



DES MOINES AREA MPO

2017 National Household Travel Survey Overview

September 23, 2020



NHTS Overview



- Nationwide travel survey collected every 5-8 years. Previous collection was in 2009.
- The NHTS/NPTS serves as the nation's inventory of daily travel. Data is collected on daily trips taken by households and individuals in those households, over a 24-hour period, and includes:
 - purpose of the trip (work, shopping, social, etc.)
 - means of transportation (car, walk, bus, subway, etc.)
 - travel time of trip
 - time of day/day of week



NHTS Overview

- Uses of Surveys:
 - quantify travel behavior
 - analyze changes in travel characteristics over time
 - related travel behavior to the demographics of the travel, and
 - study the relationship of demographic and travel over time.
- DMAMPO and INRCOG purchased data for an additional 1,200 households
- Future updates will be annual, smaller in scale, and have passive O-D data

MPO Model Update

- The travel demand model was updated with the LRTP to incorporate ISMS modeling architecture and other socio-economic information
- NHTS data was used to provide MPO specific travel data, which included:
 - Trip production and attraction rates
 - Occupancy factors
 - Trip rates for colleges and universities
 - Mode split
 - Time period factors
 - Trip purpose
 - Trip length validation
 - Trip frequency

2050 LRTP

FIGURE 2.18: GOAL 2 MEASURES AND TARGETS

MEASURE	CURRENT	5-YEAR TARGET	2050 TARGET
Bicycle System On-Street			
Miles of On-Street Facilities	39.18	118	400
Miles of Protected Bicycle Lanes	0	5	25
Mode Choice/Split (%) - Work Trips			
Single Occupancy Vehicles	77	72	50
Carpool	19	21	25
Transit	1	2	15
Walk/Bike/Other	3	5	10
Mode Choice/Split (%) - All Trips			
Single Occupancy Vehicles	42	38	26
Carpool	46	47	54
Transit	1	2	5
Walk/Bike/Other	11	13	15
Transit			
Total Ridership	4,400,000	5,500,000	8,600,000

FIGURE 2.21: GOAL 3 MEASURES AND TARGETS

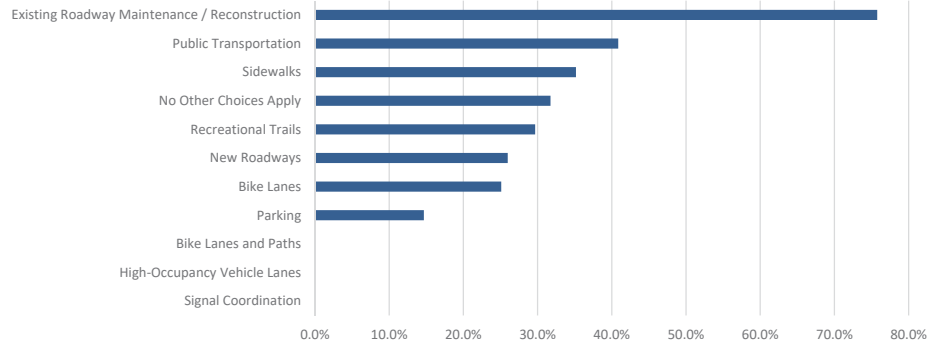
MEASURE	CURRENT	5-YEAR TARGET	2050 TARGET
Environmental Impacts			
Wetlands (% of total acres)	0.1	Maintain	Maintain
Floodplains (% of total acres)	15.8	Maintain	12.8
Woodlands (% of total acres)	0.3	Maintain	Maintain
Farmland (% of total acres)	1.3	Maintain	1.0
Person Miles Traveled			
% of non-SOV travel (all trips)	58	60	70

Add On Questions

- The DMAMPO purchased five additional add-on questions that were included in the regular survey:
 - What are the top three reasons you chose your current home location?
 - What are the top three reasons you would use public transit service more frequently?
 - What type of conditions would need to exist for you to allow your child to walk/bike to school?
 - In what types of transportation facilities should the region be investing?
 - Would you be willing to participate in a follow-up survey?

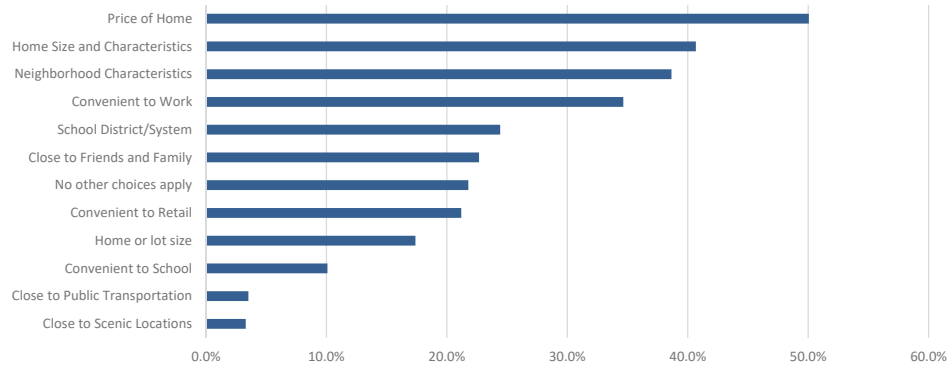
Add On Questions

What Type of Transportation Investments Should the Des Moines Region Focus On?



