \$100,000 unattractive.
		Consider increasing maximum funding to \$ 50 million or delete maximum project limit	No change recommended. The vehicle replacement/overhaul category is proposed as an annual program call with a limited annual funding allocation. Program is intended to supplement the use of available local and federal formula funds.
		Consider useful life, maintenance cost and safety in benefit-cost analysis	No change recommended. Useful life is already included as a planning factor. The proposed BCA metric (\$/annual vehicle passenger miles of travel) is intended to prioritize the replacement of high utilization vehicles. Staff recommends addition of planning factors related to safety events (reportable events per vehicle miles) and system reliability (distance between failures/breakdowns) which are proposed FTA Safety Rule performance measures.
4	Transit - Passenger facilities	Explain why maintenance costs are not eligible	Category objective is to support increase transit usage through investment in new or expanded passenger facilities.  Additional areas of eligibility are not proposed at this time. Staff proposes to consider an expansion of highway funding support for transit State-of-Good-Repair investments under a future project call pending development of transit asset management plans and performance measure targets.
		Consider increasing maximum funding to \$ 50 million or delete maximum project limit	No change recommended. Will discuss maximum project limit with subcommittee. Intent is to provide clarity to sponsors about the amount of funding available and ensure reasonable access to providers of varying size.
		Benefit > cost in evaluation criteria	No change necessary. Proposed measure (annualized \$/VMT reduced) is a cost effectiveness measure, and a minimum threshold is not proposed.
		Add Rural-Small urban connectivity in evaluation criteria	No change recommended. Identified gaps in regional service would garner evaluation points under the “planning coordination” factor.

5	Transit - Vehicle Purchase/Fleet Expansion	Add transit facilities and design cost to eligible projects	No change recommended. Passenger facilities addressed under a separate investment category. Design costs generally not relevant to vehicle acquisition.
		Increase maximum project funding to \$ 50 million	No change recommended. The vehicle purchase/fleet expansion category is proposed as an annual program call with a limited annual funding allocation. Program is intended to supplement the use of available local and federal formula funds.
		Benefit > cost in evaluation criteria	No change necessary. Proposed measure (\$/PMT growth) is a cost effectiveness measure, and a minimum threshold is not proposed.  Proposed measures prioritize fleet expansion for transit services demonstrating high ridership growth.
		Current unlinked trips per vehicle doesn't make sense for expansion projects	Proposed measures prioritize fleet expansion for transit services demonstrating high ridership growth.



## Revise 2045 RTP Vision, Goals and Strategies

Based on discussion and feedback received from the TAC subcommittees, staff has updated the draft 2045 RTP Vision, Goals, Strategies and Investment Priority Matrix:

### 2045 RTP Vision Statement [DRAFT]:

*In the year 2045, our region will have an integrated multimodal transportation system, achieved through coordinated public and private investments, that supports a desirable quality of life, enhanced economic vitality and increased safety, access and mobility.*

### 2045 RTP Goals [DRAFT]:

- Improve Safety
- Move People and Goods Efficiently
- Achieve/Maintain State of Good Repair
- Strengthen Regional Economic Competitiveness
- Conserve and Protect Natural and Cultural Resources

### 2045 RTP Strategies [DRAFT]:

- **[MAINTAIN] Asset Management:** Improve and preserve the condition of existing transportation infrastructure at the least practicable cost through the application of sound asset management techniques.
- **[MANAGE] System Management & Operations:** Maximize the efficiency and effectiveness of the transportation system through data, technology and policy solutions focused on reliability, continuity and the transparent dissemination of information.
- **[EXPAND] Expand Multimodal Network Capacity:** Add capacity across all modes of travel with a focus on the interconnections between different networks and services that provide users with greater choice.

**November 13, 2017 Draft Investment Priority Matrix**

**Major Investments (>\$100 million)**

Consider individual contribution of major capital investments exceeding \$100 million toward achievement of RTP Goals and Strategies.

