



2016-2040 Columbus Area Metropolitan Transportation Plan Objectives & Targets

The Metropolitan Transportation Plan is being developed around a set of goals that give direction to making investments in the transportation system. These goals, listed below, were adopted by MORPC in December 2014.

Goals for the 2016-2040 Columbus Area Metropolitan Transportation Plan

Through transportation:

- Reduce per capita energy consumption and promote alternative fuel resources to increase affordability and resilience of regional energy supplies.
- Protect natural resources and mitigate infrastructure vulnerabilities to maintain a healthy ecosystem and community.
- Position Central Ohio to attract and retain economic opportunity to prosper as a region and compete globally.
- Create sustainable neighborhoods to improve residents' quality of life.
- Increase regional collaboration and employ innovative transportation solutions to maximize the return on public expenditures.
- Use public investments to benefit the health, safety, and welfare of people.

The progress of achieving each goal will be measured by several objectives. Two to four objectives have been identified for each goal. Objectives were chosen to measure certain aspects of each goal that can be impacted through transportation or the transportation system, and are based on data availability and measurability. For each objective, the existing condition, or benchmark, is documented and used to establish a short- and long-term target (years 2020 and 2040). The region's progress toward reaching these targets will be reported on annually.

This document provides information on the proposed objectives and targets. The next page provides the short description of the objectives associated with each goal. The following six pages then provide detail on the rationale on how the objective is measuring as aspect of the goal along with the benchmark measurement value and the 2020 and 2040 proposed targets. Data is still being collected for a few of the objectives' benchmarks. A place holder of "X" is used to identify the objectives in which data is still being a collected. Additional detail on the data being used or calculated is available by contacting MORPC as described below.

2016-2040 Columbus Area Metropolitan Transportation Plan Objectives

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|---|--|
| <p>GOAL: Reduce per capita energy consumption and promote alternative fuel resources to increase affordability and resilience of regional energy supplies</p> | <p>OBJECTIVE: Reduce the percentage of commuters driving alone, and increase the percentage of commuters riding transit, bicycle, or walking</p> |
| | <p>OBJECTIVE: Reduce vehicle miles traveled (VMT) per capita</p> |
| | <p>OBJECTIVE: Increase the percentage of vehicles using alternative fuels</p> |
| <p>GOAL: Protect natural resources and mitigate infrastructure vulnerabilities to maintain a healthy ecosystem and community</p> | <p>OBJECTIVE: Reduce emissions from mobile sources to continuously meet EPA air quality standards for each criteria pollutant</p> |
| | <p>OBJECTIVE: Decrease the locations of freeway and expressway facilities that are at risk for flooding</p> |
| <p>GOAL: Position central Ohio to attract and retain economic opportunity to prosper as a region and compete globally</p> | <p>OBJECTIVE: Increase the average number of jobs reachable within 20 minutes via automobile and within 40 minutes via transit</p> |
| | <p>OBJECTIVE: Minimize the percentage of total vehicle miles traveled under congested conditions</p> |
| | <p>OBJECTIVE: Minimize the amount of extra, or buffer, travel time necessary when planning expected trip travel time.</p> |
| <p>GOAL: Create sustainable neighborhoods to improve residents' quality of life</p> | <p>OBJECTIVE: Encourage and support MORPC member communities to adopt complete streets policies or policies that contain those elements</p> |
| | <p>OBJECTIVE: Target roadway infrastructure development to serve a higher number of people and jobs and increase sidewalk coverage of arterials and collectors</p> |
| | <p>OBJECTIVE: Target transit and bikeway infrastructure development to serve a higher number of people</p> |
| <p>GOAL: Increase regional collaboration and employ innovative transportation solutions to maximize the return on public expenditures</p> | <p>OBJECTIVE: Increase the percentage of funding from non-public sources on transportation projects on functionally classified Principal Arterials and above</p> |
| | <p>OBJECTIVE: Increase the number of projects utilizing innovative initiatives on functionally classified Principal Arterials and above</p> |
| | <p>OBJECTIVE: Increase the percentage of functionally classified Principal Arterials and above facilities employing coordinated Intelligent Transportation System (ITS) technologies</p> |
| | <p>OBJECTIVE: Increase the number of transit vehicles and facilities with surveillance capabilities and increase the miles of functionally classified Principal Arterials and above with video surveillance</p> |
| <p>GOAL: Use public investments to benefit the health, safety, and welfare of people</p> | <p>OBJECTIVE: Minimize the difference in trip travel time for disadvantaged populations relative to the regional trip travel time</p> |
| | <p>OBJECTIVE: Maintain infrastructure in a state of good repair by minimizing the percentage of bridges with poor General Appraisals, minimizing pavement miles in unacceptable conditions, maintaining transit fleet of a useful life, and incorporating bike facilities</p> |
| | <p>OBJECTIVE: Reduce the number of fatal crashes and serious injury crashes</p> |

