

Connecting Kentuckiana 2050: Performance Measures Baselines and Targets

The baselines and targets for the performance measures, as part of the Metropolitan Transportation Plan (MTP) update, are how our progress is determined regarding our goals and objectives in the region. Performance measures, via the baselines and targets, help establish where the tracking of our progress begins, and give us the target to measure how well projects contribute to the goals.

Performance measures with the draft baselines and targets are listed under the goals and objectives. Objectives and associated federal performance measures are listed in blue. Baselines and targets that are subject to change are highlighted in yellow.

*Performance measure is associated with more than one objective

1) Safety

Goal 1: Increase safety for all users of the transportation system.

Objective A: Stabilize and decrease serious injury crashes and fatalities.						
Measure	Description	Baseline (5-Yr Rolling Average 2016-2020)	Target (5-Yr Rolling Avg 2018-2022)	Data	Source	Notes
Number of serious injuries		705.3	644.3	KY state police, ARIES (Indiana)	FHWA	
Serious injury rate (per 100 million VMT)		6.25	5.82	KY state police, ARIES	FHWA	
Number of fatalities		140.6	149.4	KY state police, ARIES	FHWA	
Fatality rate (per 100 million VMT)		1.25	1.36	KY state police, ARIES	FHWA	
Objective B: Reduce bicycle and pedestrian related crashes.						
Measure	Description	Baseline (5-Yr Rolling Average 2016-2020)	Target (5-Yr Rolling Avg 2018-2022)	Data	Source	Notes
Number of non-motorized fatalities and serious injuries		117.7	117.5	KY state police, ARIES	FHWA	
Objective C: Increase safety on fixed route transit and paratransit.						
Measure	Description	Baseline (2016-2020)	Target	Data	Source	Notes
Number of fixed route fatalities	Total	N/A	0	TARC PTASP	FTA	
Number of paratransit fatalities	Total	N/A	0	TARC PTASP	FTA	
Fixed route fatality rate	Rate per 100,000 vehicle route miles (VRM)	N/A	0.0036	TARC PTASP	FTA	
Paratransit fatality rate	Rate per 100,000 vehicle route miles (VRM)	N/A	0.016	TARC PTASP	FTA	
Fixed route injuries	Total	N/A	55	TARC PTASP	FTA	
Paratransit injuries	Total	N/A	10	TARC PTASP	FTA	
Fixed route injury rate	Rate per 100,000 vehicle route miles (VRM)	N/A	0.77	TARC PTASP	FTA	
Paratransit injury rate	Rate per 100,000 vehicle route miles (VRM)	N/A	0.18	TARC PTASP	FTA	
Number of fixed route safety events	Total	N/A	35	TARC PTASP	FTA	
Number of paratransit safety events	Total	N/A	5	TARC PTASP	FTA	
Fixed route safety event rate	Rate per 100,000 vehicle route miles (VRM)	N/A	0.47	TARC PTASP	FTA	
Paratransit safety event rate	Rate per 100,000 vehicle route miles (VRM)	N/A	0.13	TARC PTASP	FTA	
Objective D: Increase transportation safety through Intelligent Transportation System solutions.						
Measure	Description	Baseline	Target	Data	Source	Notes
		n/a				

2) Sustainability

Goal 2: Invest in sustainable transportation that protects environmental resources and minimizes the effects of climate change.