**Other Investments (<\$100 million)**

Provide priority direction to other investments to ensure alignment with RTP Strategies (TABLE BELOW):

Mobility Investment Areas		RTP Strategies		
		<i>MANAGE</i> <i>System Management &amp; Operations</i>	<i>MAINTAIN</i> <i>Asset Management</i>	<i>EXPAND</i> <i>Transportation Network Capacity</i>
Mobility	Highways & Thoroughfares	<ul style="list-style-type: none"> <li>• Access Management</li> <li>• Interchange/Intersection improvements (direct connectors, geometry)</li> <li>• Rail grade separations</li> <li>• [PRG] Regional ITS Infrastructure (communications, motorist/passenger information, dynamic facility mgmt.)</li> <li>• [FUT] Autonomous and Connected Vehicle Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Reconstruction of principal arterials/NHS</li> <li>• Rehabilitate/Reconstruct intermodal connectors (First Mile/Last Mile)</li> </ul>	<ul style="list-style-type: none"> <li>• Interjurisdictional connectivity (e.g. bridges)</li> <li>• Regional Thoroughfare Widening and New Construction</li> <li>• Innovative freight movement</li> </ul>
	Transit	<ul style="list-style-type: none"> <li>• [FUT] Regional Fare Collection</li> <li>• Transit Priority Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• [PRG] Vehicle Replacement</li> <li>• <b>Vehicle Overhaul</b></li> </ul>	<ul style="list-style-type: none"> <li>• Passenger Facilities (Park &amp; Ride/Pool, Transfer Points/Super Stops, Shelters)</li> <li>• [PRG] Vehicle Purchase</li> </ul>
	Ped / Bike	<ul style="list-style-type: none"> <li>• [PRG] “First Mile/Last Mile” (access to fixed route transit, bike share, employment)</li> <li>• [PRG] Pedestrian Safety Treatments (Midblock crossing, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• [PRG] ADA compliance of pedestrian network</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate gaps between existing facilities within the regional bikeway system</li> </ul>

**PRG - Possible annual program call program**  
**FUT – Possible allocation for future programming**

**Investment Category: Highways & Thoroughfares – Access Management**

---

**Category Description/Objective:** Improve thoroughfare safety and operational efficiency through the application of access management treatments.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Right of Way and Construction costs (Design costs ineligible)
- Driveway consolidation/elimination/relocation, raised medians, dedicated turn lanes, frontage/backage roads, roundabouts/innovative intersections, road diet/reconfiguration, associated reasonable ped/bike accommodations

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$1,000,000/\$10,000,000

**Benefit/Cost Analysis Measure(s):** Safety + Delay (PHED)

**Weight and/or Minimum Ratio:** 50%/1.0 (benefits exceed costs)

**Other Evaluation Criteria:** Connectivity to other modes (Multimodal LOS), Travel Time Reliability (LOTTR), Planning Coordination, Major Employment Connections, Funding Leverage, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%

**Investment Category: Highways & Thoroughfares – Interchange/Grade Separations**

---

**Category Description/Objective:** Improve thoroughfare safety and operational efficiency through the application of interchange and grade separation treatments.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Right of Way and Construction costs (Design costs ineligible)
- Direct connectors, grade separations, associated intersection and reasonable ped/bike accommodations

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$5,000,000/50,000,000

**Benefit/Cost Analysis Measure(s):** Safety + Delay (PHED)

**Weight and/or Minimum Ratio:** 50%/1.0 (benefits exceed costs)

**Other Evaluation Criteria:** Connectivity to other modes (Multimodal LOS), Travel Time Reliability (LOTTR), Freight System Priority, Planning Coordination, Funding Leverage, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%

**Investment Category:** Highways & Thoroughfares – Regional ITS Infrastructure

---

**Category Description/Objective:** Improve transportation operational efficiency through the deployment and expansion of regional ITS infrastructure.

**Selection Process:** Competitive, annual program call

**Eligible Projects and Costs:**

- Capital equipment and installation/construction costs (Right of Way and Design costs ineligible)
- Regional communications (connectivity with TranStar, interagency redundancy, etc), traveler information systems (dynamic message signage, warning systems, real-time transit vehicle location/next-bus arrival, active parking management), active traffic management/dynamic facility management (automated ramp/gate operations, signage, etc)

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$500,000/5,000,000

**Benefit/Cost Analysis Measure(s):** Safety + Delay (PHED)

**Weight and/or Minimum Ratio:** 50%/0.0

**Other Evaluation Criteria:** Travel Time Reliability (LOTTR), Planning Coordination, Funding Leverage, Incident/Event Management, Interagency Coordination, Continuity of Operations, Life-Cycle/Maintenance

**Weight and/or Minimum Score:** 50%

**Investment Category:** Highways & Thoroughfares – Autonomous and Connected Vehicle Infrastructure

---

**Category Description/Objective:** Support the broad deployment of autonomous and connected vehicles through implementation of eligible construction and technology equipment investments.