2016-2040 Columbus Area Metropolitan Transportation Plan Objectives and Targets

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|--|---|---|--|---|
| GOAL: Reduce per capita energy consumption and promote alternative fuel resources to increase affordability and resilience of regional energy supplies | OBJECTIVE: Reduce the percentage of commuters driving alone, and increase the percentage of commuters riding transit, bicycle, or walking | | | |
| | <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| | Reducing single occupancy auto commutes and increasing commuters using alternative transportation modes will reduce per capita fuel and energy consumption. | 82% of commuters drive alone 5% of commuters ride transit, bicycle, or walk <i>*2009-2013 American Community Survey</i> | 80% of commuters drive alone 6% of commuters ride transit, bicycle, or walk | 75% of commuters drive alone 10% of commuters ride transit, bicycle, or walk |
| | OBJECTIVE: Reduce vehicle miles traveled (VMT) per capita | | | |
| | <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| | Reducing vehicle miles traveled per person for any trip purpose will reduce per capita fuel and energy consumption. | 9,700 vmt per capita <i>*2013 ODOT VMT on functionally classified Collectors and above, 2013 MORPC land use</i> | 9,200 vmt per capita (5% reduction) | 6,800 vmt per capita (30% reduction) |
| | OBJECTIVE: Increase the percentage of vehicles using alternative fuels | | | |
| | <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| | Increased use of alternative fuel vehicles is a direct measurement of alternative fuel usage. | XX% of registered vehicles use alternative fuels** <i>*Ohio Bureau of Motor Vehicles</i> | XX% of registered vehicles use alternative fuels** | XX% of registered vehicles use alternative fuels** |

**Data for the benchmark is still being gathered. Specific targets can not be established until benchmark is known although the 2020 target would likely be in the range of a 5% to 15% increase from the benchmark with a 2040 target of 50% to 100% increase from the benchmark.

2016-2040 Columbus Area Metropolitan Transportation Plan Objectives and Targets

GOAL: Protect **natural resources** and mitigate infrastructure vulnerabilities to maintain a healthy ecosystem and community.

| OBJECTIVE: Reduce emissions from mobile sources to continuously meet EPA air quality standards for each criteria pollutant | | | |
|---|---|--|--|
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| Clean air an essential natural resource and is a key indicator of a healthy community. | Ozone Non-Attainment PM2.5 Attainment | Ozone Attainment PM2.5 Attainment | Ozone Attainment PM2.5 Attainment |
| OBJECTIVE: Decrease the locations of freeway and expressway facilities that are at risk for flooding | | | |
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| Flooding prohibits safe travel and is a result of vulnerabilities during extreme weather events. | 3 freeway/expressway locations at risk for flooding <i>*2014 ODOT Communication</i> | 3 freeway/expressway locations at risk for flooding | 2 freeway/expressway locations at risk for flooding |