Objective A: Support improved modal connectivity in pedestrian, bicycle, and transit projects that contribute to cleaner air.						
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source
Number of miles of gaps in the pedestrian network.	Total mileage of gaps between pedestrian facilities	228	194	114	KIPDA Pedestrian Facility Gap Analysis	MPO
Number of miles of gaps in the bicycle network.	Total mileage of gaps between dedicated bicycle facilities	56	48	28	KIPDA Bicycle Facility Gap Analysis	MPO
Number of miles of pedestrian facilities along a transit route.*	Total mileage of sidewalks or multi-use paths within 1/4 mile of a transit route.	422	485	633	KIPDA pedestrian facilities, TARC routes	MPO
Number of miles of dedicated bicycle facilities along a transit route.*	Total mileage of bike lanes or multi-use paths within 1 mile of a transit route.	54	62	81	KIPDA bicycle facilities, TARC routes	MPO
Objective B: Prioritize roadway projects that enhance existing infrastructure operations and support connection to other modes.						
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source
n/a						
Objective C: Promote environmental sustainability and protect historic, natural, and cultural resources.						
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source
n/a						
Objective D: Reduce disruption to travel by limiting encroachment into environmentally sensitive areas negatively impacted by weather events and climate change.						
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source
n/a						
Objective E: Improve air quality by reducing carbon-based vehicle miles traveled.						
Measure	Description	Baseline	2 Year Target	4 Year Target	Data	Source
Total emissions reductions (CMAQ)		VOC-38,555 NOx-101,689	VOC-22,329 NOx-60,144	VOC-44,658 NOx-120,289		FHWA
Percent of non-SOV travel in urbanized area (CMAQ)		19.5	18.5	19.0		FHWA
Annual hours of peak hour excessive delay per capita within urbanized area (CMAQ)		8.4	10.0	10.0		FHWA
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source
Ratio of electric and hybrid vehicles to combustion engine vehicles in the fleet mix.	Total electric, hybrid, and plug-in hybrid vehicles compared to total fleet size (passenger cars & trucks)	1.45%	1.50%	40%	U.S. Census, KYTC vehicle data integrated by APCD for MOVES inputs, and International Energy Agency data on vehicle populations	MPO

3) Equity

Goal 3: Foster an accessible and equitable transportation system.

Objective A: Reduce auto-dependent access and increase transportation options to employment, education, and healthcare.						
Measure	Description	Baseline (2020)	4 Year Target	2050 Target	Data	Source
Percent of commutes by transit	Percent of commute trips made by bus, calculated for all counties in MPO region.	1.88%	2.07%	2.63%	American Community Survey, 5-Year Estimates, 2020 Table B08301	MPO
Percent of commutes by walking	Percent of commute trips made by walking, calculated for all counties in MPO region.	1.55%	1.71%	2.17%	American Community Survey, 5-Year Estimates, 2020 Table B08301	MPO
Percent of commutes by biking	Percent of commute trips made by bike, calculated for all counties in MPO region.	0.22%	0.24%	0.31%	American Community Survey, 5-Year Estimates, 2020 Table B08301	MPO
Objective B: Minimize disproportionate burdens and ensure equitable benefits from transportation investments in areas with high minority and low-income population.						
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source
EJ population within 1/4 mile of a transit route	EJ population determined by maximum count from either minority or low-income.	194,663	214,130	272,529	KIPDA Environmental Justice Areas, TARC routes	MPO
EJ population within 1/4 mile of a bicycle lane	EJ population determined by maximum count from either minority or low-income.	48,385	53,224	67,740	KIPDA Environmental Justice Areas, TARC routes	MPO
Objective C: Implement innovative outreach strategies to marginalized communities.						
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source
n/a						
Objective D: Implement innovative outreach strategies to marginalized communities.						
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source
n/a						

4) Economic

Goal: Leverage transportation investments to support regional and local economic growth.

Objective A: Support access to work by maintaining or improving reasonable travel time on the region's transportation infrastructure.							
Measure	Description	Baseline (2022)	2 Year Target	4 Year Target	Data	Source	Notes
Level of travel time reliability on interstates.*	KIPDA endorses KYTC and INDOT targets	KY - 91.3% IN - 99.6%	KY - 93.0% IN - 90.5%	KY - 93.0% IN - 92.8%	NPMRDS	FHWA	
Level of travel time reliability on non-interstate National Highway System (NHS).*	KIPDA endorses KYTC and INDOT targets	KY - 86.5% IN - 92.1%	n/a	KY - 82.5% IN - 89.8%	NPMRDS	FHWA	
Objective B: Develop a sustainable workforce through better employment accessibility and mobility options, especially for those residing in low-income areas with high unemployment.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	Notes
Average headway of transit routes traveling from EI areas to employment clusters.		TBD	-10%	-20%	TARC General Transit Feed Specification, KIPDA Environmental Justice Areas, KIPDA employment clusters	MPO	Joseph Garcia and Alex Posorske will have this by the end of the week.
Objective C: Enhance multi-modal access to major employment centers and areas with anticipated employment growth.							
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source	Notes
Jobs within a ¼ mile walk (sidewalk present).	Number of employees (jobs) within 1/4 mile of a sidewalk or multi-use path.	565,246	607,639	904,394	Data Axle 2019 employment, KIPDA pedestrian facilities 2021	MPO	75% 80% 89% Swap for percentage of employees instead of number of employees.
Jobs within a 1-mile bike ride (dedicated bike facility).	Number of employees (jobs) within 1 mile of a bike lane or multi-use path.	460,775	495,333	737,240	Data Axle 2019 employment, KIPDA bicycle facilities 2021	MPO	61% 65% 73%
Objective D: Strengthen coordination between transportation and land use planning.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	Notes
		n/a					

5) Roadway System

Goal: Create a modern, innovative, and efficient roadway system.

