

Metropolitan Planning Council MPO for the Moravia Area

Executive Summary

Moravia is a coastal city of 425,000 people in a metro area of 1.2 million that was founded over 300 years ago. While the metro area's population has been growing at a slow pace, the city itself has seen steady population decline for more than a generation. The city is largely at sea level and is surrounded by a hurricane levee system. While the region does experience 4 seasons, the winters tend to be very short and mild. Summers are generally hot with daytime temperatures commonly higher than 105. The region has a history of hurricanes, most recently in 2007, which caused significant damage. Much of the region's interstate system was constructed in the 1970s, and is generally in good condition. Nearly all of the NHS is owned and operated by the State DOT, except for two toll facilities. Two separate transit agencies within the urbanized area operate a collective 70 fixed bus routes, complimentary ADA paratransit with a total of 60 vehicles, and 3 trolley lines. A separate rural transit agency operates a fleet of 35 vehicles to support the outlying areas.

Population Trends

Year	2000	2010	2017 (est)	Percent Change from 2000
MPO Region	1,100,000	950,000	1,200,000	+9.1%
Moravia	450,000	350,000	425,000	-5.6%
Oysterville	250,000	300,000	305,000	+22.0%
Summer Retreat	40,000	55,000	60,000	+50.0%
Bridgeville	15,000	50,000	75,000	+400.0%
Waldo	25,000	27,000	25,000	+0.0%
Marsh City	15,000	7,000	5,000	-66.7%
Cypress	30,000	15,000	12,500	-58.3%

Moravia began its history as an important 18th century port at the first major bend of the Moravia River. The City also lies at the head of navigation for ocean going ships on the Moravia River and thus represents a very important transfer center for US goods being shipped to other countries as well as an important port of entry for imported goods. As a result of this, Moravia is also the major terminus of the Chicago, Gulf and Southwest Railroad providing significant intermodal connections to the Midwest and Northeast US.

Geography and Climate

Moravia was originally settled along the natural levee of the Moravia River which lies between 10 to 15 feet above sea level. Since 1900, the marshes surrounding the original city have been drained and surrounded by a hurricane levee system which permitted these areas to be developed. Cities such as Oysterville and Marsh City were incorporated shortly after World War II after marshes in those areas were drained and in response to an increased demand for new housing after the war. Due to these areas being former marshes, elevations are often 5 to 10 feet below sea level making these cities prone to frequent street flooding.

Areas to the north of the Gulf of Redemption are located on a slightly higher escarpment of ancient glacial till and as a result are less vulnerable to hurricanes and storm surge than areas to the south. Cities such as Summer Retreat and Bridgeville thus lie between 25 to 100 feet above sea level.

While the region does experience 4 seasons, winters tend to be very short with infrequent freezing temperatures and rarely experiencing snow or ice. Summers are generally hot and humid with heat indices frequently rising above 105 degrees despite daytime high temperatures around 90. The region is vulnerable to hurricanes being within a subtropical climate and only 100 miles north of the Sea of Great Affection. Historically a tropical storm or hurricane has come ashore within 100 miles of the region once every year with a major hurricane coming ashore within 100 miles of the region once a decade.

In 2007, a major hurricane with sustained winds of 130 mph came ashore just east of the region causing extensive damage as a result of storm surge flooding, especially to areas that were not physically located on the natural levee of the Moravia River. Areas to the south of the Gulf of Redemption were almost entirely evacuated prior to the storm, thus greatly decreasing the loss of life.

Highway Status

Interstate Highway development came late to the Moravia area and as a result much of the system was built in the 1970s with the last section of Interstate 6 in Marais Parish being completed in 1985. Due to this, the regional interstate and freeway system is generally in pretty good condition. With that said, the remainder of the highway system has been subject to a deferred maintenance strategy due to a crash in the market for the primary natural resource of the region: Rutabagas. Due to the marshy terrain and numerous major navigable waterways, all significant highway corridors within the region have at least one major bridge. As a result, traffic regional traffic congestion has similar levels as that of cities which are much larger.