**Selection Process:** Future, Collaborative Planning Process

**Eligible Projects and Costs:**

- Planning costs associated with a Regional AV/CV Plan
- Capital costs associated with implementation of Regional AV/CV Plan

**Base Funding Participation/Match:** TBD

**Project Overruns and Change Orders:** TBD

**Minimum/Maximum Funding per Project:** TBD

- PROPOSED: \$20 million available for implementation in the FY 2019-2022 TIP timeframe
- PROPOSED: \$25 million available for implementation in the FY 2023-2027 timeframe

**Benefit/Cost Analysis Measure(s):** TBD, result of planning process

**Weight and/or Minimum Ratio:** N/A

**Other Evaluation Criteria:** TBD, result of planning process

**Weight and/or Minimum Score:** N/A

**Investment Category:** Highways & Thoroughfares – NHS/Principal Arterial Reconstruction

---

**Category Description/Objective:** Improve state of good repair and operational efficiency of the National Highway System and Principal Arterial roadway network through major rehabilitation and reconstruction. Includes designated NHS intermodal connectors.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Design, Right of Way and Construction costs
- Major rehabilitation and reconstruction of roadway pavements and structures including bridges, including reasonable pedestrian/bicycle/transit accommodations and drainage improvements related to the roadway impervious surface only.
- Jurisdictions must have adopted asset management plan that demonstrates how preservation/preventive maintenance strategies are being utilized to extend the useful life of roadway infrastructure and reduce the need for major rehabilitation or reconstruction.

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$5,000,000/50,000,000

**Benefit/Cost Analysis Measure(s):** 20-year Life-Cycle Cost Analysis (LCCA)

**Weight and/or Minimum Ratio:** 50%/1.0 (benefits exceed costs)

**Other Evaluation Criteria:** Safety, Connectivity to other modes (Multimodal LOS), Travel Time Reliability (LOTTR), Freight System Priority, Planning Coordination, Funding Leverage, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%

**Investment Category:** Highways & Thoroughfares – Interjurisdictional Connectivity

---

**Category Description/Objective:** Improve accessibility and mobility of people and goods through enhanced roadway connectivity between local jurisdictions.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Design, Right of Way and Construction costs
- Construction of roadway pavements and structures including bridges, including reasonable pedestrian/bicycle/transit accommodations and drainage improvements related to the roadway impervious surface only.
- Projects limited to 1 mile on either side of a jurisdictional boundary.
- Projects must be consistent with H-GAC's congestion management process.
- Jurisdictions must have adopted asset management plan that demonstrates how preservation/preventive maintenance strategies are being utilized to extend the useful life of roadway infrastructure and reduce the need for major rehabilitation or reconstruction.

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$5,000,000/50,000,000

**Benefit/Cost Analysis Measure(s):** Delay (PHED)

**Weight and/or Minimum Ratio:** 50%/0.0

**Other Evaluation Criteria:** Barrier Elimination, Potential for VMT reduction, Planning Coordination, Connectivity to other modes (Multimodal LOS), Freight System Priority, Funding Leverage, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%



## **Investment Category: Highways & Thoroughfares – Widening and New Construction**

---

**Category Description/Objective:** Improve accessibility and mobility of people and goods on the regional thoroughfare network through the addition of roadway capacity.

**Selection Process:** Coordinated Competitive Call

### **Eligible Projects and Costs:**

- Design, Right of Way and Construction costs
- Widening and reconstruction of roadway pavements and structures including bridges, including reasonable pedestrian/bicycle/transit accommodations and drainage improvements related to the roadway impervious surface only.
- Regional Thoroughfare Network includes non-freeway/tollway facilities functionally classified as principal or minor arterials or designated as part of the National Highway System.
- Projects must be consistent with H-GAC's congestion management process.
- Jurisdictions must have adopted asset management plan that demonstrates how preservation/preventive maintenance strategies are being utilized to extend the useful life of roadway infrastructure and reduce the need for major rehabilitation or reconstruction.