Objective A: Maintain or improve travel time on freeway and interstate roadways.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	Notes
Level of travel time reliability on interstates.*	KIPDA endorses KYTC and INDOT targets	KY - 91.3% IN - 99.6%	KY - 93.0% IN - 92.8%	N/A	NPMRDS	FHWA	RITIS
Objective B: Maintain or improve travel time on arterial roadways.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	Notes
Level of travel time reliability on non-interstate National Highway System (NHS).*	KIPDA endorses KYTC and INDOT targets	KY - 86.5% IN - 92.1%	KY - 82.5% IN - 89.8%	N/A	NPMRDS	FHWA	RITIS
Objective C: Stabilize and decrease vehicle miles traveled.							
Measure	Description	Baseline (2019, in thousands)	4 Year Target	2050 Target	Data	Source	Notes
Annual regional vehicle miles traveled.	Annual regional VMT estimated from annual county-level daily vehicle miles traveled in 2019.	11,476,964		-2%	INDOT, KYTC	MPO	per capita in development
Objective D: Direct efforts to expand facilities in support of electric and automated vehicles and other future transportation technology.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	Notes
Number of electric vehicle charging stations.	Public electric vehicle chargers as of June 2022.	98	172	980	https://afdc.energy.gov/data/download	MPO	
Objective E: Explore innovative management and operation strategies.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	Notes
		n/a					

6) Transit

GOAL: Expand public transit and non-single occupant vehicle travel throughout the region.

Objective A: Improve access to transit.							Notes
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	
Annual TARC fixed-route ridership (number of boardings).	Measure the change in the number of annual boardings on TARC buses	5,018,004	TBD	TBD	TARC FY 2022 Ridership Summary	MPO	
Population served in transit service area (1/4 mile of a route).	Measure the change in the number of commuters using transit.	315,679	347,247	441,951	American Community Survey, 5-Year Estimates, 2020 Table B01003	MPO	
Objective B: Prioritize transit service to employment, schools, and other activity centers.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	
Number of schools served by transit (1/4 mile of a route).	Identify the number of schools, colleges, and universities within 1/4 mile of a transit route	300	3% Increase or 309 schools, colleges, or universities	10% Increase or 330 schools, colleges, or universities		MPO	Potentially change this one to a percentage to be consistent with 4-Economic-objective C
Number of employees served in transit service area (1/4 mile of a route).	Identify the number of jobs located within a 1/4 mile of a transit route.	481,516	TBD	TBD	Data Axle 2019 employment, TARC 2021 bus routes	MPO	
Objective C: Increase ridesharing by expanding vanpooling, carpooling, and similar strategies.							
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source	
Number of rideshare trips.	Measure the change in the number of vanpool, carpool, transit, walking, biking, and telework trips logged through the Every Commute Counts program.	23,000	47,693	4,549,713		MPO	

7) Active Transportation

Goal: Expand active transportation options with connected pedestrian and bicycle infrastructure.

Objective A: Increase access to pedestrian facilities and continuity of the system.							Notes
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	
Number of miles of pedestrian facilities (sidewalks and shared-use paths).	Number of miles of sidewalks or multi-use paths on collectors and above.	895.99	985.5886458	1254.385549		MPO	
Objective B: Increase access to and utilization of bicycle facilities.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	
Increase number of miles of bicycle facilities	Number of miles of bike lanes on collectors and above.	91.58	100.7210182	128.1903868		MPO	
Objective C: Increase or improve existing bicycle and pedestrian access to transit.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	
Number of miles of pedestrian facilities along a transit route.*	Total mileage of sidewalks or multi-use paths within 1/4 mile of a transit route.	422	464	591	KIPDA pedestrian facilities, TARC routes	MPO	
Number of miles of dedicated bicycle facilities along a transit route.*	Total mileage of bike lanes or multi-use paths within 1/4 mile of a transit route.	54	59	76	KIPDA bicycle facilities, TARC routes	MPO	
Objective D: Support innovative active transportation and shared micromobility strategies.							
Measure	Description	Baseline (2022)	4 Year Target	2050 Target	Data	Source	
		n/a					

8) Freight

Goal: Support the reliable movement of freight.