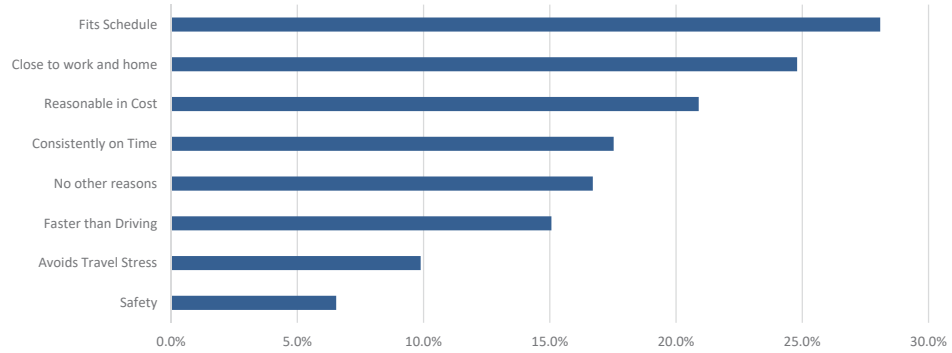
Add On Questions

What Are The Top Three Reasons You Chose Your Current Home Location?



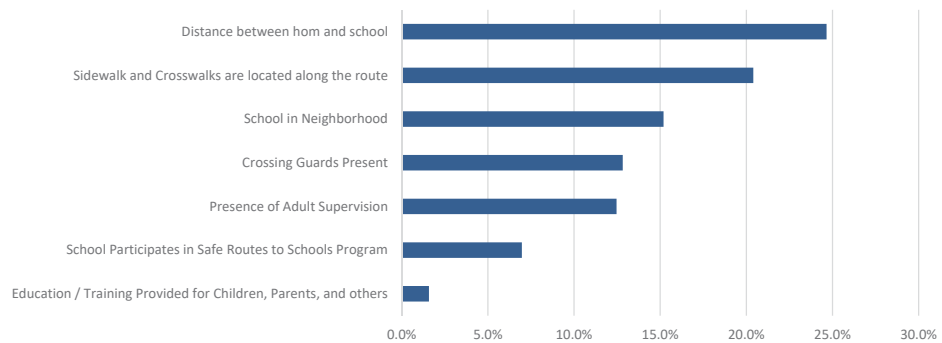
Add On Questions

What Are The Three Most Important Factors That Would Make DART's System a Good Option For (your) Commute?



Add On Questions

Which Of The Following Reasons Would Influence Your Decision To Allow Your Child/Children To Walk/Bike To School?

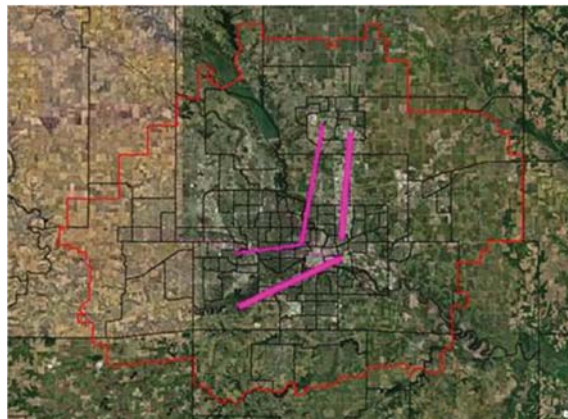


NSF Grant

- Proposed NSF grant between ISU, DART, and other regional stakeholders to identify spatial mismatches between housing affordability and jobs
- NHTS data was used to identify travel patterns in select neighborhoods
- Goal is to find micro-mobility options in conjunction with existing transit services to improve journey to work trips



NSF Grant



Iowa DOT Right Sizing Project

- Pilot study looking to identify right sizing strategies for existing infrastructure
- Incorporates scenario planning into the study framework
- NHTS data was used to review Des Moines specific travel data:
 - Working from home availability
 - Online delivery frequency
 - Pre COVID-19

Table 99 Persons by Household Income and Count of Times Purchased Online for Delivery (Row %)

	Household Income	Count of Times Purchased Online for Delivery in Last 30 Days			
		0	1-3	4+	All
	\$49,999 or less	61.3	28.6	10.1	100
	\$50,000 to \$74,999	44.9	32.3	22.8	100
	\$75,000 to \$124,999	33.1	41.3	25.6	100
	\$125,000 or more	26.0	35.5	38.5	100
	All	42.5	34.2	23.2	100

NHTS Summary Report

- Finalizing a summary report with relevant NHTS statistics
- Will give communities an idea of the different kinds of data available
- Current draft is over 100 pages and has almost 130 tables