2016-2040 Columbus Area Metropolitan Transportation Plan Objectives and Targets

GOAL: Position central Ohio to attract and retain **economic opportunity** to prosper as a region and compete globally

| OBJECTIVE: Increase the average number of jobs reachable within 20 minutes via automobile and within 40 minutes via transit | | | |
|---|--|---|--|
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| Access to jobs within reasonable travel time is important for the vitality of a region's economy. | On average, 332,000 jobs reachable within 20 minutes via automobile On average, 32,000 jobs reachable within 40 minutes via transit <i>* 2014 Travel Demand Model</i> | On average, 350,000 (5% increase) jobs reachable within 20 minutes via automobile On average, 35,000 (10% increase) jobs reachable within 40 minutes via transit | On average, 365,000 (10% increase) jobs reachable within 20 minutes via automobile On average, 38,500 (20% increase) jobs reachable within 40 minutes via transit |
| OBJECTIVE: Minimize the percentage of total vehicle miles traveled under congested conditions | | | |
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| Efficient mobility of people and freight is an important element of a vibrant economy. | Total vehicle miles traveled under congested conditions: Daily: 3.1% Peak Periods 6.9% <i>*2014 Travel Demand Model on functionally classified Collectors and above</i> | Total vehicle miles traveled under congested conditions: Daily: <5% Peak Periods <10% | Total vehicle miles traveled under congested conditions: Daily: <5% Peak Periods <10% |
| OBJECTIVE: Minimize the amount of extra, or buffer, travel time necessary when planning expected trip travel time. | | | |
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| Freight carriers, commuters and businesses need reliable and consistent travel times to ensure the on-time delivery of goods and most efficiently use their time. | AM Peak Region-wide Uncertainty Index: 1.31 PM Peak Region-wide Uncertainty Index: 1.35 <i>*Calculated from Oct 2013-Sept 2014 INRIX data, arterials and above</i> | Region-wide Uncertainty Index: 1.3 | Region-wide Uncertainty Index: 1.25 |

2016-2040 Columbus Area Metropolitan Transportation Plan Objectives and Targets

GOAL: Create **sustainable neighborhoods** to improve residents' quality of life

OBJECTIVE: Encourage and support MORPC member communities to adopt complete streets policies or policies that contain those elements

| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
|---|--|--|---|
| Complete streets allow for transportation choices, which enhance quality of life. | 14% of MORPC member communities have adopted complete streets policies or policies that contain those elements. | 45% of MORPC member communities have adopted complete streets policies or policies that contain those elements. | 100% of MORPC member communities have adopted complete streets policies or policies that contain those elements. |

OBJECTIVE: Target infrastructure development to serve a higher number of people and jobs and increase sidewalk coverage of arterials and collectors

| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
|---|--|--|---|
| Activity density along major facilities and pedestrian access among the activity provides a more livable environment. | 4.3 people + jobs per acre are within 3/4 mile of arterials 36% of arterials and collectors have sidewalks* * 2015 MORPC Land Use Data, Sidewalk Inventory | 5 people + jobs per acre are within 3/4 mile of arterials 40% of arterials and collectors that have sidewalks** | 6 people + jobs per acre are within 3/4 mile of arterials 85% of arterials and collectors have sidewalks |

OBJECTIVE: Target transit and bikeway infrastructure development to serve a higher number or people

| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
|---|--|---|---|
| Sustainable neighborhoods have access to multiple transportation modes. | 70% of population live within 3/4 mile of a transit stop 71% of population live within 3/4 mile of a bikeway *2015 MORPC Land Use Data | 72% of population live within 3/4 mile of a transit stop 72% of population live within 3/4 mile of a bikeway | 80% of population live within 3/4 mile of a transit stop 80% of population live within 3/4 mile of a bikeway |

**MORPC is completing a regional sidewalk inventory which is not yet complete in order to establish the benchmark. A specific 2020 targets can not be established until benchmark is known although the 2020 target is proposed to be approximately a 5% increase from the benchmark.

2016-2040 Columbus Area Metropolitan Transportation Plan Objectives and Targets

GOAL: Increase regional collaboration and employ innovative transportation solutions to **maximize the return** on public expenditures

OBJECTIVE: Increase the percentage of funding from non-public sources on transportation projects on functionally classified Principal Arterials and above

| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
|--|--|---|---|
| Creative funding partnerships are a result of regional collaboration and seeking out innovative solutions. | 1.3% of funding is from non-public sources on transportation projects <i>*projects completed 2010-2014</i> | 5% (5% increase) of funding from non-public sources on transportation projects | 20% (20% increase) of funding from non-public sources on transportation projects |

