2021 PUBLIC TRANSPORTATION AGENCY SAFETY PLAN (PTASP)

Alan Rodenstein TIP Subcommittee May 5, 2021

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Defining the PTASP Process

- Transit agencies required to develop safety plans by Dec 31, 2020
- Agency plans include past safety record and defined information
- Examine seven categories related to accidents and safety measures
- Two tiers of targets METRO (Tier I) and regional agencies (Tier II)
- Develop weighted average accident and safety performance for Tier II
- MPO's are required to submit regional targets by June 30, 2021



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Key Elements of Developing Targets

Transit agencies already submitted benchmarks and targets to FTA

We take reports as submitted – let FTA/FHWA make any judgements

We are required to submit future years targets (designated rates).
 We also include a regional benchmark.

Prepare a brief explanation of target process



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Definitions for Tier I and Tier II

According to Federal Transit Administration definitions

- VRM Vehicle Revenue Miles travelled
- Fatality confirmed death within 30 days at scene of accident
- Injuries harm to a person requiring immediate medical attention away from the scene.
- Safety Events collision, derailment, fire, hazardous material spill, or evacuation
- MDBF Mean Difference Between Failures (Revenue Vehicles)



Tier I Transit Agencies

- Over 1 million population in Houston Urbanized Area (UZA)
- Approximately 95% plus of vehicle revenue miles in region
- Serves extensively most congested roadways
- Interacts with high number of pedestrians and cyclists
- Rates are per 100 thousand miles for METRO
- Island Transit is in Tier I due to rail service under FTA waiver
- Three modes to measure for accidents and safety
 - Bus including commuter and park and ride
 - Rail (will include bus rapid transit in 2020)
 - Demand Response including ADA Complementary Paratransit



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Tier I Targets and Benchmarks

		MET	RO	
Rates are per 100K Vehicle Revenue Miles		TIER I		
	MODE	Benchmark	2021 Targets	
Fatalities		2	0	
Fatality Rate		0.003	0	
Injuries		194	194	
Injury Rates	Bus	0.37	0.258	
Safety Events		136	136	
Safety Event Rates		0.258	0.258	
Mean Distance Between Failures		10,084	10,084	
Fatalities		4	0	
Fatality Rate		0.122	0	
Injuries		50	50	
Injury Rates	Rail	1.466	1.466	
Safety Events		121	121	
Safety Event Rates		3.51	3.51	
Mean Distance Between Failures		9,292	9,292	
Fatalities		0	0	
Fatality Rate		0	0	
Injuries		35	35	
Injury Rates	Paratransit	0.174	0.174	
Safety Events		39	39	
Safety Event Rates		0.19	0.19	
Mean Distance Between Failures		22,039	22,039	



METROPOLITAN PLANNING ORGANIZATION

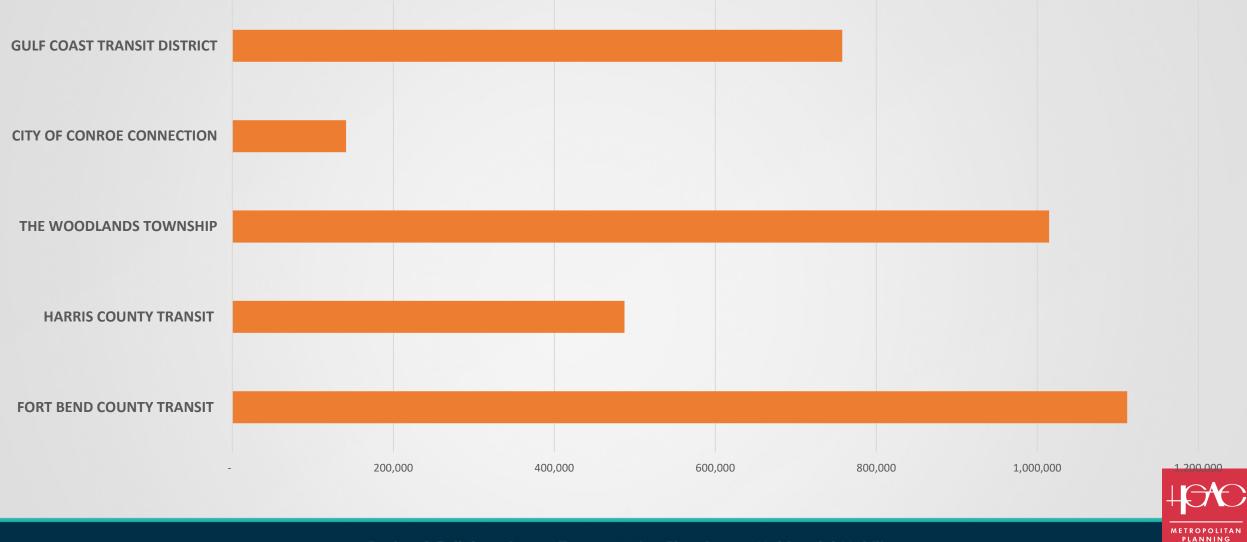
Tier II – Regional Transit Agencies

- One million or less in population
- Or fewer than 75 vehicles
- Vary widely in service delivery profile
- Two modes fixed route and paratransit
- Five systems included:
 - Fort Bend County Transit
 - Gulf Coast Transit District
 - Harris County Transit
 - The Woodlands Township
 - Conroe Connection



