CHAPTER 3:
THE TRANSPORTATION SYSTEM

The transportation system's role is to accommodate the travel needs of the region. The entire transportation system, however, is made up of several components or sub-systems that should be seamlessly connected to provide fluid movement across the system. These include roadways, transit, bikeways, pedestrian facilities, and the unique intermodal facilities that interface these surface modes with ground and air freight. These components each serve their own particular and equally important role in providing for mobility for all persons throughout the region.

This chapter describes these individual systems and intermodal connections that make up the entire surface transportation system.

3.a ROADWAY SYSTEM

The roadway system is the primary component of the transportation system in central Ohio. Nearly all of the transportation systems described later in this chapter require access to the roadway system in order to function. To accommodate growth in travel, the capacity of the roadway system continues to expand through the widening of existing roads and the construction of new roads. Other physical improvements improve safety and access along existing roadways and intersections.

For the purposes of the MTP, MORPC focuses on roads classified as “collectors” or higher. As of 2020, this includes 5,650 lane miles of roadways in the MPO planning area. This “lane mile” figure includes the length of each roadway (in miles), multiplied by the number of lanes in each roadway. That is, a mile of road with four lanes contributes four lane miles in the calculation. Figure 3.1 shows the Federal Functional classifications of roadways within the MPO planning area and Figure 3.2 breaks down the 5,650 lane miles by roadway classification.

Where lane miles illustrates the extent of the roadway system, “vehicle miles traveled” (VMT) depicts the use of the roadway system. Mathematically, VMT is a combination of the distance traveled by all vehicles in a given area over a specific period, which is usually a day. VMT within the MPO planning area has shown an average annual growth of 1.2 percent since 2005. Figure 3.3 shows daily VMT by roadway classification type from 2005 to 2018. Although VMT declined in 2007 and 2008 due to high gas prices and the economic recession, VMT generally continued to rise after 2008.

There are a couple of aspects of the roadway system condition to consider. First is the physical condition—are the roadways and bridges in good repair? Section 4.1 discusses that aspect. Second, how does the roadway operate in terms of level of congestion? This section summarizes the various measures used to determine operational qualities of the system.

While VMT depicts overall use of the roadway system, it alone cannot demonstrate where roadway capacity adversely affects traffic congestion. Growth and development of the region over the past several decades has lead to congestion on the roadway system in Central Ohio. Figure 3.4 shows average traffic conditions during peak periods on major roadways in the MPO planning area in 2018. Roadway segments in green (no congestion), yellow (moderate congestion), and red (severe congestion) portray how traffic puts stress on Central Ohio’s roadway system. MORPC’s Travel Demand Model helps estimate the levels of congestion shown.

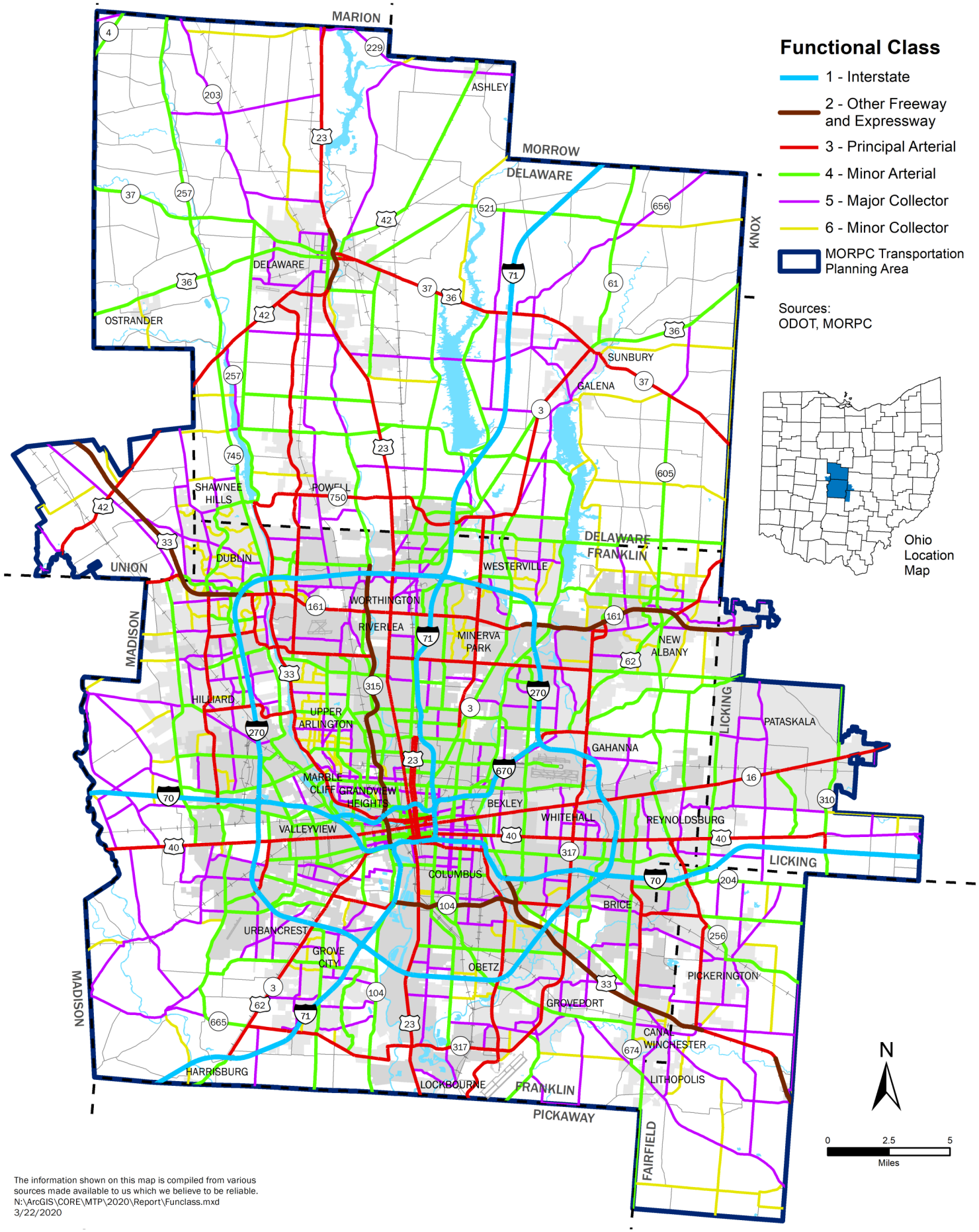

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Figure 3.1
Functional Classification, 2020

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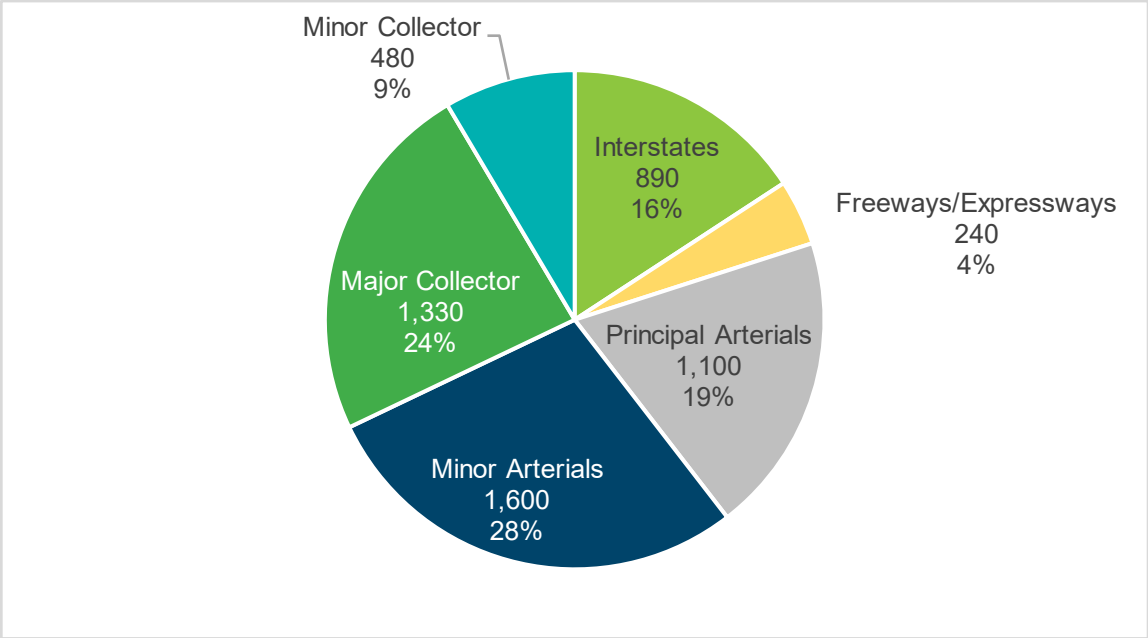