OBJECTIVE: Increase the number of projects utilizing innovative initiatives on functionally classified Principal Arterials and above

| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
|--|---|---|---|
| Encourage initiatives that advance innovation and partnership to deliver and build projects efficiently. | 1% of projects utilized innovative initiatives <i>*projects completed with Every Day Counts initiatives utilized for projects 2010-2014</i> | 4% of projects utilized innovative initiatives | 8% of projects utilized innovative initiatives |

OBJECTIVE: Increase the percentage of functionally classified Principal Arterials and above facilities employing coordinated Intelligent Transportation System (ITS) technologies

| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
|---|---|---|---|
| ITS provides for maximization of capacity on existing facilities and real-time response to incidents and security issues. | 20% of mileage utilizes coordinated ITS technologies | 30% of mileage utilizes coordinated ITS technologies | 90% of mileage utilizes coordinated ITS technologies |

OBJECTIVE: Increase the number of transit vehicles and facilities with surveillance capabilities and increase the miles of functionally classified Principal Arterials and above with video surveillance

| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
|--|--|---|--|
| Surveillance capabilities allow for real-time response to incidents and security issues. | 79% transit vehicles and facilities with surveillance capabilities 18% of functionally classified arterials and above are under video surveillance <i>*2014 COTA, DATAbus and ODOT Inventories</i> | 90% transit vehicles and facilities with surveillance capabilities 25% of functionally classified Arterials and above under video surveillance | 100% transit vehicles and facilities with surveillance capabilities 90% of functionally classified Arterials and above under video surveillance |

**Data for the benchmark is still being gathered. Specific targets can not be established until benchmark is known.

2016-2040 Columbus Area Metropolitan Transportation Plan Objectives and Targets

GOAL: Use public investments to benefit the **health, safety, and welfare** of people

| OBJECTIVE: Minimize the difference in trip travel time for disadvantaged populations relative to the regional trip travel time | | | |
|---|---|---|--|
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| The transportation system should equally serve all of the region's population. | Average trip travel time for disadvantaged populations is 5% less than the regional average trip travel time <i>*2014 Travel Demand Model</i> | Average trip travel time for disadvantaged populations within 5% of regional average trip travel time | Average trip travel time for disadvantaged populations within 5% of regional average trip travel time |
| OBJECTIVE: Maintain infrastructure in a state of good repair by minimizing the percentage of bridges with poor General Appraisals, minimizing pavement miles in unacceptable conditions, maintaining transit fleet of a useful life, and incorporating bike facilities | | | |
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| Maintenance and enhancement of existing infrastructure ensures the maximum lifespan and safe use of public investments | 95% of bridges with GA rating of 5 or better, 5% of pavement miles in unacceptable conditions, 6% of transit fleet older than useful life 580 miles of bikeways <i>*2013 ODOT, 2014 COTA, DATAbus, 2015 MORPC Inventories</i> | 95% of bridges with GA rating of 5 or better, No more than 5% of pavement miles in unacceptable conditions, 0% of transit fleet older than useful life 630 miles of bikeways | 98% of bridges with GA rating of 5 or better, No more than 5% of pavement miles in unacceptable conditions, 0% of transit fleet older than useful life 830 miles of bikeways |
| OBJECTIVE: Reduce the number of fatalities and serious injuries from crashes | | | |
| <i>Rationale</i> | <i>Benchmark</i> | <i>2020 Target</i> | <i>2040 Target</i> |
| Crash reduction is a direct measurement of safety. | 0.69 fatalities per 100 million VMT 6.4 serious injuries per 100 million VMT Number of fatalities: 96 Number of serious injuries: 896 Number of non-motorized fatal and serious injuries: 138 <i>*average number of crashes occurring 2010-2014</i> | 0.63 fatalities per 100 million VMT 5.83 serious injuries per 100 million VMT 10% reduction in both fatalities and serious injuries 10% reduction in non-motorized fatalities and serious injuries | 0.42 fatalities per 100 million VMT 3.91 serious injuries per 100 million VMT 39% reduction in fatalities and serious injuries 39% reduction in non-motorized fatalities and serious injuries |