# Table of Contents

Establishing HSTC Regions .................................................................................................................................................. 1  

Executive Summary ............................................................................................................................................................... 1  

Methodology for Determining HSTC Regions ..................................................................................................................... 2  

Geographic Analysis ............................................................................................................................................................. 2  

Establish Goals ....................................................................................................................................................................... 4  

Goals for Development of the HSTC Regions .......................................................................................................................... 4  

Goal #1 – Use and build upon existing travel movement .................................................................................................. 4  

Goal #2 – Keep the number of regions to a manageable level ............................................................................................. 4  

Goal #3 – Use and build on the existing statewide structures ........................................................................................... 5  

Goal #4 – Identify regional organizations with experience managing Federal grants ................................................. 5  

Travel Movement Analysis ...................................................................................................................................................... 5  

U.S. Census Journey to Work ................................................................................................................................................. 6  

Demographic Analysis ............................................................................................................................................................. 8  

Zero Vehicle Households ....................................................................................................................................................... 8  

Persons Below Poverty .......................................................................................................................................................... 9  

Population Density ............................................................................................................................................................... 10  

Older Adult Population Density ........................................................................................................................................ 11  

Persons with a Disability .................................................................................................................................................... 12  

Transit Propensity ............................................................................................................................................................... 13  

Existing Agency Regional Boundaries .................................................................................................................................. 14  

Ohio Mobility Management Program .................................................................................................................................... 14  

ODOT Districts ...................................................................................................................................................................... 15  

Area Agency on Aging ............................................................................................................................................................ 16  

Managed Care Organizations ................................................................................................................................................ 17  

Other Factors That Influence Traffic Flow, Planning and Development ........................................................................ 17  

Recommendations ................................................................................................................................................................... 19  

Justification ............................................................................................................................................................................. 22  

Conclusions ............................................................................................................................................................................ 24  

APPENDIX – County-to-County Travel Movement Analysis, by Region ................................................................. 27
ESTABLISHING HSTC REGIONS

EXECUTIVE SUMMARY

The Ohio Department of Transportation (ODOT) is investigating the merits of developing a regional structure for coordinated human services transportation to assess the potential financial efficiencies of service provision and enhance mobility options for the residents of Ohio. The ODOT, Office of Transit has long known that the significant amount of resources applied at the local level could not solve larger scale challenges of mobility within the budget available for coordinated transportation and mobility management. Some single county systems were operating in a fragmented approach, often resulting in duplications of service while unmet needs existed within the county. And, while a variety of human service and planning resources in Ohio were being applied at a regional level, regional boundaries were divided based on the missions of those departments and offices and not necessarily on transportation patterns or trip generators—employers, medical facilities, social service agencies, shopping areas, senior and low-income housing, etc.—again, resulting in both duplications and gaps in the transportation resources used to serve residents. These primary challenges and others are recognized and addressed through the Ohio Mobility Transformation Study. As illustrated in the analysis and exhibits within this document, it is clear that there is wisdom and efficiency in regional planning for the provision and management of coordinated human services and public transportation in Ohio.

A working group, comprised of representation from the Ohio Departments of Transportation, Medicaid, Job and Family Services, and the Governor’s Office on Health Transformation has provided research and data that contributed to the recommendations for regionalized Human Services Transportation. A review of the regional structure of services and county-to-county traffic flow patterns pertaining to more than 30 organizations is included in this research.

Ohio has a total of 88 counties; transportation services in one form or another are provided in all 88 through county human service departments using the services of hundreds of nonprofit and for-profit organizations throughout the state. Furthermore, 61 of those 88 counties have some form of public transit provided by county and/or city public transit systems; nonprofit agencies; and/or for-profit providers. And, in addition, coordinated public transit and human services transportation is provided in 40 counties at a local, county-based level. There are also a few regional or multi-county arrangements. Coordinated human services transportation at the local level is led through Mobility Managers facilitated through ODOT’s Ohio Mobility Management Program. Currently, Ohio has a total of 23 Mobility Managers covering 40 counties. In the remaining 48 counties, local transit and human service agencies are responsible for coordinating human services and public transportation.

