APPENDIX D

INFLOW & OUTFLOW OF WAGES AND RESIDENT WORKFLOW

The following appendix contains Inflow and Outflow Wage Data for the counties in Northwest Lower Michigan as well as data that shows the commuter and workplace characteristics for workers in our region.

Inflow & Outflow of Wages and Resident Workflow

One important data point in understanding the economy for a defined area is where people work versus where they live. This can illustrate a range of phenomena that can further explain the various counties' character and existing conditions. A wages inflow and outflow chart, Figure 1 below, displays this work location and residence location relationship for the 10 counties part of Network's Northwest's planning region.

Inflow is the money earned by residents who work outside of the county.

Outflow is the money earned at jobs within the county by people living outside the county.

Net Residence Adjustment is the result of subtracting gross earnings outflow from gross earnings inflow.

The lines shown in Figure 1 show each county's Net Residence Adjustment. Counties with a high positive Net Residence Adjustment can best be defined as "bedroom communities" or those that have residential development but few employers. Leelanau, Antrim and Benzie Counties have the highest positive Net Residence Adjustment in the region. Missaukee, Kalkaska, Charlevoix and Manistee Counties have a greater inflow of wages than outflow though they are more balanced in this regard with a net adjustment closer to zero. Emmet and Wexford Counties both have a negative Net Residence Adjustment, meaning more wages are earned by residents from other counties who work in Emmet or Wexford than by Emmet and Wexford residents who work in other counties.



Figure 1. Inflow and Outflow of Wages

Source: Bureau of Economic Analysis

Data Note: All dollar estimates are in thousands of current dollars (not adjusted for inflation). Statistics presented in thousands of dollars do not indicate more precision than statistics presented in millions of dollars.

Grand Traverse has an increasingly negative Net Residence Adjustment. There are various reasons for this net outflow of wages. First, Grand Traverse is more urbanized relative to other counties in the planning region and therefore has a greater density of jobs. In addition, it is well known that the county has a housing shortage, indicating that many professionals are likely forced to reside in another county because of Grand Traverse's high cost of living. This trend may also help to explain why Benzie County and Antrim County, both adjacent to Grand Traverse, have both seen increases in wage inflow over the past 30 years.

Table 1. Workflow for the Networks Northwest Planning Region

	Residents that Work in Other County in Region	%	Residents that Work Outside of Region	%	Residents Who Work in Same County that they Reside	%
Antrim	3,468	37%	974	11%	4,810	52%
Benzie	3,385	46%	294	4%	3,750	50%
Charlevoix	2,702	23%	801	7%	8,102	70%
Emmet	943	6%	1,186	8%	13,396	86%
Grand Traverse	3,038	7%	1,498	3%	38,667	90%
Kalkaska	2,860	44%	513	8%	3,185	49%
Leelanau	3,830	40%	314	3%	5,334	56%
Manistee	1,277	14%	753	9%	6,794	77%
Missaukee	2,329	39%	590	10%	3,036	51%
Wexford	2,491	19%	951	7%	9,802	74%
Totals	23,832	20%	6,923	6%	87,074	74%

Source: Residence County to Workplace County Commuting Flows for the United States and Puerto Rico Sorted by Residence Geography: 5-Year ACS, 2011-2015

Table 1 further explains the movement of employees throughout the region. However, instead of showing the inflow and outflow of wages, it shows the inflow and outflow of the region's workforce. On average, 74 percent of Northwest Lower Peninsula employees work in the same county in which they reside. 20 percent work in another county in the region and 6 percent work outside the region. Grand Traverse and Emmet have the highest percent of residents who work in that same county. Around half of all Kalkaska, Benzie, Antrim, Missaukee and Leelanau residents travel to another county for employment. These figures not only have implications for business development and siting, but also for transportation planning and virtual work.