During the hurricane event of 2007, hurricane protection levees for Moravia, Cypress and Marsh City were breached by the resulting storm surge. As a result, approximately 75% of Moravia and nearly all of Cypress and Marsh City were inundated by the flood. As a result, these communities experienced an immediate decline in population. The population of Moravia has recovered to nearly pre-hurricane levels, but Marsh City and Cypress have continued a modest decline in population. In addition to the significant loss of housing from the hurricane, the Interstate 6 and US Highway 96 bridges crossing the Gulf of Redemption were both destroyed by the storm surge. These facilities were rebuilt in 2010 at a combined cost of \$1.7 billion.

NHS System Ownership

Classification	Owner	Lane-Miles	Percent of Total NHS	Percent Good or Better Condition
Freeway / Interstate	State DOT	624.3	30.9%	90.2%
Non-Freeway	State DOT	1201.4	59.6%	53.3%
Toll Facility	Chauvin Pkwy Authority	78.6	3.9%	98.8%
Toll Facility	Redemption Causeway Authority	110.8	5.5%	87.6%

NHS Bridge Ownership

Classification	Owner	Bridges	Percent of Total NHS	Average Condition Score	Percent Functionally Obsolete
Freeway / Interstate	State DOT	450	29.5%	84.6	10.5%
Non-Freeway	State DOT	1017	66.7%	49.3	70.0%
Toll Facility	Chauvin Pkwy Authority	38	2.5%	95.0	0.0%
Toll Facility	Redemption Causeway Authority	20	1.3%	86.2	5%

Nearly all of the NHS system is owned or operated by the State DOT with the exceptions being the Redemption Causeway and the Chauvin Pkwy connecting Eastern St Paul Parish to Downtown Moravia. Both facilities are owned and operated by a toll authority. The Chauvin Pkwy was completed in 2008 and is therefore considered to be in very good condition. The original 2-lane bridge for the Redemption Causeway was opened to traffic in 1956 with a parallel 3-lane bridge added in 1975. The original bridge currently provides for northbound traffic but was not constructed with shoulders and therefore is considered functionally obsolete. The bridge has been identified for replacement in 2022 at a cost of \$2.0 billion.

The City of Moravia consolidated operations with St Paul Parish in 1870 and thus the City maintains all streets within its jurisdiction. All other parishes operate the non-state highways within their jurisdictions and thus there are no city streets outside of the City of Moravia.

Public Transportation

The Moravia Area Transit System (MATS) provides service within the City of Moravia and Islenio Parish along 55 fixed routes. In addition to bus service, FETD operates a complimentary ADA

paratransit service with 45 vehicles and 3 trolley lines operating along a combined track of 12 miles. The trolley system has been designated as a National Historic Landmark and runs along the riverfront connecting the old quarter to the central business district and historic neighborhoods immediately upriver from the CBD. Plans were initially developed to provide a commuter rail line approximately following the Chicago, Gulf & SW RR to Oysterville and eventually to Marsh City. The project is still awaiting funding for construction.

Orange Parish operates a separate public transportation system called the Orange Metro Transportation Group or OMG for short. OMG operates 15 fixed routes and a ADA paratransit service with 25 vehicles. OMG connects with MATS at three locations, however riders travelling between Orange Parish and Moravia must change buses at one of these locations.

Beyond the MATS and OMG service areas, public transportation is provided through the Redemption Rural Transit District. The RTD operates 35 vehicles mostly in Unicoi and Marais Parishes and rural portions of Hoover, Orange and Islenio Parishes.