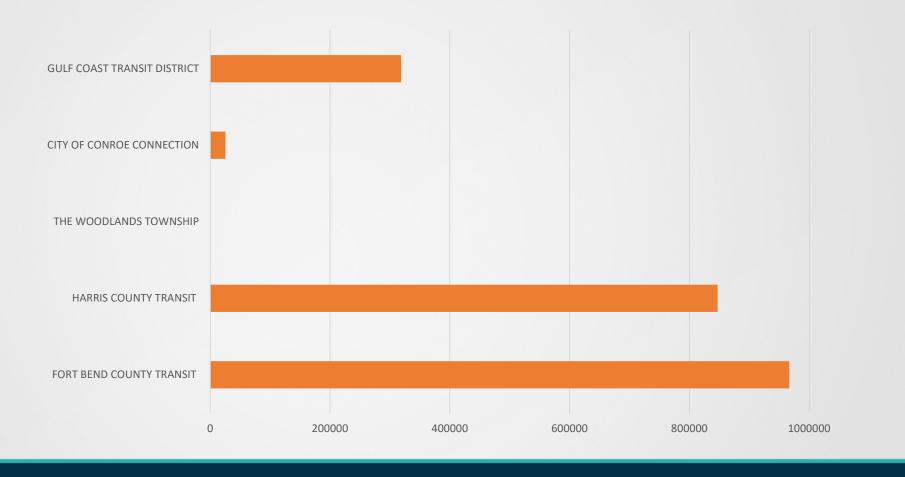
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Fixed and Commuter Bus Revenue Miles 2019 National Transit Database



Demand Response Revenue Miles 2019 National Transit Database

Demand Response Vehicle Revenue Miles 2019





Tier II Targets and Benchmarks

		OTHER P	ROVIDERS
Rates are per Vehicle Revenue Mile		TIE	RII
	MODE	Benchmarks	2021 Targets
Fatalities		0	0
Fatality Rate		0	0
Injuries		0.58	0.49
Injury Rates	Fixed Route	0.0000017	0.000008
Safety Events		0.96	0.82
Safety Event Rates		0.000030	0.000020
Mean Distance Between Failures		82,544	82,544
Fatalities		0	0
Fatality Rate		0	0
Injuries		1.34	1.34
Injury Rates	Demand Response	0.0000013	0.0000013
Safety Events		2.53	1.93
Safety Event Rates		0.0000019	0.0000015
Mean Distance Between Failures		386,106	386,106



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Action Requested

Seeking the recommendation for the Transportation Policy Council's approval of:

- Public Transportation Agency Safety Plan Regional Benchmarks & Targets
- Documenting performance-based process, benchmarks and targets in the TIP and RTP



Next Steps

3/11 RTC Info		4/8 RTC Recom mend		5/5 TIP Info & Recom mend		5/19 TAC Info		6/16 TAC Action	C	6/30 TIP & RTP ocumentation Deadline
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	3/30		4/27		5/12		5/21		6/25	
	TSC Info		TSC Recom mend		RTP Info & Recom mend		TPC Info		TPC Action	

- **RTC = Regional Transit Coordination Subcommittee**
- **TSC = Transportation Safety Committee**
- **RTP = Regional Transportation Plan Subcommittee**
- **TIP = Transportation Improvement Program Subcommittee**
- TAC = Transportation Advisory Committee
- **TPC = Transportation Policy Council**







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Transportation Advisory Committee May 5, 2021



METRO

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Category 5 – Congestion Mitigation Air Quality (CMAQ) Program	As of April 2021
Total Federal Funding Allocated in FY 2021	\$87,359,856
Estimated Carryover Funds (FY 2020 to FY 2021)	\$252,216,891
Total Available Federal Funding in FY 2021	\$339,576,747
Total Federal Funding Programmed	\$69,684,717
Federal Funds Obligated in FY2021	\$10,344,000
Number of Projects in FY 2021	13
Projects Obligated as of April 2021	2
Projects Past the Estimated Start Date as of April 2021	4