After significant study and consideration of goals established by the working group, ODOT created new boundaries for Human Services Transportation Coordination (HSTC) based on a combination of travel movement in Ohio, Area Agency on Aging (AAA), Managed Care Organization (MCO), Metropolitan Planning Organization (MPO), and Rural Transportation Planning Organization (RTPO)
boundaries. This study recommends regionalization of Ohio’s HSTC programs in a manner that facilitates a more cost-effective use of available funding and to take advantage of regional deployment of enhanced technologies for all of Ohio’s human services programs that utilize agency-sponsored and public transportation resources. The recommended structure seeks, as its top priority, to protect or improve the existing level and service quality of transportation services available to the individual rider.

The proposed HSTC regions were presented at three (3) public meetings on December 4, 5 and 6, 2017 at various locations throughout the state. The opportunity for public input resulted in minor adjustments to two (2) regions. Wyandott County was moved from region five (5) to region (3). The justification for moving Wyandott County to region three (3) is the existing coordination partnership and successful coordination efforts among Hancock, Hardin, Putnam, and Wyandott Counties. These counties have previously been recognized by ODOT as a regional coordination project.

METHODOLOGY FOR DETERMINING HSTC REGIONS

The focus of this report is establishing geographic regional boundaries for human services transportation.

Geographic Analysis

The Ohio Department of Transportation, Office of Transit and Office of Statewide Planning and Research along with assistance of the consulting team explored a range of options for development of regional boundaries for coordinated transportation. The planning team considered six primary priorities for the regions, as follows:

♦ County-to-County Travel Movement
♦ LEHD (Longitudinal Employer-Household Dynamics) for employment (U.S. Census Bureau)
  o LODES (LEHD Origin-Destination Employment Statistics) were used to show county-to-county flow by employment location and home location.
  o Population employment density by county
♦ HSTC Region-to-Region Travel Movement
♦ Demographics
  o Data prepared for the Transit Needs Assessment Study (2015)
    ▪ Seniors
    ▪ Poverty
    ▪ Disability
    ▪ Zero Vehicles
    ▪ Total Population
  o Transit Propensity (combination of all 5 demographics above)
♦ To diminish disruptions in service provision and proactively address the consistency of service, ODOT compared the current regional boundaries of other agencies. The review of existing agency boundaries included the following:
  o Area Agencies on Aging (AAA) regions
  o Managed Care Organization (MCO) regions
  o Metropolitan Planning Organizations (MPO)/Regional Planning Organizations (RPO)
A significant amount of the data listed above was readily available from existing resources and, with this planning effort, was reviewed for the first time in combination with the consideration of regional HSTC boundaries. The team collected the existing relevant data and prioritized it for review as follows:

♦ Primary consideration was given to the following locations:
  o Travel movement within and between counties
  o LEHD Origin-Destination Employment Statistics
  o “Places to Protect” special generators
  o ODJFS labor maps

♦ Secondary consideration was given to the boundaries of existing regions to take advantage of working relationships and funding partnerships that already exist and to minimize disruption of the current agency service provision regions:
  o Area Agency on Aging (AAA) regions
  o Medicaid Managed Care Organization (MCO) Program regions
  o CFCA Medicaid Managed Care Program Managed Care Plans
  o Ohio Department of Health and Public Health Regions
  o Ohio Mobility Managers
  o Metropolitan Planning Organizations (MPO)/Rural Transportation Planning Organizations (RTPO)