FIGURE 3.2 2020 Lane Miles by Facility Type

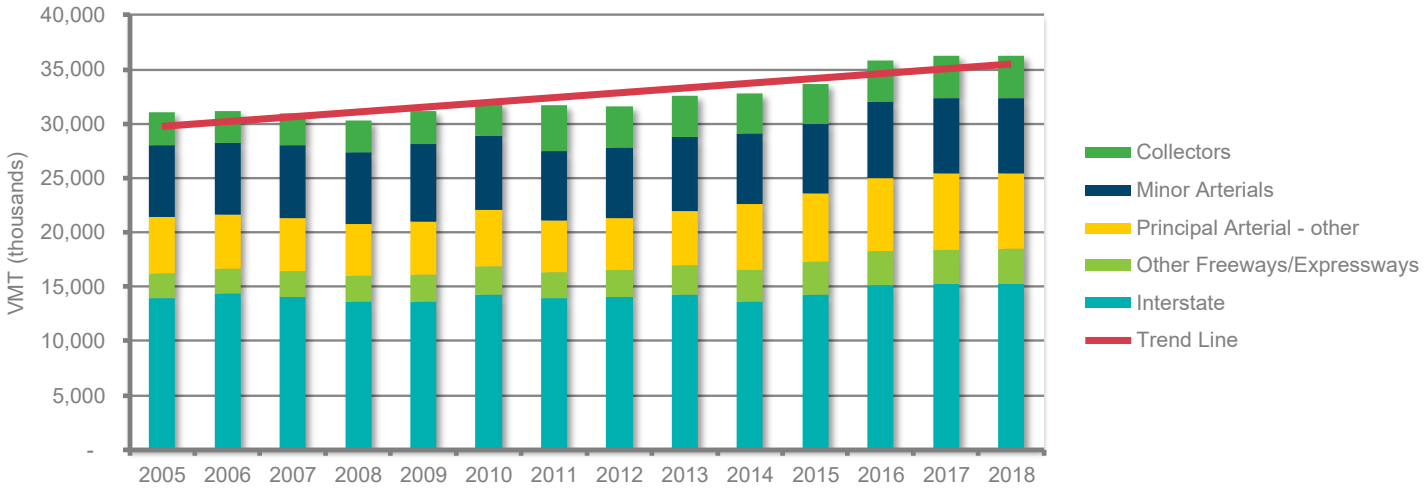

FIGURE 3.3 Daily VMT by Roadway Classification in the MPO, 2009-2018

Note: since 2015, MORPC MPO area was expanded to include Jerome Township in Union County
Improved procedures to estimate local roadway counts were introduced by ODOT in 2018. Users may notice significant differences in FC 7 VMT when comparing the 2018 data with previous annual reports.

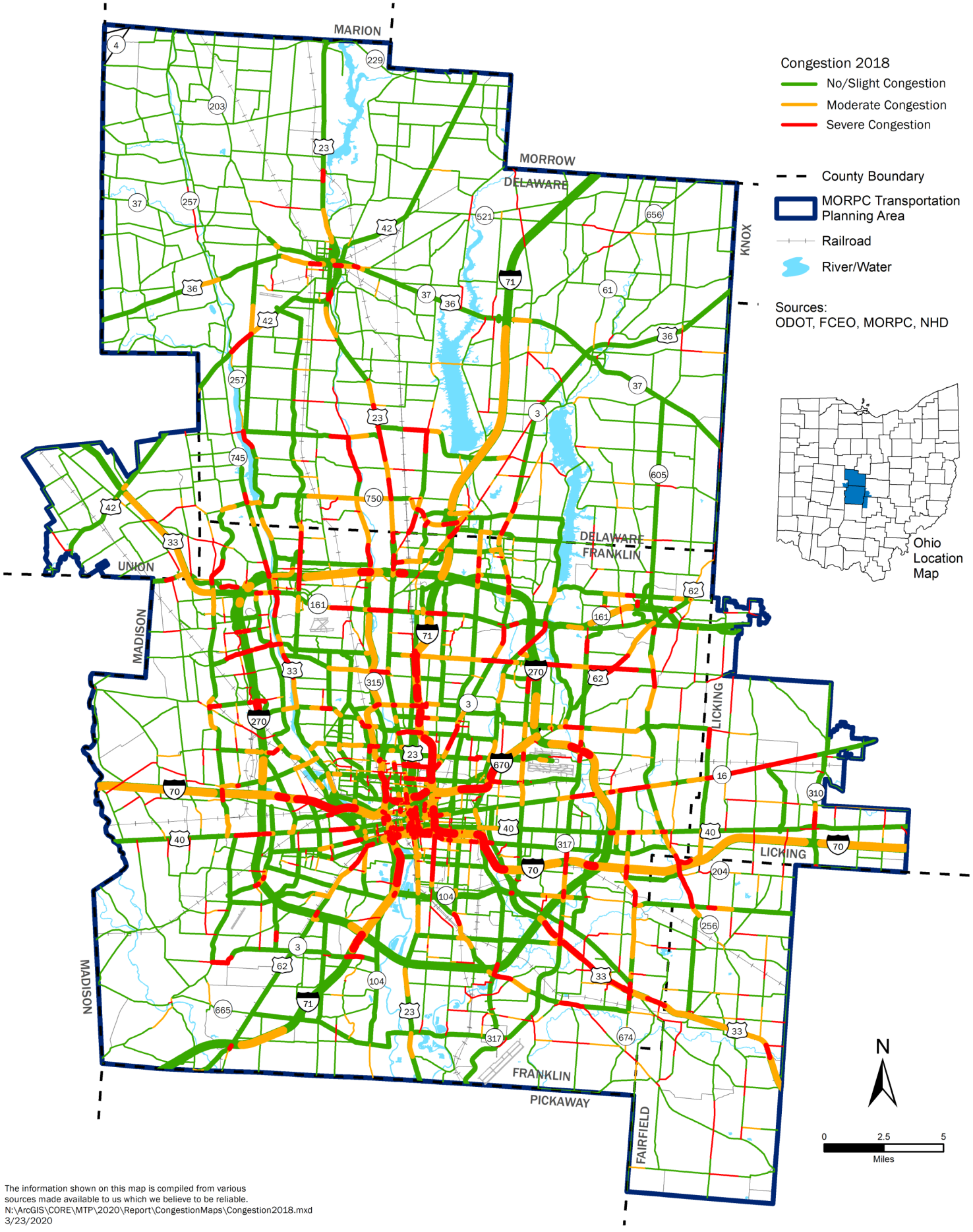

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Figure 3.4
Level of Congestion, 2018

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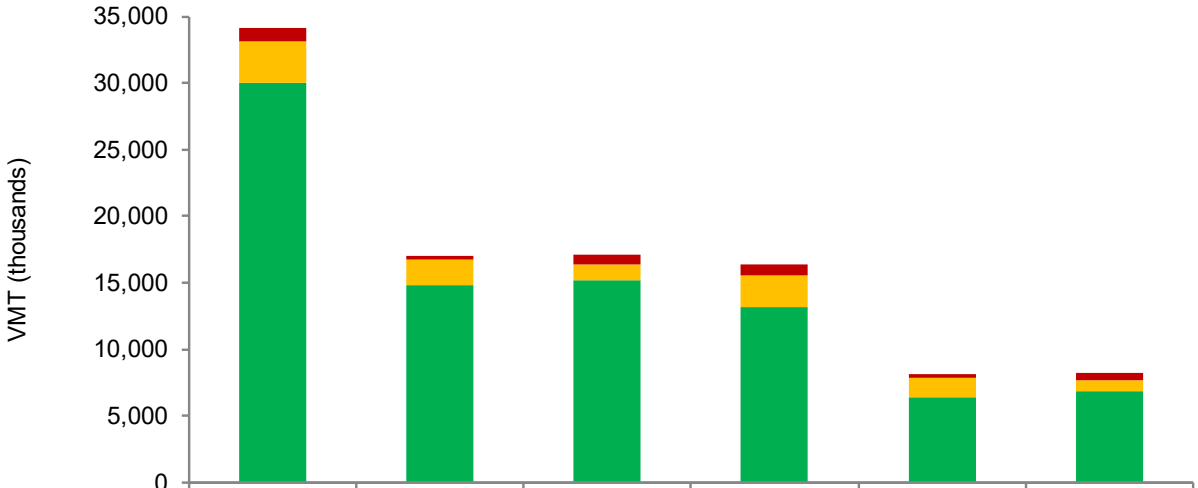
Combining VMT and congestion provides insight into the impact of congestion on overall roadway travel. Figure 3.5 illustrates the amount of VMT at different levels of overall congestion. The three bars on the left illustrate this during a 24-hour time period; the three bars on the right illustrate this during the combined AM and PM "peak periods" when system traffic is highest. Each 3-bar set illustrates this combined measure on all roadways, all freeways and all arterials and collector streets, respectively.