MPO Organization and Resources

The Moravia MPO is housed within the Metropolitan Planning Council which is effectively the Council of Governments for the 6 parish region. The MPC acts as the fiscal agent for the MPO. The MPO has 29 staff with 3 Administrative Staff. The staff is divided between the following divisions: Long-Range Transportation Plan (7 staff), TIP (8 staff), Public Involvement (3 staff), Alternative Transportation (3 staff), Freight (3 staff), and Climate Vulnerability (2 staff). The MPO budget for FY 2017 is \$1.7 million with local match being provided through a mix of toll credits allocated by the state transportation commission and \$207,000 in local dues from member municipalities and parishes. In 2017 the MPO staff received a \$225,000 grant from USDOT to study climate change and impacts to the vulnerability of critical transportation assets.

The MPO is governed by a 25 member Regional Transportation Board composed of elected officials from member counties and municipalities, 2 members from the state DOT and 1 member each from MATS, the Port of Moravia and the Airport Authority. The TDC is advised by a 30 member Technical Advisory Group and 22 member Citizens Advisory Council, both of which are appointed by the RTB.

Long Range Transportation Plan & TIP Status

The Metropolitan Planning Council, the designated MPO for the Moravia region, adopted their LRTP in November of 2014. The region is designated attainment for all pollutants. Their next LRTP update is scheduled for November, 2019 with a horizon year of 2045.

The 2017-2020 Moravia Transportation Improvement Program was adopted in August of 2016 and is amended as frequently as every month. The next TIP, covering the years 2019 through 2022 is scheduled for adoption in August of 2018.

Transportation Asset Management Plan Status

Agency	Facilities	Status
State DOT	All State Highways	Draft plan completed and presented to transportation commission in November, 2016. Adoption anticipated in May.
City of Moravia	All City Owned Streets	None
Orange Parish	All Parish Owned Roads	Plan adopted December, 2015
Hoover Parish	All Parish Owned Roads	Plan development under budget consideration for 2018
Marais Parish	All Parish Owned Roads	None
Islenio Parish	All Parish Owned Roads	None
Unicoi Parish	All Parish Owned Roads	None
Moravia Area Transit System (MATS)	MATS Owned Buses & Trolleys	Plan Adopted – 2015 New FAST compliant plan under development for 2018 adoption
Orange Metro Transportation Group (OMG)	OMG Owned Buses & Trolleys	FAST compliant plan under development for 2018 adoption
Redemption Rural Transit District	RTD Owned Vehicles	State DOT developing plan for all rural district fleets. Draft plan anticipated July, 2017.