♦ Tertiary consideration was given to the following locations:
  o Critical access hospital project regions
  o Trauma-Informed Care (TIC) Initiative (MHAS)
  o MyCare Ohio Regional Map
  o Health Home Regions (MHAS)
  o Ohio Public Health Emergency Preparedness and Healthcare Preparedness Program
  o Ohio WIC regions
  o Ohio Health Ryan White Part B service regions
  o Breast and Cervical Cancer Project Regional Enrollment Agencies
  o Ohio Department of Health, Bureau of Health Promotion, Breast and Cervical Cancer Project
  o Child Abuse and Neglect Prevention regions
  o Opioid Regional Alliances
  o Ohio Organ Procurement Organization
  o Ohio Department of Health, Bureau of Infectious Diseases, ImpactSIIS Territories
  o Ohio Department of Health, Bureau of Infectious Diseases, Vaccines for Children (VFC)/Immunization Territories – 2016
  o Immunization Action Plan (IAP) Grants 2016
  o 2016 HIV & STD Prevention regions
  o EPA map of radon zones
  o HV & CC regional consultants
  o Dental Options Program (Dentist enrollment, county by county)
  o Ohio Department of Health BCMH FNCMs and NCMs
  o Ohio Department of Transportation Districts

The team analyzed the regional boundaries for the services listed above and considered how HSTC boundaries could be designed to not only improve the efficiency of local transportation resource
management, but also to address the broader issue of reducing the gaps and challenges in service that were common throughout the state.

Establish Goals

ODOT teamed with several state human service agencies including the Department of Medicaid, Department of Developmental Disabilities, and the Department of Job and Family Services to establish three primary goals for development of the HSTC regional boundaries:

♦ Develop the regions based on current travel patterns and mobility needs.
♦ Keep the number of regions to a manageable level.
♦ Use and build on existing regional structures that exist in Ohio today for the provision of health, transportation, and human services programs.
♦ Identify organizations within regions where the staff has experience managing Federal grants.

These four goals were then refined with more specific criteria that resulted in a basic framework for the development of the final regions. This is discussed in detail in the next section.

GOALS FOR DEVELOPMENT OF THE HSTC REGIONS

Four primary goals for the development of human services transportation coordination regions were established to preserve the intent of the effort.

GOAL #1 – USE AND BUILD UPON EXISTING TRAVEL MOVEMENT.
The current travel movement of drivers in Ohio will be a primary consideration in planning regional boundaries. Studying inter-county and intra-county travel patterns to and from work, school, medical appointments, and shopping will help planners to understand the current, and predicted future, mobility needs. The Ohio Statewide Traffic Model provides the ability to analyze large multi-region corridors, to conduct consistent system-wide analysis and to provide a traffic forecasting tool in the rural areas of the state not covered by the urban Metropolitan Planning Organization (MPO) models.

GOAL #2 – KEEP THE NUMBER OF REGIONS TO A MANAGEABLE LEVEL.
The planning team agreed that the number of regions must be manageable on the state level in terms of grants management and coordination. The number of regions would be derived from the characteristics of groups of counties, travel patterns, and the number of counties in each group. The leader/coordinator within each region would be given discretion to develop sub-regions, with appropriate justification. For example, a region of significant size or broad differences between the urbanized and rural areas might function more efficiently with sub-regions. A regional representative would be responsible for oversight of the HSTC region and sub-regions.
GOAL #3 – USE AND BUILD ON THE EXISTING STATEWIDE STRUCTURES.
The coordinated human services transportation regions would be established around already existing and functioning regional offices. The focus is on two characteristics: 1) regional organizations that have transportation and planning expertise; and 2) regional organizations with an established relationship with elected officials already in place.

GOAL #4 – IDENTIFY REGIONAL ORGANIZATIONS WITH EXPERIENCE MANAGING FEDERAL GRANTS
The selection of regional organizations with Federal grant experience will ensure a sound foundation with demonstrated financial and technical capacity to administer Federal grants. Regional organizations receiving state and Federal funds have well-established financial policies, accounting practices, procurement policies and procedures, and meet other regulatory requirements for Federal grants management. Regional organizations receiving state and Federal funds also have qualified staff that understand the nuances of this funding and have the requisite technical capacity for grants management.