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Category 7 – Surface Transportation Block Grant (STBG) Program	As of April 2021
Total Federal Funding Allocated in FY 2021	\$137,246,015
Estimated Carryover Funds (FY 2020 to FY 2021)	\$167,552,785
Total Available Federal Funding in FY 2021	\$304,798,800
Total Federal Funding Programmed	\$100,581,839
Federal Funds Obligated in FY2021	\$3,200,000
Number of Projects in FY 2021	14
Projects Obligated as of April 2021	2
Projects Past the Estimated Start Date as of April 2021	12
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Category 9 – Transportation Alternative Set Aside (TASA) Program	As of April 2021
Total Federal Funding Allocated in FY 2021	\$9,385,907
Estimated Carryover Funds (FY 2020 to FY 2021)	\$14,165,927
Total Available Federal Funding in FY 2021	\$23,551,834
Total Federal Funding Programmed	\$7,931,288
Federal Funds Obligated in FY2021	\$0
Number of Projects in FY 2021	6
Projects Obligated as of April 2021	2
Projects Past the Estimated Start Date as of April 2021	4

Summary & Next Steps

Over halfway through FY 2021 (October 2020 – September 2021)

Funding Categories	Percentage of FY 2021 Completed Obligations
CMAQ	15%
STBG	3%
TASA	0%

Coordinate with project sponsors and TxDOT to review projects and make any needed amendments to the TIP



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Development of Project Evaluation Criteria



2021 Call for Projects

Meeting Packet

- Investment category definitions
- Benefit/Cost Analysis and Planning factors score weights
- Planning factors evaluation criteria scores
- Total Project Cost
- Example project types (Attachment A)



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Changes in planning factor scores

 Maximum scores for each planning factors evaluation criteria for all roadway, freight and transit projects.

Resiliency

- Based on Vulnerability and Criticality score.
- Pavement condition
 - Criteria included for evaluating roadway/freight projects in Maintain Investment Category.



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Planning Factors – Active Transportation (DRAFT)

2021 Call - Planning factors

Safety (39%) Connectivity (25%) Equity (24%) Barrier Elimination (8%) Innovation (4%)



Total Project Cost Definition

- If Benefit Cost analysis is used, evaluate using total project cost (include all required costs such as environmental determination, right of way acquisition, design, construction, etc.).
 - Additional benefits will not be given to projects that provide more than the required local match.
 - b. Useful life of projects by type must be established and published along with the evaluation criteria. As such, forecasted travel demand for the useful life of a proposed project should be considered for calculating potential benefits.



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Total Project Cost Definition

Total Project Cost = Federal Funding Request + Local Match/Contribution

*20% local cash match is required for federal funds. Any contribution beyond the 20% required match will be considered

towards total project cost.						
Project Scenarios	Right of Way and Utility Relocation Contributed by Sponsor	Engineering Phase including Environmental	Construction			
Scenario 1: Projects within the Existing Footprint/Cross section (no additional Right of Way Required)	NO	YES (Even if engineering phase costs are not part of the federal request)	YES			
Scenario2: Projects requiring additional Right of Way acquisition due to expansion of existing footprint or new construction.	YES (Even if ROW phase costs are	YES				
Scenario3: Projects expanding existing footprint/cross section. Acquired ROW previously or will acquire ROW with other resources or ROW was donated.	not part of the federal request)	(Even if engineering phase costs are not part of the federal request)	YES			

Total Project Cost Clarification from TPC Workgroup

- Scenarios 3 (Project that acquired ROW previously or ROW is donated)
 - Estimate ROW costs using current appraisal values?
- Questions/Clarifications
 - Built in preference for greenfield or projects that are proposed within the existing footprint/cross section
 - Manage & Maintain Investment Categories
 - Suburban/Rural projects



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Previous funding ranges

Project Type	Funding Range	Investment Categories
		Major Investments
Mobility 75% - 82%	Expand, Manage, and Maintain	
		Set-aside program



Previous funding ranges

Project Type	Funding Range	Investment Categories
ternative Modes 9% - 13%		Active Transportation projects
		Expand, Maintain
Air Quality	9% - 13%	Set-aside programs
Planning	1%	Set-aside program



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2018 Call for Projects

Strategy	Investment Category	# of Projects	Funding request	
Major Investments (5)	Project Cost More Than \$100 M	5	\$362,204,088	11%
	Added Capacity	59	\$1,155,327,810	36%
Expand (64)	Transit Expansion	2	\$4,737,000	0.15%
	Transit Passenger Facilities	3	\$437,320,000	14%
	Infrastructure Resiliency	10	\$144,863,862	5%
Maintain (29)	Rehabilitation/Reconstruction	16	\$245,053,760	8%
	Transit Facility State of Good Repair	3	\$22,778,000	1%
	Access Management/Grade Separations	33	\$325,505,216	10%
Manage (53)	ITS Infrastructure	17	\$71,668,800	2%
	Transit Priority Infrastructure	3	\$102,705,000	3%
Active Transportation Bike and Pedestrian Infrastructure		42	\$293,856,147	9%
	Total	193	\$3,166,019,683	100%

Questions?

Send comments on

- Investment Category definitions
- BCA/Planning factors weightage
- Planning factors evaluation criteria

Send comments by Monday May 17, 2021 Vishu.lingala@h-gac.com or Adam.Beckom@h-gac.com



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