	Total (24hr)	Freeway (24hr)	Arterials/ Collectors (24hr)	Total (Peak)	Freeway (Peak)	Arterials/ Collectors (Peak)
Severe	1,081	314	768	838	276	562
Moderate	3,086	1,892	1,194	2,304	1,464	840
Uncongested	30,011	14,834	15,178	13,202	6,344	6,858

FIGURE 3.5 VMT by Congestion Level in MPO, 2018

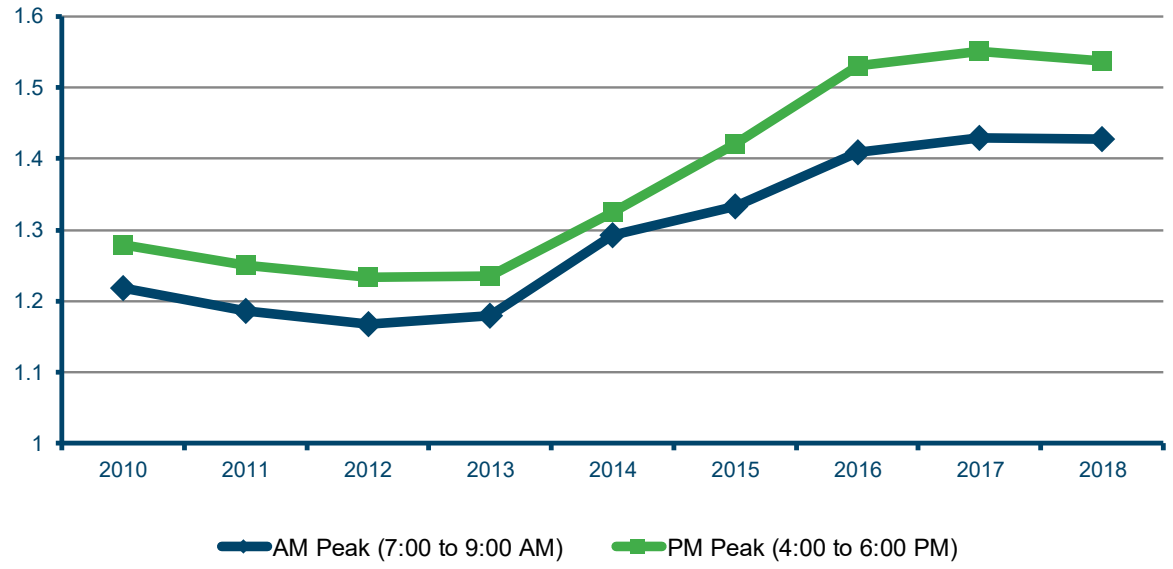


FIGURE 3.6 Travel Time Uncertainty Index, Peak Periods, 2010-2018

TRAVEL TIME UNCERTAINTY INDEX

"Travel Time Uncertainty Index" compares the worst traffic conditions in a given time period to average traffic conditions for the same time period considered. This index is calculated as a ratio of 95th percentile travel time to average travel time for a specific roadway segment. The 95th percentile travel time represents the worst congestion condition in one month.

Travel time data were obtained from ODOT for the NHS segments in MORPC's MPO area. An index was calculated for each segment with travel time available, and then a region-wide index was estimated by averaging individual indices across the segments weighted on their average travel time. The numbers shown in Figure 3.6 are the travel time uncertainty indices from 2010 to 2018, for AM and PM peak periods, respectively. For example, the index for 2018 PM peak period is 1.537, which means that compared to a typical PM peak period, it could take a traveler 53.7% more time to make a trip than in average travel conditions. This measure is meant to provide an indicator of how much extra time a traveler should plan to add to one's trip when traveling during peak periods, to account for delays caused by "worst-case scenario" congestion.

3.b BICYCLE & PEDESTRIAN SYSTEMS

Bicycle and pedestrian facilities, or active transportation facilities, are an important part of the transportation network. Many people use a bike for transportation, and every trip, whether it involves travel by car, bus, bike, rail or air, begins and ends with walking. At least one-third of the region's population does not drive because they are unable due to age, economics, health, or simply choose not to. A convenient and safe active transportation network accommodates these users and could attract others to make short trips by biking or walking, rather than by automobile.

COMPLETE STREETS

To expand the region's active transportation network, MORPC and several jurisdictions within our region have adopted Complete Streets Policies. The MORPC region policy requires all transportation project sponsors using MORPC-attributable funding to accommodate all users in the design of their project. In 2011, the National Complete Streets Coalition recognized MORPC's policy as the best among large MPOs.

BICYCLE FACILITIES

The current bikeway system includes both on- and off-street facilities. This includes trails and "multi-use paths ," which are facilities physically separated from the roadway and intended for multiple, non-automotive uses, including biking. It also includes on-street facilities such as bike lanes, protected cycle tracks, and paved shoulders. However, the MPO planning area has a patchwork system of bicycle facilities. Past construction of components of the roadway system did not always include consideration for cyclists and as a result the region is not fully connected to destinations. To date, the MPO planning area has 700 miles of bikeways (see Figure 3.7).

While local communities are building more bikeways, there are still some significant challenges that exist throughout the region:

- Comfort & Safety
  - Need for additional low-stress (safe and comfortable) bike facilities
  - Limited number of roadways with low speeds, low traffic volumes, etc. that also offer connectivity
- Connectivity
  - Lack of safe connections from neighborhoods, job centers, and recreational opportunities to the active transportation network
  - Lack of continuity across jurisdictions
  - Lack of east-west connectivity across the region
  - Crossing wide, heavily traveled arterials, rivers, and freeways

Regional Bike Network

To provide information to the bicycling community and the region, in 2009, MORPC and local partners created a Bike User Map for the region that is available both as a printed map and as an interactive online map. The base for this map was Bicycle Level-of-Comfort (LOC) data, which illustrates the usability and comfort of roads for bicycling. Public input was also used to verify and finalize the information presented on the map. The LOC identifies the level of stress using Good, Moderate, Poor and Residential designations. It also includes multi-use paths.

Central Ohio Greenways

The Central Ohio Greenways network serves as the backbone of the bicycle network and consists primarily of north-south trails or multi-use paths along the region's five major waterways. Currently, these greenways extend more than 200 miles throughout the 7-county region, providing separated facilities for people to walk and bike both for transportation and recreation.

PEDESTRIAN FACILITIES

The MPO planning area lacks a comprehensive system of pedestrian facilities. A pedestrian network should provide comfortable and safe walking conditions for everyone. To provide such conditions, a number of factors must be considered, such as street widths, number of travel lanes, traffic volumes, travel speeds, and roadside connections, which include sidewalk width and separation from moving traffic. A comprehensive network of pedestrian facilities provides for direct and convenient pedestrian travel within and between residential areas, places of employment, neighborhood activity centers, and other destinations. In very rural areas, a paved shoulder may be an appropriate pedestrian facility; in more urban areas, a sidewalk is most appropriate. Multi-use paths are an important component of a pedestrian network as well.

Past construction of components of the roadway system did not always include consideration for pedestrians. In 2015 MORPC partnered with the City of Columbus and the Ohio Department of Transportation (ODOT) to compile an inventory of sidewalk facilities in the MPO planning area. The inventory is available online in an interactive web map format and includes attributes such as where sidewalks are and are not located, and the location of marked and unmarked crosswalks. The inventory is maintained jointly by ODOT and local jurisdictions. The inventory is used to support transportation planning activities throughout the region. Existing sidewalk facilities are shown in Figure 3.8.

Chapter 6 will describe the strategies and projects identified related to the bike and pedestrian systems.