TRAVEL MOVEMENT ANALYSIS
The primary goal was to develop the HSTC regional boundaries that would complement existing mobility patterns. The ODOT team conducted in-depth research of the county-to-county travel movement (daily car travel) in Ohio. Analysis is based on the Ohio Statewide Traffic Model ("Model") which provides ODOT-certified design traffic for ODOT projects as well as traffic forecasts for planning studies (including bypass, corridor and transit route planning), system-wide congestion analysis and air quality conformity analysis. The Model provides the ability to analyze large multi-region corridors, to conduct consistent system-wide analysis and to provide a traffic forecasting tool in the rural areas of the state not covered by the urban Metropolitan Planning Organization (MPO) models. The MPOs already have their own traffic models.

The Model is used to plan for and evaluate projects that would: reduce, minimize, or avoid roadway congestion and delay; sustain and improve the state economy; freight planning, particularly with regard to the management of truck traffic and the potential for shifting it to other routes and modes; multi-modal/inter-modal options for travel, passenger and freight; improve conditions for non-auto (and non-single-occupant auto) mode services; maintain or improve safety; mitigate the impacts of new development and related access management; maintain or improve air quality; and reduce conflicts between modes.

The Model is calibrated to match current traffic and current conditions, and then forecasts traffic for future years, under various planning scenarios of development, population, transportation system networks, etc. The Model uses a vast array of input data. The primary output are specific volumes of person trip and vehicle trip volumes assigned to the transportation networks. The Model micro-simulates each individual traveler.
Maps that were prepared based on the Model are provided in Exhibit 1 and again later in this report. A full description of the Model is included in the Appendix.

Exhibit 1 illustrates the current daily travel movement (daily car travel) in Ohio. The map illustrates that county-to-county travel from rural areas tends to flow to the nearest city, which is a regional travel pattern. It also illustrates higher trip volume around Ohio's largest cities.

**Exhibit 1: County-to-County Surface Travel Movement**

![County-to-County Surface Travel Movement Map](source: ODOT Office of Statewide Planning and Research)

The travel movements illustrated in Exhibit 1 will be revisited when the team creates the HSTC regional boundaries. The data was initially used along with demographic and socio-economic trends that are described in the following exhibits.

**U.S. CENSUS JOURNEY TO WORK**

Journey to Work data was analyzed as a subset of the general travel movement patterns because travel to work is a significant contributor to the frequency of travel movement between counties.
While we cannot know the purpose of travel recorded in the travel movement pattern model, it is possible to compare the trips reported to the U.S. Census Bureau as being from home to work with the total trips reported in the Ohio Statewide Traffic Model. U.S. Census Bureau Journey to Work data was applied in this research effort because it is the most accurate work trip data available for the entire State. More accurate data sources for employment-related travel may exist for Ohio’s densely populated areas, but those sources do not exist for rural counties with less density.

Exhibit 2 depicts the county-to-county travel patterns reported to U.S. Census Bureau as the trip originating at a person’s home and ending at his or her place of employment. Two-hundred home to work trips is the minimum level displayed in the map.

A comparison of travel patterns depicted in the general travel movement model (Exhibit 1) and journey to work analysis reveals that there is consistency in county-to-county travel for work purposes when compared to general purposes. Also, the county-to-county journey to work trips are more often shorter trips between contiguous counties whereas, travel for general purposes may be longer trips that cross multiple counties from origin to destination.

**Exhibit 2: County-to-County Journey to Work**

Source: ODOT Office of Statewide Planning and Research
DEMOGRAPHIC ANALYSIS

Demographic data was originally analyzed in the Transit Needs Assessment Study (2015). Demographics from that plan is included in this section. Traffic flow patterns and Longitudinal Employer-Household Dynamics (LEHD) for employment maps were provided by the Ohio Department of Statewide Planning and Analysis.