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$5,000,000/50,000,000

**Benefit/Cost Analysis Measure(s):** Safety + Delay (PHED)

**Weight and/or Minimum Ratio:** 50%/1.0 (benefits exceed costs)

**Other Evaluation Criteria:** Planning Coordination, Connectivity to other modes (Multimodal LOS), Travel Time Reliability (LOTTR), Freight System Priority, Funding Leverage, # of EJ/Title VI factors, EcoLogical Analysis

**Weight and/or Minimum Score:** 50%

## **Investment Category: Highways & Thoroughfares – Innovative Freight Movement**

---

**Category Description/Objective:** Improve transportation safety and operational efficiency through the deployment of innovative intermodal freight transfer technologies.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Capital equipment and installation/construction costs (Right of Way and Design costs ineligible)
- Intermodal transfer equipment

**Base Funding Participation/Match:** 50/50

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$2,500,000/25,000,000

**Benefit/Cost Analysis Measure(s):** Safety + Delay (PHED)

**Weight and/or Minimum Ratio:** 50%

**Other Evaluation Criteria:** Travel Time Reliability (LOTTR), Planning Coordination, Potential for VMT reduction, Freight System Priority, Funding Leverage, Life-Cycle/Maintenance

**Weight and/or Minimum Score:** 50%

**Investment Category:** Transit – Regional Fare Collection

---

**Category Description/Objective:** Provide federal funding assistance to achieve regional coordination of fare collection and fare structure among providers of public transportation within H-GAC's 8-county planning area.

**Selection Process:** Future, Collaborative Planning Process

**Eligible Projects and Costs:**

- Planning costs associated with creation of a Regional Fare Collection Plan
- Capital costs associated with implementation of Regional Fare Collection Plan recommendations

**Base Funding Participation/Match:** 100%/0% (TDCs)

**Project Overruns and Change Orders:** TBD

**Minimum/Maximum Funding per Project:** TBD

- PROPOSED: \$5 million available for implementation of coordinated/consolidated fare payment platform
- PROPOSED: \$5 million available for implementation of regional fare structure

**Benefit/Cost Analysis Measure(s):** TBD, result of planning process

**Weight or Minimum Ratio:** N/A

**Other Evaluation Criteria:** TBD, result of planning process

**Minimum Score:** N/A

**Investment Category:** Transit – Transit Priority Infrastructure

---

**Category Description/Objective:** Improve operational efficiency of transit services within H-GAC's 8-county planning area by prioritizing the movement of transit vehicles within mixed traffic.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Right of Way and Construction costs (Design costs ineligible)
- Bus pullouts, queue jump lanes, stop consolidation, ITS systems (detection, controllers, communications), signage

**Base Funding Participation/Match:** 80/20 (TDC eligible)

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$500,000/\$5,000,000

**Benefit/Cost Analysis Measure(s):** Transit Passenger Delay

**Weight and/or Minimum Ratio:** 50%/1.0 (benefit must exceed costs)

**Other Evaluation Criteria:** Frequency of transit service, connections with other transit routes, vehicular traffic volume or LOS, Multimodal LOS, job access/activity density threshold, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%

**Category Description/Objective:** Improve the safety and operational efficiency of transit services within H-GAC’s 8-county planning area by supporting the replacement or overhaul of revenue transit vehicles that have exceeded their Useful Life Benchmark (ULB), consistent with each transit provider’s adopted Transit Asset Management Plan (TAMP) and performance targets.

**Selection Process:** Competitive, annual program call

**Eligible Projects and Costs:**

- Revenue vehicle replacement purchase (must be same type/size)
- Revenue vehicle overhaul

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$200,000/\$2,000,000

**Benefit/Cost Analysis Measure(s):** Cost Effectiveness (\$/Annual Vehicle PMT)

**Weight and/or Minimum Ratio:** 50%

**Other Evaluation Criteria:** Years beyond ULB (FTA guidance is minimum, must be >0)

**Weight and/or Minimum Score:** 50%

**Investment Category:** Transit – Passenger Facilities

---

**Category Description/Objective:** Increase transit usage within H-GAC’s 8-county planning area by supporting the construction of new or expanded passenger facilities.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Right of Way and Construction costs (Design costs ineligible)
- New or Expanded Park & Rides/Pool, Multi-route transfer points/Super Stops, Shelters

**Base Funding Participation/Match:** 80/20 (TDC Eligible)

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$1,000,000/\$10,000,000

**Benefit/Cost Analysis Measure(s):** Cost Effectiveness (Annualized \$/Estimated VMT Reduced)

**Weight and/or Minimum Ratio:** 50%

**Other Evaluation Criteria:** Connectivity to other modes/routes (Multimodal LOS), Planning Coordination (identified as gap in H-GAC plan), ridership plan (new service) or documented growth (expansion), activity density threshold, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%

**Investment Category:** Transit – Vehicle Purchase/Fleet Expansion

---

**Category Description/Objective:** Increase transit usage within H-GAC’s 8-county planning area by supporting the purchase of additional revenue vehicles for transit providers demonstrating ridership growth, as documented in reporting to FTA’s National Transit Database (NTD).