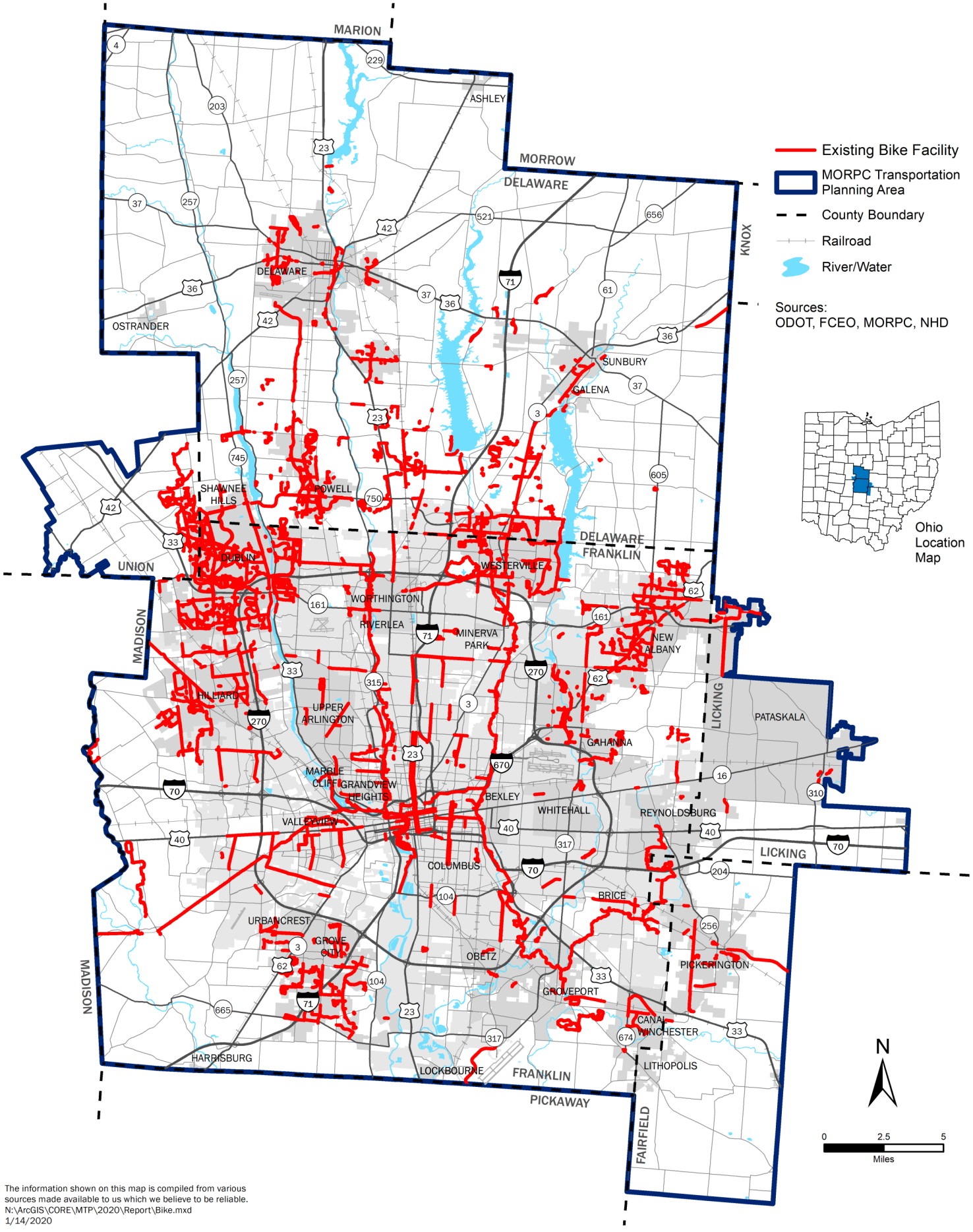


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Figure 3.7
Bicycle Facilities, 2020

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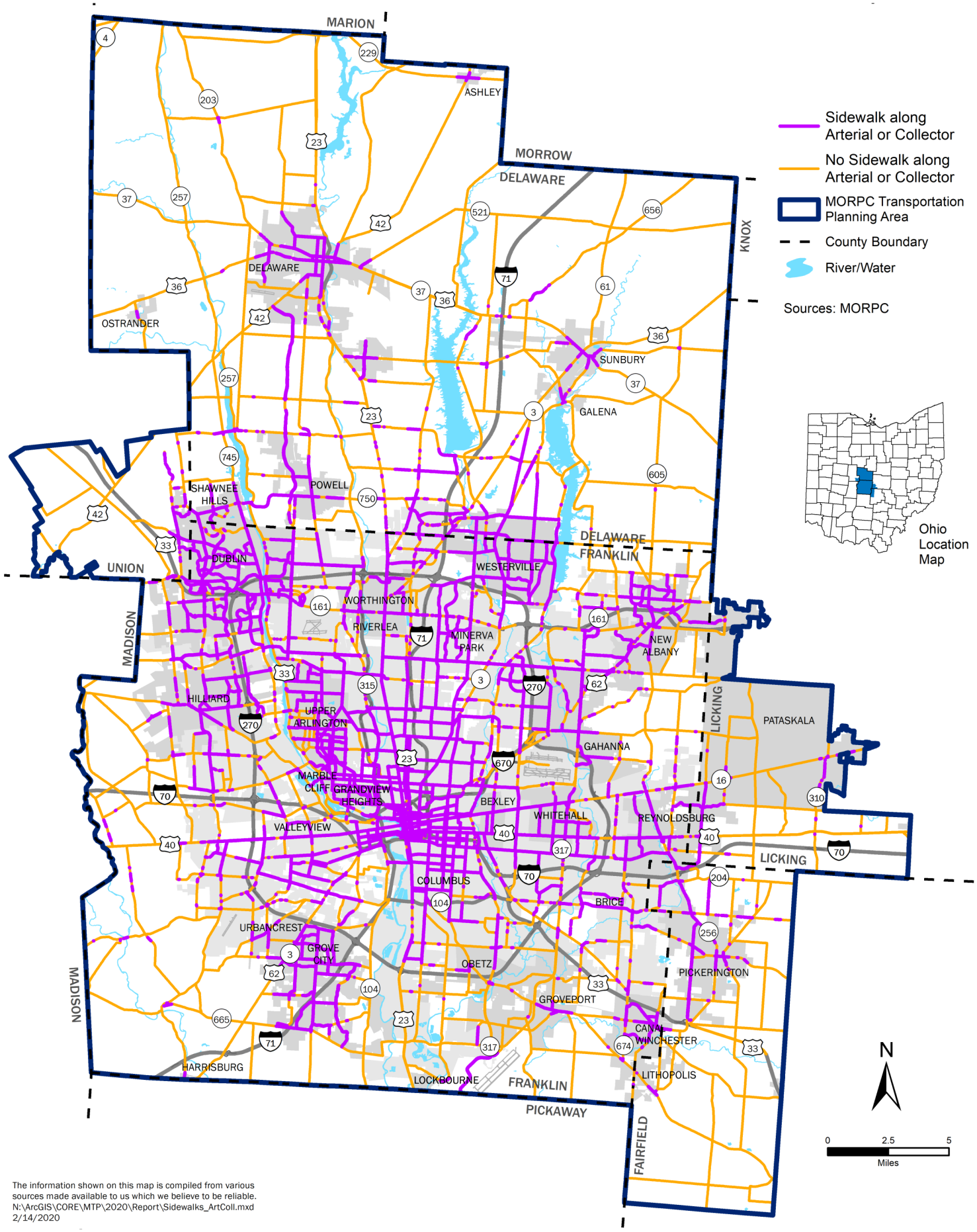

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Figure 3.8
Sidewalk Inventory, 2020

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3.c TRANSIT SYSTEMS

The need and demand for transit is changing in response to both underlying demographic changes in central Ohio's population and cultural preferences. Changing cultural preferences for transportation are evident from lifestyle preferences, migrant populations, younger and older generations. A large portion of these populations have expressed a desire to live in communities with access to transit and that are pedestrian and bike friendly.

Public transit can offer a more convenient, economical and/ or environmentally prudent choice over other modes of transportation. The very presence of a convenient and accessible transit system may help attract and retain a skilled workforce and enhance the quality of life.

Some individuals may not be able to afford personal transportation, or may lack the ability or the interest to drive; public transit may provide the only independent means of transportation. It preserves the connection to work, daily living needs, medical appointments and other destinations.

The transit systems that operate within the MPO area range from large urban to coordination programs. These system classifications relate to the size of the urbanized area or cluster they serve, which, in turn, determines eligibility for different sections of federal funding. Federal Transit Administration (FTA) formula funding is often determined by area population, population density, transit system ridership and operating costs. Three types of transit systems operate within the planning area.

- Large Urban Transit Systems serve an urbanized area (UZA) defined by the Census with a population over 200,000. In the planning area the Columbus urbanized area has two urban systems the Central Ohio Transit Authority (COTA) and Delaware County Transit (DCT). As a result of the 2010 Census, in 2013 as defined by the US Census Bureau the DCT, which is owned and operated by the Delaware County Transit Board (DCTB), was reclassified from a rural transit system (in an urbanized cluster with less than 50,000 people) to a small transit system in a large urban area with population over 200,000.
- Small Urban Transit Systems serve urbanized clusters with a population of 50,000 or more. The Licking County Transit Board (LCTB) is the only small urban system in the MPO area.
- Rural Transit Systems serve areas that do not meet the above population thresholds. Two such systems operate in the MPO area—the Lancaster-Fairfield Public Transit System (LFPT) and Union County Agency Transportation Service (UCATS)

Table 3.1 displays statistics for each system.