DEMOGRAPHICS AND TRIP GENERATORS

The demographics of an area are a strong indicator of demand for transportation service. Relevant demographic data was collected and is summarized in this section. The data provided in the following exhibits has been gathered from multiple sources including the U.S. Census Bureau’s American Community Survey (ACS) Five-Year Estimates. As a five-year estimate, the data represent a percentage based on a national sample and does not represent a direct population count.

Zero Vehicle Households

The number of households available to a household is a strong indicator of need for public or agency-sponsored transportation for employment, medical trips, shopping, and general socialization. In Ohio, the highest concentrations of households without an available vehicle are in the largest urban areas. And, zero-vehicle households are present in every Ohio county.

Exhibit 3: Zero Vehicle Households
Persons Below Poverty
Similar to zero vehicle households (Exhibit 3), the largest concentrations of households below poverty are in Ohio’s largest cities. Exhibit 4 illustrates the location of households below poverty in each Ohio County.

Exhibit 3: Persons Below Poverty
**Population Density**

The likelihood for transportation demand is higher in areas with the highest population density. Exhibit 5 indicates population density statistics by county in Ohio.

**Exhibit 5: Population Density**
Older Adult Population Density

As we age, the likelihood that an individual will need transportation other than his or her personal vehicle increases. Conditions such as frequency of transportation to medical appointments and pharmacies also tend to increase with a person's age. Exhibit 6 illustrates densities of older adults in each Ohio County.

Exhibit 6: Older Adult Population Density
Persons with a Disability
Individuals with a disability, especially a disability that limits independent mobility, have a higher likelihood for needing and using public and human service agency transportation resources. Indeed, many of the individuals counted in this density map are likely also consumers of a human service agency that is participating in the study. Exhibit 7 illustrates the density of individuals in Ohio counties who have a disability, according to U.S. Census data.

Exhibit 7: Density of Persons with a Disability
Transit Propensity
A combination of each of the demographic factors in Exhibits 2 through 6 is used to compute the transit propensity across Ohio. Transit propensity is a measure of the likelihood that an individual needs public or human service agency transportation. Exhibit 7 illustrates transit propensity that was calculated using the individual data sets included in Exhibits 2 through 6. Areas with the darkest shading have highest propensity. Transit Propensity was calculated as part of the Ohio Transit Needs Assessment study (2015). The map in Exhibit 8 was created by the consultant for that project, Nelson\Nygaard Consulting Associates.

Exhibit 8: Transit Propensity

Source: Ohio Statewide Transit Needs Study, 2015; Nelson\Nygaard Consulting Associates
EXISTING AGENCY REGIONAL BOUNDARIES

Portions of several regional structures met some of the established goals for regional structuring. The team examined the regional structures and the region-to-region traffic flow for the primary medical and human service agencies in Ohio and compared those structures with the established goals for the HSTC regions. The organizations that most closely resembled the goals of the HSTC regional effort included:

♦ Ohio Mobility Management Program
♦ Area Agency on Aging (AAA) Regions
  o County-by-County car travel patterns
  o Region-by-Region car travel patterns
♦ Managed Care Organization (MCO) Regions
♦ ODOT Districts

A summary of regions for each of these organizations is provided below.

Ohio Mobility Management Program
The ODOT Ohio Mobility Management Program is administered by the Office of Transit and funded through the Federal Transit Administration (FTA) Elderly Individuals and Individuals with Disabilities Program (Section 5310). This program is intended to identify and improve community resources for transportation and mobility, understand the gaps and unmet needs within the existing resources, and determine the approach to addressing those gaps and unmet needs. Mobility Managers work in partnership with public transportation, human services agencies, local governments, non-profit and for-profit organizations, and the general public to improve the coordinated network of transportation options available to older adults, individuals with disabilities, people with low incomes, and the general public. Transportation options support employment, health, safety, and overall quality of life for Ohio communities and citizens.