Objective A: Reduce delay and improve reliability for trucks traveling on interstates, freeways, and arterials.							Notes
Measure	Description	Baseline (2021)	2 Year Target	4 Year Target	Data	Source	
Truck Travel Time Reliability (TTR) on the Interstates	KIPDA endorses KYTC and INDOT targets	KY - 1.35 IN - 1.20	KY - 1.19 IN - 1.27	KY - 1.19 IN - 1.30		FHWA	RITIS
Objective B: Improve truck access to freight destinations.							
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source	
		n/a					
Objective C: Safely integrate freight mobility with other transportation modes.							
Measure	Description	Baseline (2021)	4 Year Target	2050 Target	Data	Source	
		n/a					

9) Resiliency

Goal: Implement resilient infrastructure.

Objective A: Improve pavement condition.

Measure	Description	Baseline (2017)	4 Year Target	2050 Target	Data	Source	Notes
Percent of pavements in Good condition on Interstates	KIPDA endorses KYTC and INDOT targets	46.20%	TBD	TBD	KYTC and INDOT	FHWA	
Percent of pavements in Poor condition on Interstates	KIPDA endorses KYTC and INDOT targets	1.90%	TBD	TBD	KYTC and INDOT	FHWA	
Percent of pavements in Borderline condition on Interstates		11.10%	10%	TBD	KYTC and INDOT	MPO	
Percent of pavements in Good condition on non-Interstate NHS	KIPDA endorses KYTC and INDOT targets	24.90%	TBD	TBD	KYTC and INDOT	FHWA	
Percent of pavements Poor condition on non-Interstate NHS	KIPDA endorses KYTC and INDOT targets	3.90%	TBD	TBD	KYTC and INDOT	FHWA	
Percent of pavements in Borderline condition on non-Interstate NHS		12.10%	13.50%	TBD	KYTC and INDOT	MPO	

Objective B: Improve bridge condition.

Measure	Description	Baseline (2017)	4 Year Target	2050 Target	Data	Source	Notes
Percent of deck area in Good condition on bridges carrying the NHS		30.50%	30.50%	TBD	National Bridge Inventory	FHWA	
Percent of deck area in Poor condition on bridges carrying the NHS		10.50%	7.10%	TBD	National Bridge Inventory	FHWA	
Percent of bridges on functionally classified roads Collector and above that are in Good condition		27.80%	TBD	41.70%		MPO	
Percent of bridges on functionally classified roads Collector and above that are in Poor condition		6.90%	TBD	3.50%		MPO	

Objective C: Reduce the percent of transit fleet exceeding the useful life benchmark and maintain the condition of transit facilities

Measure	Description	Baseline (2021)	Target	N/A	Data / Sources	Source	Notes
Percent of non-revenue vehicles exceeding ULB		N/A	Trucks and Other Rubber Tire Vehicles: ≤ 45% exceed ULB of 10 years Non-revenue service vehicle fleet (equipment/Automobile): ≤ 10% exceed 8 years		FY23 TARC TAM Plan	FTA	
Percent of revenue vehicles exceeding ULB		N/A	Buses: ≤ 10% exceed ULB of 15 years Gutaway Buses: ≤ 0% exceed ULB of 10 years Vans: ≤ 0% exceed ULB of 8 years		FY23 TARC TAM Plan	FTA	

Objective D: Increase system reliability on fixed route transit and paratransit.

Measure	Description	Baseline (2021)	Target	Data	Source	Notes
Fixed route system reliability		N/A	5,478	TARC	FTA	
Paratransit system reliability		N/A	70,781	TARC	FTA	

Objective E: Prioritize resiliency strategies to extend the life span and functionality of the transportation system.

Measure	Description	Baseline (2021)	Target Mid (2030)	Target Long (2050)	Data / Sources	Source	Notes
		n/a					

Objective F: Add redundant infrastructure to increase system resiliency.

Measure	Description	Baseline (2021)	Target Mid (2030)	Target Long (2050)	Data / Sources	Source	Notes
		n/a					

Objective G: Integrate climate change considerations into asset management.

Measure	Description	Baseline (2021)	Target Mid (2030)	Target Long (2050)	Data / Sources	Source	Notes
		n/a					