Other transit systems adjacent to the planning area include Pickaway and Madison counties. The Pickaway Area Rural Transit (PART) is a rural transit system that offers demand-response, point deviation, Columbus Shuttle, rural route and other immediate response services. Madison and Union counties participate with ODOT's Office of Transit's Coordination Mobility Management Program with Madison County Ride and UCATS.

The transit service areas are shown in Figure 3.9

Table 3.1
Transit System Operation Characteristics
National Transit Database 2014-2018

Provider		Annual Data	2014	2015	2016	2017	2018
COTA	Fixed-Route	Passenger Trips	19,041,382	18,920,014	18,549,436	18,401,546	18,913,789
		Vehicle Miles	10,590,852	11,443,670	12,298,599	13,036,419	13,619,995
		Vehicle Hours	879,037	948,298	1,013,167	1,072,219	1,143,094
	Demand-Response	Passenger Trips	285,817	282,515	278,379	287,242	291,455
		Vehicle Miles	3,382,851	3,495,999	3,480,344	3,542,978	3,551,774
		Vehicle Hours	172,145	178,039	179,844	180,302	182,865
DCTB	Fixed-Route	Passenger Trips	56,506	66,846	66,458	61,676	46,693
		Vehicle Miles	233,786	299,109	255,333	249,899	191,041
		Vehicle Hours	16,783	20,493	18,355	18,158	13,643
	Demand-Response	Passenger Trips	11,745	14,655	18,193	16,653	24,007
		Vehicle Miles	145,936	163,901	162,865	207,788	224,456
		Vehicle Hours	7,895	9,390	9,263	11,716	13,026
LFPT	Fixed-Route	Passenger Trips	n/a	n/a	n/a	n/a	20,428
		Vehicle Miles	n/a	n/a	n/a	n/a	152,736
		Vehicle Hours	n/a	n/a	n/a	n/a	11,500
	Demand-Response	Passenger Trips	92,290	111,787	115,167	113,883	89,847
		Vehicle Miles	533,956	562,003	528,785	526,368	402,667
		Vehicle Hours	25,934	34,647	34,200	34,680	21,344
LCTB		Passenger Trips	165,738	148,771	132,773	124,503	124,899
		Vehicle Miles	1,837,455	1,698,818	1,542,804	1,450,105	1,428,602
		Vehicle Hours	96,252	82,997	72,348	66,265	67,361
UCATS		Passenger Trips	n/a	n/a	11,323	8,744	7,811
		Vehicle Miles	n/a	n/a	n/a	67,523	74,214
		Vehicle Hours	n/a	n/a	n/a	2,550	2,537

CENTRAL OHIO TRANSIT AUTHORITY (COTA)

COTA provides public transit services within Franklin County as well as small portions of Delaware, Fairfield, Licking and Union counties that are included within the municipal corporation limits of Columbus, Dublin, Westerville and Reynoldsburg. COTA's Board of Trustees is made up of representation from its Charter municipalities and Franklin County. COTA collects sales tax within these areas to provide transit service.

COTA provides three types of service based on frequency, as shown in Figure 3.9:

- Frequent service operates throughout the day · Departure times are every 15 minutes or better
- Standard service operates throughout the day · Departure times are typically 30-60 minutes apart
- Rush Hour service Operates Monday - Friday during AM and PM peak travel times

CMAX Bus Rapid Transit

In January 2018, COTA introduced a new transit technology to central Ohio, Bus Rapid Transit (BRT). The Cleveland Avenue CMAX line was funded in part by a Section 5309 Capital Investment Grant awarded to COTA in June 2016.

Construction of the CMAX Cleveland Avenue BRT began in August 2016, along the Cleveland Avenue corridor between downtown Columbus and Polaris Parkway and Africa Road in the City of Westerville. CMAX represents a $48 million investment in the community resulting in upgraded transit and spurring economic development, of which Congress approved nearly $38 million toward the project.

CMAX resulted in substantial benefits for the more than 200,000 residents in the corridor and more than 170,000 people working along the corridor. CMAX features faster travel times along the corridor along with specially branded buses, upgraded transit stations and bus stops and other customer amenities.

First/Last Mile Partnerships

In an effort to address the gap in “last-mile” service, COTA has partnered with local municipalities, employers, and MORPC to offer shuttle service from COTA facilities to employment centers. In 2014, COTA partnered with the City of New Albany to launch the SmartRide shuttle. Funded by New Albany, the service connects COTA’s New Albany Park & Ride to all employers in the New Albany International Business Park, which boasts more than 12,000 jobs.

In 2015, MORPC and COTA partnered with the City of Groveport to launch the GREAT shuttle service funded by Groveport with additional assistance from the Village of Obetz. This service provides safe last-mile trips in the Rickenbacker area to over 34 large employer job sites in a low-density industrial area of Franklin County without safe pedestrian or bicycle infrastructure. The shuttle service is free for employees. This service is being provided with the working goal for the employers to contribute.

COTA Plus is an on-demand, app-based rideshare service that can book multiple passengers heading in the same direction into a shared vehicle. Referred to in the industry as on-demand microtransit, COTA Plus operates either as a point-to-point rideshare service or as a connection to or from a COTA bus line. Operators are COTA employees, who receive best-in-class training and are subject to background checks upon hiring.

The first COTA Plus pilot began in Grove City in June 2019. This partnership provides customers with further access to jobs, healthcare and more, while also offering a fast, convenient and comfortable transit solution. COTA Plus provides more jobs and residents access to COTA's fixed-route network.

Additional COTA Plus zones are planned to be implemented in 2020.

COTA's Mainstream Service

Mainstream paratransit service provides demand response service within three-quarters of a mile of fixed route service for qualifying customers as required by the Americans with Disabilities Act (ADA). "Demand response" refers to a system that dispatches transit vehicles to a destination upon request instead of a fixed schedule. Such a system requires trips to be scheduled in advance.

Mainstream also provides accessible non-ADA demand response transportation service for clients who want to travel outside COTA's ADA service area beyond three-quarters of a mile of a fixed route line but within COTA's service area.

In 2019 COTA launched Mainstream on Demand, a TNC type service powered by UZURV. UZURV provides private, accessible, same day, non-stop, door-to-door service. Trips may be scheduled at least two hours in advance or further in advance with greater flexibility. Reservations can be made up to 30 days in advance. This service model has been very successful, drivers arriving with in five minutes of the desired time.

Downtown C-pass

In 2017, MORPC, COTA and the Capital Crossroad Special Improvement District (SID) in downtown Columbus piloted and partnered to provide no cost transit passes to employees and residents of participating SID member property owners. C-pass is good for rides anywhere in COTA's service territory. The program is funded by property owners in the SID in partnership with the Mid-Ohio Regional Planning Commission and other sponsors. The goal of the program is to decrease the number of cars being driven and parked downtown, making office space more appealing to companies that would like to move downtown but choose not to because of concerns about a lack of parking for employees. C-pass has shown an increase COTA ridership.

The C-pass program was fully rolled out in June 2018, and work is in progress to continue the project though the year 2025 with COTA, MORPC and the SID.

DELAWARE COUNTY TRANSIT (DCT)

DCT became part of the Columbus Urbanized Area from an urban cluster as a result of the 2010 Census. The reclassification to an urban transit system changed the way DCT receives FTA funding from Section 5311 funds administered by ODOT to Section 5307 formula funding administered by DCT directly with FTA and reporting to NTD. With this shift, the federal operating funds available to assist in subsidizing transportation were severely reduced.

DCT serves all of Delaware County with demand-response, and five fixed routes (shown in Figure 3.9) and paratransit service. Current fixed routes include the Green Route from Delaware City to COTA's Crosswoods Park-N-Ride via the Polaris area, four Delaware City Routes. DCT does not receive county sales tax levy funds to operate. Instead, local funding comes directly from the budgets of participating jurisdictions in Delaware County. DCT and COTA accept transfers between their fixed-route systems.

DCT provides fixed route and on demand service. The challenge for DCT is to determine how to best serve the entire county with limited operating funds in the future. The idea of providing this service through demand-response is the most logical way to proceed, but the service needs to be affordable for the passengers so the service will need to be subsidized

The DCT Board provides Mobility Management to the Delaware County community. Mobility

Management strives to provide a one-stop information source for transportation options in Delaware County by linking passengers' needs with the most appropriate form of transportation. Mobility Management also provides referral services to passengers who may qualify for financial assistance with their transportation needs.

LICKING COUNTY TRANSIT BOARD (LCTB)

LCTB provides demand-response service in almost all of Licking County. Its service area includes the City of Pataskala and Etna Township, which are both in the MPO area. In addition to its fares, LCTB receives local funding from Licking County general revenue funds and local service contracts. LCTB receives state funding from ODOT's Office of Transit and federal funding through FTA.