As indicated previously, 40 of Ohio’s counties have a Mobility Manager to help facilitate coordination among local agencies; the remaining 48 counties do not have Mobility Managers and, therefore, do not benefit from the advocacy and coordination efforts of these specialists. There are demonstrated efficiencies to be gained through coordinating these services at a higher level. With this study, the ODOT, Office of Transit team researched many different potential structures that Ohio could use to organize the current single and multi-county approaches to coordinated transportation into public transit-human services transportation regions. One of ODOT’s objectives for conducting this study is to determine a means by which all Ohio counties would have the opportunity to benefit from a Mobility Manager's
knowledge and skillset. Establishment of HSTC regions has potential to provide the opportunity for statewide mobility management coverage within the funding constraints of ODOT's Section 5310 program. The methodology and justification for determining the proposed regional boundaries is described in this report.

**ODOT Districts**
Initially, the planning committee considered the ODOT Districts as a potential existing regional structure that could be applied to the HSTC program. There are 12 ODOT Districts (as indicated in Exhibit 9). A comparison of existing Mobility Managers and ODOT districts revealed that in some cases there is no Mobility Manager present within an ODOT District (e.g., Region 12), and in other cases there are multiple Mobility Managers within a single ODOT District. Given the difference in mission between the ODOT district offices and the HST regionalization effort, it is not likely that the two would make a strong match in terms of policy. ODOT Districts did not meet the goals established for HSTC regions and were eliminated as potential HSTC boundaries.

**Exhibit 9: Ohio Mobility Managers and ODOT Districts**
Area Agency on Aging

Next, the Area Agency on Aging (AAA) structure was considered. The AAA regional structure consists of 11 regions, which is one more than the goal that was established as a targeted amount for a manageable coordinated human services transportation region structure. However, the AAA regions did meet the second and third goals:

♦ The AAA regions are established to serve the same customer market as the primary Federal funding source for the coordinated human service transportation program—older adults and individuals with disabilities. Given the level of overlap in funding sources and mission, the AAA regions ranked highest as a potential format for the coordinated human services transportation regions.

The ODOT Office of Statewide Planning and Research provided analysis of the AAA District level and major county-to-county car travel movements to reveal the travel patterns within and through its regional boundaries. The highest car-travel corridors are in Central, northeastern, and southwestern Ohio and also a portion of northwestern Ohio. These areas include Ohio’s most densely populated cities as well as the locations of Ohio’s primary medical facilities and human service agency locations. Research indicated that while a significant portion of the travel was within the AAA regional boundaries, some anomalies of inter-regional travel existed between Regions 1 and 3 in southwestern Ohio. However, the separation of these two regions is necessary because of existing planning patterns for the two regions.

Based on this conclusion, the AAA Regions are compatible with traffic flow. However, the number of AAA Regions may be beyond the manageable amount for administrative purposes (Source: ODOT, Office of Statewide Planning and Research).
**Managed Care Organizations**
Ohio is currently divided into three MCO Regions. The State engaged key stakeholders in its initial implementation and design of the program and continues to engage them through community-based meetings and forums as well as regular, ongoing meetings to assure involvement from Ohio’s managed care system. These key stakeholders include: providers, consumer advocates, MCOs, county departments of job and family services, local health departments and other social service agencies.¹

While there are three MCO Regions, the state currently contracts with five managed care plans including three national, for-profit plans (Buckeye Community Health Plan; Molina Healthcare of Ohio, and United Healthcare Community Plan); one national, not-for-profit plan (CareSource); and one local, for-profit plan (Paramount Advantage).

**OTHER FACTORS THAT INFLUENCE TRAFFIC FLOW, PLANNING AND DEVELOPMENT**

**Metropolitan Planning Organizations and Rural Transportation Planning Organizations**
Consideration of existing economic development and other multi-county planning activities is also a primary factor in the travel patterns of Ohio’s residents. Local planners and elected officials work through a Metropolitan Planning Organization (MPO) to create policies and plans that benefit multi-county areas. The alignment of MPO regions is re-evaluated on a regular basis to determine if the counties have a natural working relationship. These multi-county relationships often reflect commonalities in community visions and goals. Therefore, the boundaries of MPOs and the Rural Transportation Planning Organizations (RTPOs) are considered as factors that influence local traffic flow. The MPO and RTPO map was provided by the ODOT Office of Statewide Planning and Research.