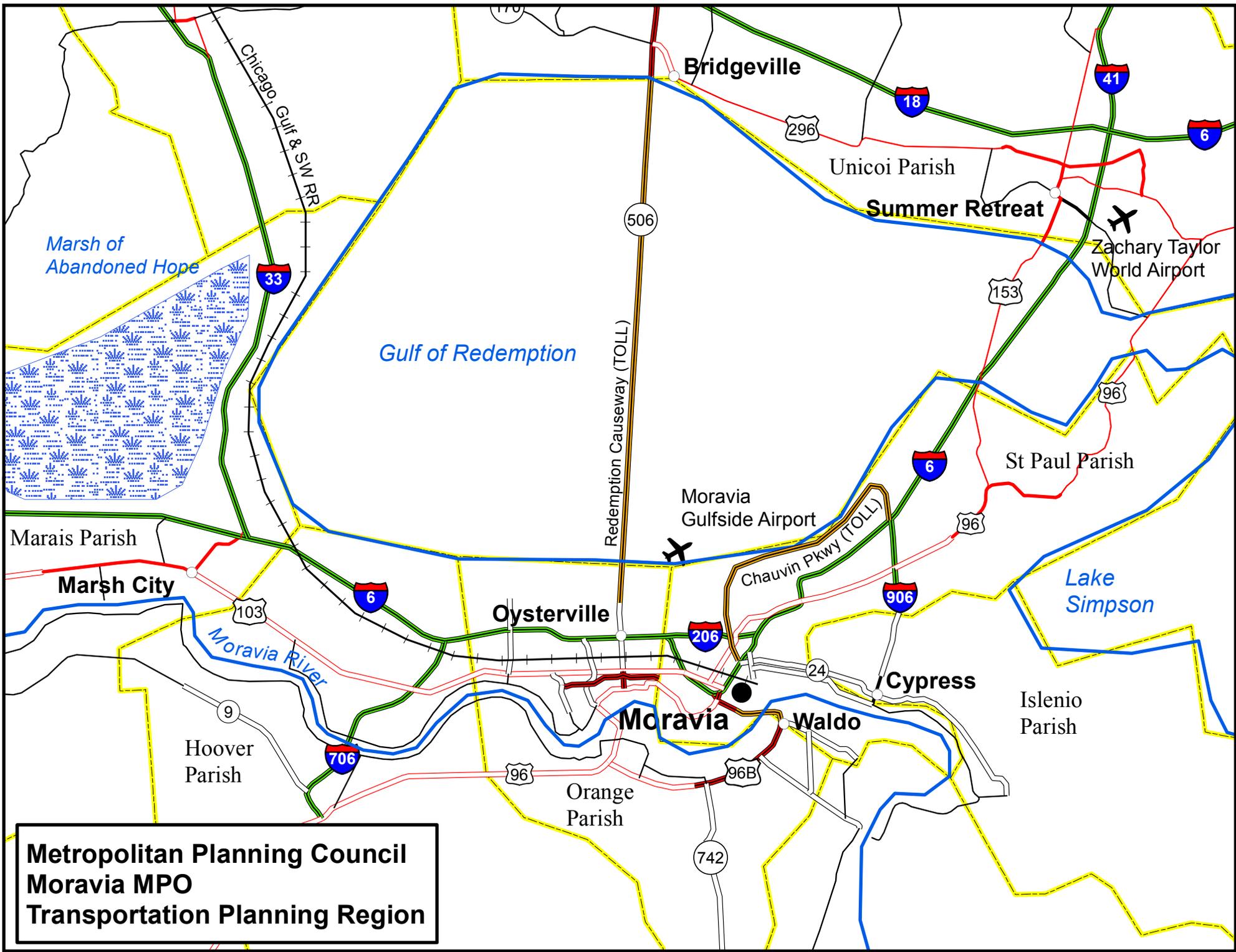
2040 Financial Forecasts and Forecasted Needs

Funding Silo	Responsible Agency	Estimated Revenues	Need	Percent Funded
State Highway & Bridge Maintenance	State DOT	\$2.0 billion	\$3.0 billion	66.7%
Local Highway Maintenance	Cities & Parishes	\$750 million	\$2.0 billion	37.5%
State Highway Mobility	State DOT	\$1.5 billion	\$2.75 billion	54.5%
MPO Mobility*	MPC	\$2.0 billion	\$4.0 billion	50.0%
FTA 5307 + Farebox	MATS & OMG	\$1.75 billion	\$2.9 billion	60.3%
FTA 5310 + 5311	RTD	\$80 million	\$175 million	45.7%
Toll Revenue	Toll Authorities	\$700 million	\$1.2 billion	58.3%
TOTAL		\$8.78 billion	\$16.025 billion	54.8%

Funding Silo^a	Definition of Need
Highway & Bridge Maintenance Local & State	Amount required to maintain 75% of pavements in good or better condition and 75% of bridges with a structural condition score greater than or equal 75
State Highway Mobility	Amount required to eliminate Level of Service 'F' on all state owned NHS facilities
MPO Mobility*	Cost of mobility projects scoring higher than 75 utilizing the MPO project evaluation criteria score
FTA 5307 + Farebox	Amount required to address 75% of service gaps identified within the 2040 transit coordination plan
FTA 5310 + 5311	Amount required to eliminate all denial of service with a 24 hour advanced reservation
Toll Revenue	Amount required to maintain all pavements in good or better condition and all bridges / tunnels with a structural condition score greater than or equal to 75 and eliminate Level of Service 'F'

*Note: MPO mobility projects may be of any mode and for any purpose.

^aAlso known as cylinders of excellence



**Metropolitan Planning Council
Moravia MPO
Transportation Planning Region**