LANCASTER-FAIRFIELD PUBLIC TRANSIT

LFPT provides curb-to-curb demand-response service and three deviated-fixed routes in Fairfield County. Unlike the other transit agencies in the MPO planning area, a countywide board does not govern LFPT. At present, it remains a department of the City of Lancaster. Like DCT, it receives no county sales tax levy funds. With local support, it began serving Violet Township and the city of Pickerington in 2010. With the financial support of jurisdictions across Fairfield County, in 2011 the service went countywide. LPTS receives state and federal funding through the ODOT Office of Transit.

Each transit system in the counties surrounding Franklin receives requests for transportation into Franklin County and the City of Columbus. Employment opportunities, specialized medical treatment, shopping and entertainment all draw passengers beyond their country of origin. However, the distance that transit providers must travel beyond their normal service area can be cost prohibitive. It also deprives that transit system from a fleet vehicle for a long period when it could be serving other customers instead. Systems that do provide such trips add a significant premium to the fare.

INTER-CITY TRANSIT SERVICES

In addition to the local transit systems, three companies provide inter-city motor coach service in the planning area.

Greyhound operates the largest intercity bus system in the nation. It offers service to over 2,300 destinations and maintains interline partnerships to facilitate transfers to destinations beyond its network. Greyhound also offers passengers the opportunity to connect with Amtrak service in Cleveland or Cincinnati. The company maintains a station in Downtown Columbus.

Flixbus provides daily service to and from Pittsburg and Washington D.C. using long distance electric buses. The stop in Columbus is on W. Lane Ave near Neil Avenue. near a COTA stop on W. LANE.

GoBus is a Rural Inter-City Bus Service funded with FTA Section 5311(f). This service is designed to address low-cost and geographically accessible intercity bus transportation needs of the entire state by supporting projects that provide transportation between non-urbanized areas and urbanized areas that result in connections of greater regional, statewide, and national significance. Funding for the Rural Inter-City Bus is administered by ODOT, and the service is currently operated by Barons Bus and Miller Transportation.

Buses are equipped with amenities, such as wireless internet and electrical outlets, offering service similar levels to those found on Flixbus or Greyhound, with connections to other transportation options such as Amtrak and airports. Passengers are also able to connect with healthcare and educational

opportunities.

GoBus operates five lines, some of which can be transferred between each other listed below.

- Columbus, Athens, OH and Parkersburg, WV, facilitating transfers at Port Columbus International Airport, the Greyhound Station in Downtown Columbus, Ohio University, and Hocking College
- Cincinnati and Athens, OH, facilitating transfers to the Greyhound Station in Cincinnati
- Cleveland, OH, Parkersburg WV, and Athens, OH with transfers to the Greyhound Stations in Cleveland, Akron and Canton
- Columbus to Wooster, OH, with transfers to the Licking County Transit Board office, Port Columbus International Airport, the Greyhound station in Downtown Columbus and the College of Wooster
- Columbus to Van Wert, OH, with transfers to the Greyhound station in Downtown Columbus

COORDINATED TRANSPORTATION PLANS

Transportation needs that go unmet by transit systems may sometimes be fulfilled through other government departments, non-profit organizations and private companies. Federal, state and local funding programs beyond those specifically designated for public transit can generate alternate transportation service offerings. Coordination of these programs offers the chance to better use these funds so that fewer needs go unmet.

All five counties covered or partially covered by the MPO planning area have maintained their own Public Transit-Human Services Transportation Coordination Plan or Coordinated Plan. Local coordinating councils or boards typically carry the responsibility for implementing these plans. These boards include representatives from the transit system and human service agencies, such as county boards of developmental disabilities, groups focused on senior transportation, and county departments of job and family services. The funding and operating picture behind human services transportation remains as diverse as the needs of the populations served. Coordinated plans and these boards seek to find opportunities to coordinate services and meet the transportation needs of the elderly, low- income and persons with disabilities.

FTA Section 5310 funds to enhance the mobility of seniors and persons with disabilities are available to transit providers, local jurisdictions, non-profits and private for-profit companies to help implement a county's Coordinated Plan. MORPC is the designated recipient for the Columbus UZA, and ODOT's Office of Transit serves the same role in the small urban and rural areas outside the MPO.