The boundaries of MPOs/RTPOs are based in current and projected demographic analysis and are ultimately determined through an agreement between the MPO and

¹ OMB No: 0938-0933
the Governor. If two or more Metropolitan Planning Areas (MPAs) are included in the same non-
urbanized area that is expected to become urbanized within a 20-year forecast period for the
transportation plan, the Governor and the relevant MPOs are required to agree on the final
boundaries of the MPA such that the boundaries of the MPAs do not overlap. Furthermore, MPA
boundaries may be established to coincide with the geography of regional economic development
and growth forecasting areas. Where the Governor and MPO have determined that the size and
complexity of the MPA make it appropriate to have more than one MPO designated for an MPA, the
MPOs within the same MPA shall, at a minimum:

1) Establish written agreements that clearly identify coordination processes, the division of
transportation planning responsibilities among and between the MPOs, the procedures for joint
decision-making and the resolution of disagreements;

2) Through a joint decision-making process, develop a single TIP and a single metropolitan
transportation plan for the entire MPA as required under Section 450.324(c) and 450.326(a):
and

3) Establish the boundaries for each MPO within the MPA, by agreement among all affected MPOs
and the Governor.

In addition to their basis in regional population and economic development and the historical
relationship between member communities, the MPOs and RTPOs are already providing expertise in
the management of Federal funds, including Federal Transit Administration (FTA) grants.

There are 23 different MPOs and RTPOs in Ohio. While this pattern exceeds the maximum goal of 10
HST regions, the committee believes the MPO and RTPO regions must be considered in the
recommendations for HST boundaries due to their strong connections with multi-county economic
development, planning, and policy development.
RECOMMENDATIONS

Based on the analysis of travel movement, local demographic and socio-economic data, and existing regional boundaries for various programs, it is apparent that the existing organizational boundaries that most completely met the goals for the HSTC Regions were the Area Agency on Aging (AAA) regional boundaries, with one exception: the AAA structure includes 11 Regions, which is slightly higher than the goal for having a manageable number of regions for statewide administrative purposes. After further consideration, it was determined that AAA Regions 10 and 11 would be combined into a single Region (ODOT HSTC Region 10) with three sub-regions within it (10a, 10b, and 10c). Exhibit 10 illustrates the proposed HSTC Regional boundaries.

Exhibit 10: Proposed HSTC Regional Boundaries

To verify that these boundaries would indeed match the travel movement in Ohio as well as meeting the other established goals, the research team overlaid the travel movement patterns on the proposed HSTC regional boundary lines. Exhibit 11 illustrates the travel flow with the HSTC regional boundaries. After creating those boundary lines, the team analyzed the county-to-county and region-to-region travel flow. As illustrated in the map, the heaviest patterns of travel movement appear within the regional boundary lines. The only significant volume of movement that is inter-regional occurs between the Dayton and Cincinnati regions (HSTC Regions 1 and 2). Even with the noteworthy travel between Regions 1 and 2, the majority of travel is within the respective regions.
Movement in all other regions stays primarily within the regional boundaries as people travel, most often, to and from the nearest city within each region. Detailed analysis of all county-to-county and region-to-region data is included in the Appendix to this document.

Exhibit 11: County-to-County Surface Travel Movement with HSTC Regional Boundaries

Source: ODOT, Office of Statewide Planning and Research
As illustrated by Exhibit 12, and supported with county-level travel movement analysis, 90 to 99 percent of county-to-county travel flow stays within each of the proposed HSTC Regions.

Exhibit 12: Intra-Regional and County-to-County Travel Movement

Source: ODOT, Office of Statewide Planning and Research
Similarly, the majority of journey to work travel flow between counties occurs within the proposed HST regional boundaries. Journey to work travel and proposed HSTC regional boundaries are depicted in Exhibit 13.