**Selection Process:** Competitive, annual program call

**Eligible Projects and Costs:**

- Revenue vehicle purchase

**Base Funding Participation/Match:** 80/20 (TDC Eligible)

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$200,000/\$2,000,000

**Benefit/Cost Analysis Measure(s):** Cost Effectiveness (\$/Current PMT Growth for service type)

**Weight and/or Minimum Ratio:** 50%

**Other Evaluation Criteria:** Current Unlinked Trips per vehicle for service type

**Weight and/or Minimum Score:** 50%

**Investment Category: Ped/Bike – First Mile/Last Mile Connectivity**

---

**Category Description/Objective:** Increase utilization of existing transit services and active modes of transportation through direct pedestrian and bicycle connections to priority destinations/services.

**Selection Process:** Competitive, annual program call

**Eligible Projects and Costs:**

- Construction costs (ROW/Design costs ineligible)
- New and widened sidewalks/multi-use trails/protected bicycle facilities, bicycle station infrastructure, pedestrian amenities and necessary utilities (lighting/landscaping/furniture/etc, capped at 25% of funding request)

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$250,000/2,500,000

**Benefit/Cost Analysis Measure(s):** Safety or Cost Effectiveness (Annualized \$/Estimated VMT Reduced)

**Weight and/or Minimum Ratio:** 50%/0.0

**Other Evaluation Criteria:** Transit Connections, Major Employment Connections, Barrier Elimination, Planning Coordination, Funding Leverage, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%



**Investment Category:** Ped/Bike – Pedestrian Safety

---

**Category Description/Objective:** Increase pedestrian safety by constructing safety treatments (i.e. pedestrian countermeasures).

**Selection Process:** Competitive, annual program call

**Eligible Projects and Costs:**

- Construction costs (ROW/Design costs ineligible)
- Pedestrian countermeasures such as highly-visible crosswalks, raised pedestrian crossings, curb extensions, pedestrian crossing islands, signals, signs, roadway markings, etc. (See: Pedestrian Crash Countermeasures)

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$250,000/1,000,000

**Benefit/Cost Analysis Measure(s):** Safety

**Weight and/or Minimum Ratio:** 50%/1.0 (benefits exceed costs)

**Other Evaluation Criteria:** Transit Connections, Major Employment Connections, Barrier Elimination, Planning Coordination, Funding Leverage, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%

**Investment Category:** Ped/Bike – ADA, Pedestrian Network

---

**Category Description/Objective:** Improve accessibility of the pedestrian network by upgrading existing facilities and constructing new ADA-compliant pedestrian facilities.

**Selection Process:** Competitive, annual program call

**Eligible Projects and Costs:**

- Construction costs (ROW/Design costs ineligible)
- ADA-compliant pedestrian facilities such as sidewalks, curb ramps, tactile detectors, pedestrian signals, etc.
- Improvements must be identified within a jurisdiction's adopted ADA self-evaluation or transition plan.

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$400,000 (1x) or 800,000 (2x) fixed award

**Benefit/Cost Analysis Measure(s):** Cost Effectiveness (TBD)

**Weight and/or Minimum Ratio:** 50%

**Other Evaluation Criteria:** Transit Connections, Major Employment Connections, Barrier Elimination, Planning Coordination, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%

**Investment Category: Ped/Bike – Gaps in Regional Bicycle System**

---

**Category Description/Objective:** Eliminate gaps between existing facilities within the regional bicycle system.

**Selection Process:** Coordinated Competitive Call

**Eligible Projects and Costs:**

- Construction costs (ROW/Design costs ineligible)
- New and enhanced bicycle facilities such as bicycle lanes (buffered, separated), shared-use trails, amenities (lighting, landscaping, furniture, etc.) and necessary utilities capped at 25% of funding request
- Improvements must fill a gap within and connect to the existing Regional Bikeway Network

**Base Funding Participation/Match:** 80/20

**Project Overruns and Change Orders:** 0/100

**Minimum/Maximum Funding per Project:** \$400,000/\$4,000,000

**Benefit/Cost Analysis Measure(s):** Safety or Cost Effectiveness (Annualized \$/Estimated VMT Reduced)

**Weight and/or Minimum Ratio:** 50%

**Other Evaluation Criteria:** Transit Connections, Major Employment Connections, Barrier Elimination, Planning Coordination, Funding Leverage, # of EJ/Title VI factors

**Weight and/or Minimum Score:** 50%