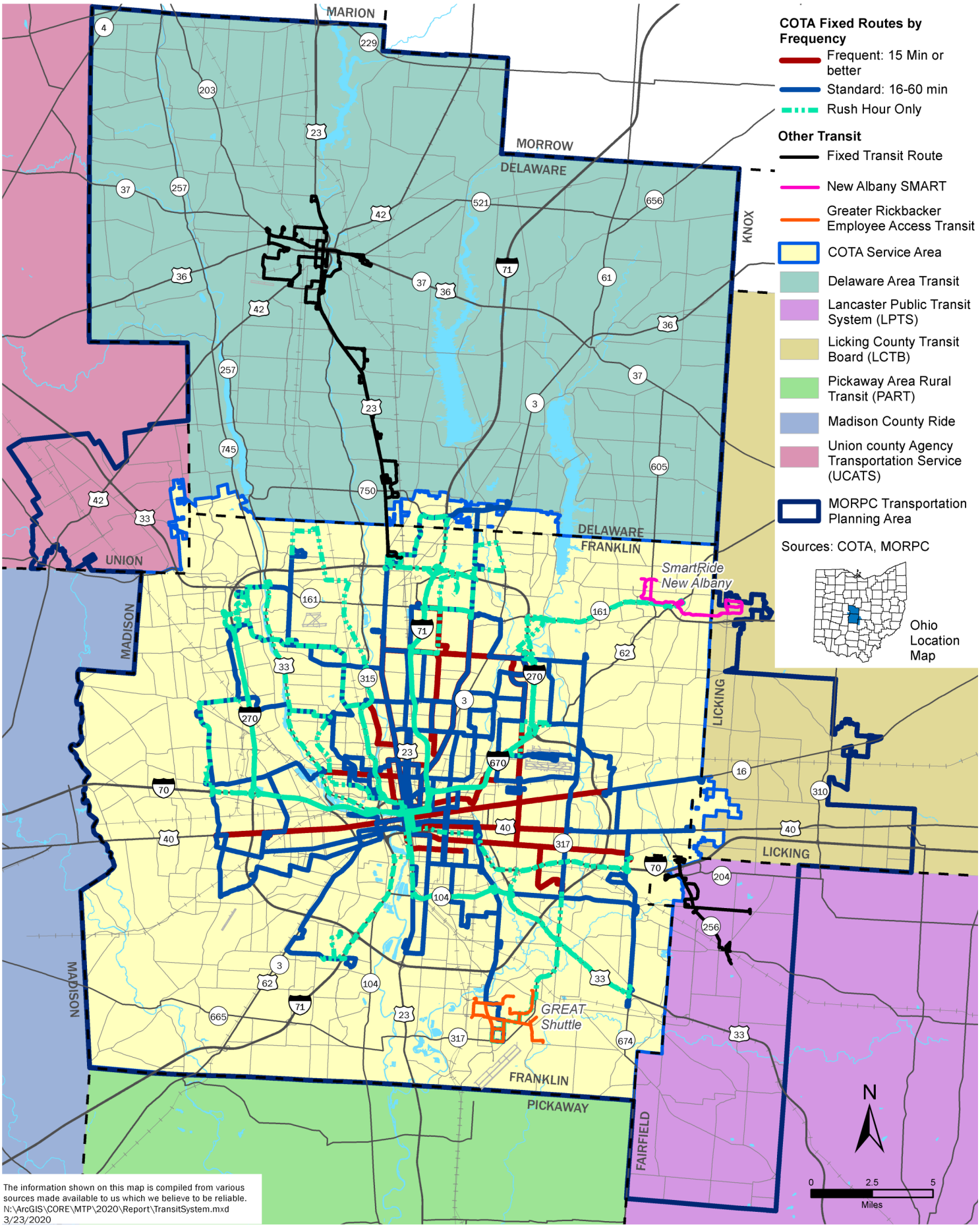

Figure 3.9
Transit Service, 2020

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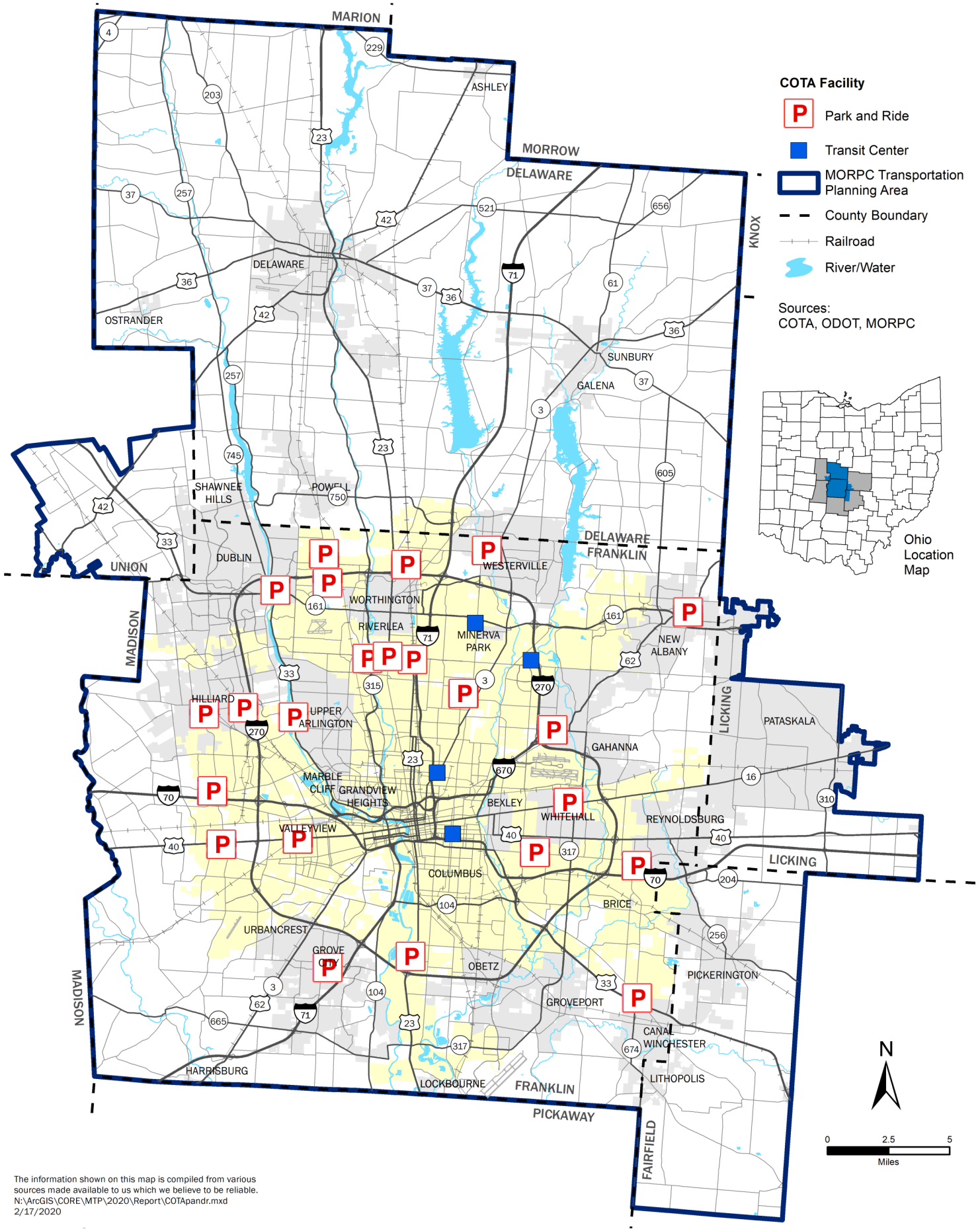

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Figure 3.10
Transit Facilities, 2020

MID-OHIO REGIONAL MORPC PLANNING COMMISSION

3.d FREIGHT RAIL & MULTIMODAL CONNECTIONS

Central Ohio offers a strategic location for the transfer and distribution of national and international goods across the United States and eastern Canada. Whether by truck, rail, or air, our region's efficiency in the movement of goods is an important part of the nation's security, economic competitiveness, trade, and commodity flow. MORPC's planning activities consider strategies and projects that support the area's economic vitality, increase the mobility of freight and the workforce that supports freight-related businesses, and enhance the integration and connectivity of the transportation system across and between all modes that support freight activities.

Central Ohio has historically held an important place in national freight movements. Our region's economy has benefited from its multimodal transportation assets for many decades. Today, the Central Ohio region is home to an inland port and is crossed by two of the nation's arterial rail corridors as well as two major interstate highways that traverse the country coast to coast.

Central Ohio is strategically located within a 10-hour truck drive of 46 percent of the United States population and 61 percent of its manufacturing. This historic proximity to people and jobs has led the Columbus region to establish a strong logistics sector that contributes to our region's economic vitality. Over 4,400 logistics and distribution operations employ over 83,000 people in the Central Ohio region. Our location is critical to the movement of goods at the state and national stage.

Our region's freight activities are contingent on shifts in the global supply chain, and include factors such as major infrastructure improvements. Examples of such improvements include the Panama Canal expansion, completed in mid-2016, that doubled the canal's capacity in the United States, the port with the most depth and the most container traffic is the Port of Los Angeles/Long Beach. However, capacity-increasing projects such as the Panama Canal expansion has led other ports, including the Port of Virginia, to prioritize improvements such as dredging to meet the needs of larger barges. These improvements are expected to increase imports along the east coast ports, which impact the flow of freight in Central Ohio and increases the competitive advantage of our location in attracting and retaining logistics businesses.

While ports on the east coast have prepared for the potential influx of container traffic, Central Ohio public and private partners made strides to complete its Heartland Corridor project, linking the Port of Virginia to Columbus and on to Chicago. This public/private partnership involved not only funding, but also the development of its facilities (like Buckeye Intermodal Yard and the Rickenbacker Intermodal Facility in Central Ohio) and the infrastructure to serve them. These partnerships have resulted in sustaining existing businesses, and created new economic development in our region. Some quick facts about the MPO's freight/economic assets:

- Four intermodal lift and rail yard facilities
- 2 Class 1 rail service providers (CSX and Norfolk Southern), and a third Class 1 (Genesee & Wyoming) operates in the region
- Rickenbacker Airport, dedicated mostly to air freight cargo
- Rickenbacker Inland Port, which includes Foreign Trade Zone #138
- In 2017, the region exported nearly $6 billion in goods
- More than 1,600 small and medium-size businesses that specialize in exports

These assets translate into more higher-paying jobs, a greater tax base, and an improved quality of life for Central Ohio residents.

CENTRAL OHIO FREIGHT FACILITIES

Today's economy requires rail, truck, water and air modes to work together to provide the best value for their customers. The MPO area is home to significant air, rail and truck intermodal hubs, and it is within this multi/intermodal framework that the needs of our regional freight network continue to be considered. MORPC works closely with its regional partners to meet the needs of Central Ohio's freight facilities. Below is an overview of our region's most important freight assets. These are shown in Figure 3.11.

INTERMODAL LIFT AND RAIL YARDS

Central Ohio's public and private sectors have long recognized the importance of the logistics industry to the region's economy. As such, investments have occurred across the region to position the MPO area competitively in the retention of existing businesses and to attract new businesses as the economy fluctuates. The MPO area is home to four major intermodal lift and rail yards, most of which have experienced improvements to accommodate growth in the region's logistics sector.

CSX Buckeye Yard

Also referred to as CSX Columbus, Buckeye Yard is one of five CSX intermodal terminals in Ohio. Buckeye Yard is owned by two railroads, CSX and Norfolk Southern (NS). NS owns the classification yard and western portion of the yard, and uses Buckeye Yard primarily for storage. CSX Columbus is located on the eastern side of the classification yard.

In 2010, CSX purchased land to enable an expansion of Buckeye Yard to accommodate increases in container traffic stemming from improvements at the CSX's Northwest Ohio Intermodal Transfer Container Facility (ITCF). The $59 million expansion of Buckeye Yard was completed in 2013, adding 24 acres to a total of 36 acres and doubling capacity from 180,000 to 360,000 lifts per year.

Rickenbacker Global Logistics Park

This facility is part of one of the MPO area's most critical intermodal assets that connect air, rail and truck freight modes. The rail component is serviced by Norfolk Southern and CSX. The Norfolk Southern Rickenbacker Intermodal Terminal covers 175 acres and can handle more than 400,000 containers annually.

Discovery Park Intermodal Yard

Discovery Park Intermodal Yard is located in southeast Columbus with rail and truck access to warehouse and distribution facilities in nearby Rickenbacker. Operated by Norfolk Southern, it opened in 1990 and underwent one major expansion in 1994, followed by a second in 1999. These expansions occurred to provide more parking and container storage, but did not expand rail track length to accommodate lift expansion.

Discovery Park is a 40-acre yard that has experienced a steady increase of rail lifts since 1993, and growth has reached a plateau as the intermodal yard has passed its designed efficient capacity of 125,000 lifts per year.

Parsons Yard

Parsons Yard is an intermediate- sized yard on the south side of Columbus operated by CSX. It is used primarily to serve local industry, but it is also a support yard for coal operations, handling loaded and empty hopper cars/trains. Spot car repair and locomotive service tracks are also located in the yard. Regional and short-line railroads use this yard to switch service between them and the Class I railroads.