**Exhibit 13: Journey to Work and Proposed ODOT HSTC Regional Boundaries**

![Exhibit 13: Journey to Work and Proposed ODOT HSTC Regional Boundaries](image)

**JUSTIFICATION**

The HSTC regions capture 90 to 99 percent of the intra-regional traffic flow. Also, the AAAs and HSTC regions serve many of the same consumers within their primary mission. Therefore, the designation of common regional boundaries should reflect an easy merge of information and resources. Another advantage of regionalized HSTC is to provide a more economically sound structure of transportation resources to support the mission of Ohio’s Managed Care Organizations (MCOs). Exhibit 14 illustrates the proposed ODOT HSTC Regional boundaries with the Medicaid MCO boundaries.

The proposed HSTC regional boundaries fit within the larger regional boundaries of the MCOs with the exception of 16 counties that are misaligned with the new structure. The majority of the
The joining of common regional structures of the ODOT HSTCs, AAA, and MCO services is intended to promote better access to services for the individual riders and improved cost-efficiency in the utilization of transportation funding and resources for all programs. However, justification must not be based solely on travel patterns and resource locations. Consideration must also be given to the demographic characteristics of the counties within a single region, the socio-economics, and the history of political or financial partnerships.

Intergovernmental relationships involve interaction between and among the various levels of government, understanding the roles and responsibilities of each, and developing effective relationships—all of this to meet the challenges faced locally in the provision of services. On a regional level, those relationships are established through the MPOs and RTPOs. Exhibit 15 illustrates the overlay of proposed ODOT HSTC regional boundaries with the MPO/RTPO regions. As indicated, there is at least one MPO and/or RTPO within each HSTC Region. This structure will help to facilitate communication and resource sharing between organizations within each region.
CONCLUSIONS

The ODOT Office of Transit recognized that to address the unmet transportation needs and duplications of service occurring across Ohio, something more than the existing single county, fragmented approach to coordinated transportation and mobility management had to be implemented. And, while ODOT also recognized that human service and planning resources were being applied to some extent at a regional level, regional boundaries were divided based on the missions of those departments and offices and not on transportation patterns or trip generators – employers, medical facilities, social service agencies, shopping areas, senior and low income housing, etc.—again, resulting in both duplications and gaps in the transportation resources used to serve residents.

After significant research and in-depth study, ODOT recommends establishing 10 Human Service Transportation Coordination regions which take into consideration not only the demographics of and traffic flow in and among the regions, but also the coordination and flow of information and resources and economic development.
PUBLIC COMMENT

ODOT conducted a series of three (3) public meetings to solicit comments on the coordination regions those meeting were held as follows:

December 4, 2017
10:30 am to 11:30 am
ODOT District 9 Office
650 Eastern Ave.
Chillicothe, OH 45601

December 5, 2017
10:45 am to 11:45 am
Mohican State Park Conference Center
1098 County Road
3006 Perrysville, OH 44864

December 6, 2017
10:30 am to 11:30 am
ODOT District 1 Office
1885 North McCullough St.
Lima, OH 45801

All meetings were well attended. The participants in the meetings were very supportive of ODOT’s regional coordination approach. Each meeting included discussion of the regional structure and rationale for establishing the regional boundaries as described in detail earlier in this report.

Participants were provided the opportunity to recommend changes to the regional structure. Discussion of restructuring the regions to move Fayette County from Region 6 to Region 7 was discussed during the December 4th meeting. Upon discussion with transportation provider in Fayette County it was determined, Fayette County would remain in Region 6. During the December 6th meeting in Lima, discussion of moving Wyandott County from Region 5 to Region 3 ensued. The discussion resulted in Wyandott County shifting to Region 3. This move was justified by travel patterns and existing coordination partnerships between Wyandott County, Hardin County, Hancock County, and Putman County. The final ODOT HSTP Coordination map is provided below.