AIR FREIGHT CARGO FACILITIES

Rickenbacker International Airport

While there are five airports in our region that are part of the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS), only two engage in air cargo activities: Port Columbus and Rickenbacker International airports. Port Columbus Airport's air cargo operations are minimal and secondary to its passenger operations, with Rickenbacker Airport as the region's primary air cargo airport. The presence of these air facilities increases the multimodal opportunities for freight movements in the region and leverage our region's competitiveness at a national and global level. In 2018, over 300 million pounds of domestic and international freight were handled at Rickenbacker International Cargo aiport.

As one of the world's only cargo-dedicated airports, Rickenbacker International Airport offers an uncongested option to move air cargo to, from and within the United States. The airport offers nearly 645,000 square feet of air cargo facility space, two parallel 12,000-foot runways and Category II Instrument Landing System for all-weather landing capabilities.

Rickenbacker's success in recent years has resulted in the need for expansions of the airport to accommodate adequate cargo storage as well as an overall increase of airport operations. Since 2014, the airport's cargo facility space has increased from over 200,000 square feet to nearly 645,000 square feet. The region's public and private stakeholders are working collectively to identify and fund future improvements, including infrastructure needs to meet the growth of an area that houses one of the region's most critical regional and national economic engines. As such, MORPC coordinated the completion of a collaborative, community-driven study, the 2018 Rickenbacker Area Study, to identify infrastructure investments needs to leverage the area as a globally competitive freight hub..

Rickenbacker Inland Port (Foreign Trade Zone #138)

Considered an inland port, Rickenbacker provides Central Ohio with air, truck and rail intermodal capabilities. The area includes the Rickenbacker International Airport, which is dedicated primarily to air cargo and Foreign Trade Zone #138.

A Foreign Trade Zone is a site within the United States that is legally considered outside of Customs territory, so goods may be brought into the site duty-free and without formal customs entry, providing users the opportunity to lower costs and remain competitive with international companies. FTZ #138, the seventh most active FTZ in the U.S., encompasses Rickenbacker, surrounding industrial parks and a 25 -county service area. International freighter service continues to expand, with destinations including Shanghai, Singapore, and Shannon, Ireland. In 2014, Cargolux and Cathay Pacific Airways began multiple freighter flights a week between Rickenbacker and Hong Kong.

As of 2018, more than 75 million square feet of industrial space has been constructed in the immediate Rickenbacker port area. which is more than a quarter of the total square feet of industrial space in Central Ohio. Recognizing the importance of this asset, MORPC is working with regional partners, including the Columbus Regional Airport Authority to address infrastructure investment needs as they

arise, to ensure Rickenbacker's continued success.

AVIATION FACILITIES AND GROUND ACCESS

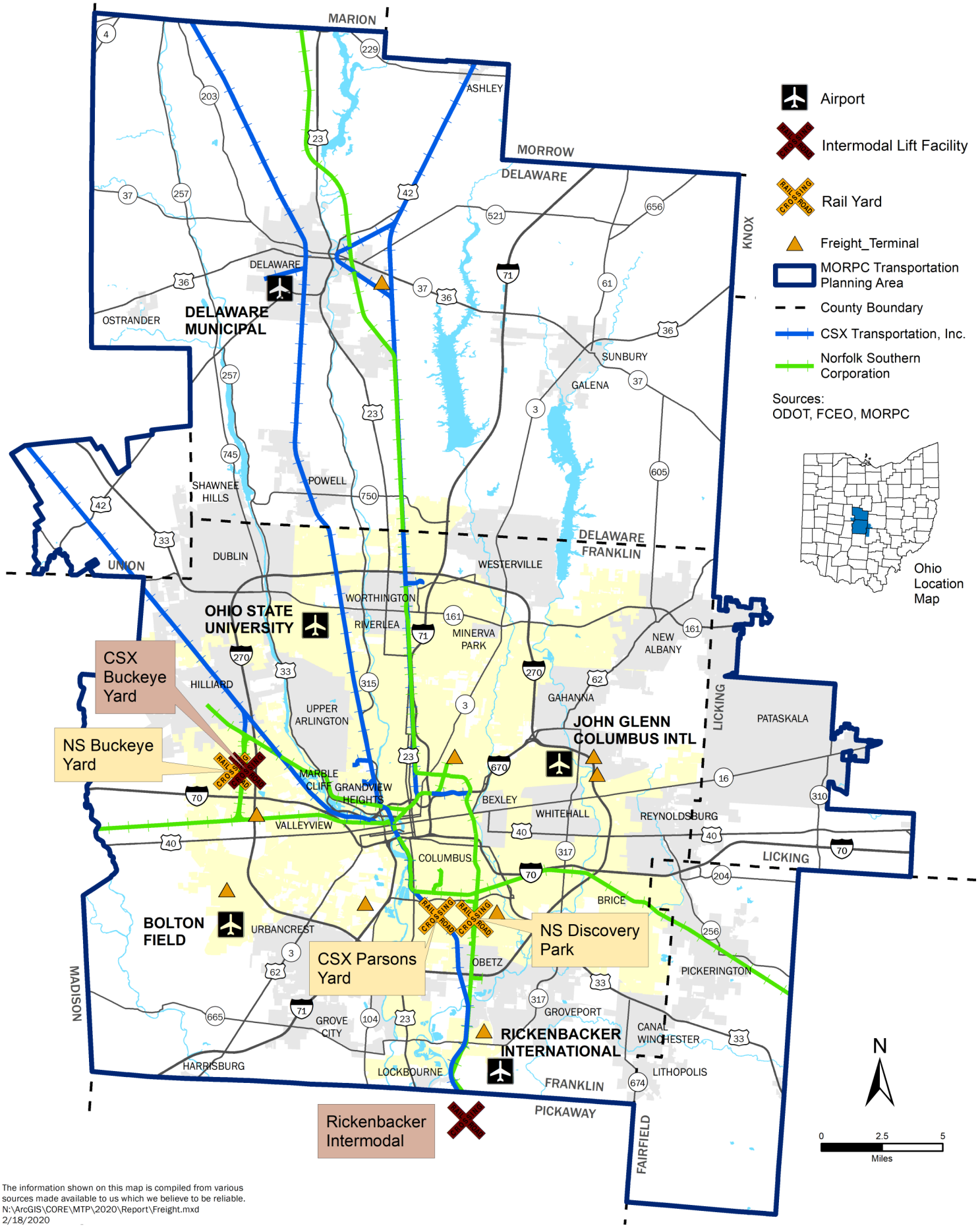
While air transportation is not directly within the purview of MPO planning activities, connectivity of airports to the rest of the region through surface transportation is a part of the Metropolitan Transportation Plan, and it is important to plan for the continued success of this relationship.

Five airports in the MPO planning area are part of the Federal Aviation Administration (FAA) National Plan of Integrated Airport Systems (NPIAS). As shown in Table 3.2, the Columbus Regional Airport Authority (CRAA) owns and operates three of the five, with Port Columbus International Airport serving most of the region's passenger flight needs. Rickenbacker Airport also provides passenger flights to the southern U.S. through low-cost carrier Allegiant Air, but this number is minimal compared to the number of passengers using John Glenn International. In 2019, Rickenbacker had nearly 309,000 passengers travel through its facilities, while 8.6 million passengers departed and arrived from Port Columbus.

John Glenn International

John Glenn International is the region's main commercial passenger airport. John Glenn International provides 140 daily departures to 34 airports. In 2019 8.6 million passengers used John Glenn International . This facility also handles a small amount of air freight relative to its sister airport Rickenbacker, with a total 6.3 million pounds of freight being handled at John Glenn International in 2019. John Glenn International is responsible for nearly 59,000 jobs, with an annual payroll over $3.1 billion, and a total of $12.9 billion in annual economic output to the Central Ohio Region.

Regional stakeholders recognize the potential for economic growth that the John Glenn International Airport represents for Central Ohio. In April 2014, the Jobs, Expansion and Transportation (JET) Task Force was convened to provide recommendations on how to position the John Glenn International Airport area for an economic development boom. Comprised of leaders from the business, economic development and transportation sectors, the task force focused on how best to redefine our airport as an economic hub and the center of transportation for the region. Three working groups were created: Economic Development, Regional Transportation and Air Service. MORPC led the transportation working group and contributed to a report and recommendations to the city and its regional project partners: the Columbus Regional Airport Authority and Franklin County. One the recommendations of this task force involved direct bus service from downtown Columbus to John Glenn Columbus International Airport, which resulted in the current AirConnect COTA bus route.



The information shown on this map is compiled from various sources made available to us which we believe to be reliable.
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Figure 3.11
Freight Facilities, 2020

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