



Charter Township of Marquette

Road Facilities Plan

Adopted by the

Marquette Township Planning Commission

March 12, 2008

Prepared by the:
County of Marquette
Resource Management/Development Department
234 Baraga Avenue
Marquette, MI 49855
906.315.2671



Table of Contents

Chapter 1	Introduction.....	1-1
	Description of Marquette Township.....	1-1
	Planning Process.....	1-2
Chapter 2	Goals and Objectives.....	2-1
	Background.....	2-1
	Goals and Objectives.....	2-2
Chapter 3	Current Conditions.....	3-1
	Public Act 51 Roads.....	3-1
	National Functional Classification.....	3-4
	Making Changes to the NFC.....	3-8
	Federal Funding.....	3-9
	Road Surface Condition Analysis.....	3-11
	Bridges.....	3-15
	Traffic Counts.....	3-18
	MDOT Traffic Counts.....	3-18
	MCRC Traffic Counts.....	3-19
	Commercial Traffic.....	3-20
	Traffic Crashes.....	3-22
	Transit.....	3-25
Chapter 4	One Township... Many “Communities”.....	4-1
	US 41/M-28 Highway Corridor.....	4-1
	Access Management.....	4-2
	Directional Crossovers.....	4-4
	Turn Lanes.....	4-7
	Roundabouts.....	4-7
	Aesthetics.....	4-9
	Trowbridge Park.....	4-11
	Right of Way Rationalization.....	4-11
	Disposition of Vacant Right-of-Ways.....	4-15
	Utilities.....	4-15
	Roads.....	4-15
	Trails and Greenways.....	4-18
	Financial Implications.....	4-18
	Summary.....	4-19
	Subdivisions.....	4-20
	Dispersed Development.....	4-21
Chapter 5	Future Road Enhancement / Development.....	5-1
	Michigan Department of Transportation.....	5-1
	Marquette County Road Commission.....	5-1
	Marquette Township.....	5-2
Chapter 6	Future Land Use, Build Out Analysis.....	6-1
	Future Land Use Plan.....	6-2
	Build Out Analysis Method.....	6-4

	Build Out Analysis Assumptions.....	6-4
	Rural Residential Build Out.....	6-5
	Forested Land Build Out.....	6-6
	Trip Generation Factors.....	6-6
	Transportation System Impact.....	6-7
	Other Land Use Impacts on Transportation.....	6-10
Chapter 7	Finance.....	7-1
	Federal Highway Administration.....	7-1
	State – Michigan Department of Transportation.....	7-1
	County – Marquette County Road Commission.....	7-2
	Local – Charter Township of Marquette.....	7-3
	Private Participation.....	7-4
Chapter 8	Recommendations.....	8-1

Appendices

A	Public Participation Issues and Comments.....	A-1
B	Act 51 and NFC Classification by Road Name Lists.....	B-1
C	Surface Condition Ratings by Segment.....	C-1
D	MCRC Bridge Priority List.....	D-1
E	Trowbridge Abandoned Right-of-Way Map.....	E-1
F	Trowbridge Park Field Notes.....	F-1
G	Right of Way Abandonment Process.....	G-1
H	Daily Vehicle Trip Generation Rate by Land Use Type (FHWA)...	H-1
I	Recommended National Functional Classification Changes.....	I-1
J	Trowbridge Park Right-of-Way Plan List.....	J-1

Tables

3-1	Marquette Township NFC Compared to FHWA Guidelines.....	3-8
3-2	Marquette Township Local Road Ratings Comparison.....	3-14
3-3	Marquette County Road Commission Bridges in Marquette Twp. ..	3-16
3-4	Historic Average Daily Traffic (ADT) State Trunkline.....	3-19
3-5	Highest Crash Intersections in Marquette Township.....	3-22
5-1	Marquette Township Millage Funded Road Projects	5-3
5-2	Marquette Township's Proposed Road Development.....	5-3
5-3	Township Proposed Roads.....	5-4
6-1	Acreage by Future Land Use Type.....	6-5
6-2	Estimated Population at Build out per Future Land Use Category...	6-7
7-1	Michigan SAFETEA-LU Distributions.....	7-1
7-2	Five Year Highway Program 2007-2011.....	7-2
7-3	MCRC 2006 Audit-Program Revenue	7-3
I-1	Proposed NFC Changes Compared to FHWA Guidelines.....	I-3

Figures

1-1	Location of Marquette Township.....	1-1
3-1	Public Act 51 Legal System Classification.....	3-2
3-2	P.A. 51 Legal System Map.....	3-3
3-3	Functional Classification Relation to Movement & Access Graph...	3-4
3-4	Road Function Types within a Network.....	3-5
3-5	National Functional Classification for Marquette Township	3-6
3-6	National Functional Classification Map	3-7
3-7	Surface Condition Analysis Map.....	3-13
3-8	Surface Conditions per Act 51 Classification.....	3-14
3-9	Bridges in Marquette Township Map.....	3-15
3-10	MDOT 2006 Average Daily Traffic Counts.....	3-18
3-11	MCRC Traffic Count Locations Map.....	3-19
3-12	County Road 492 (Wright Street) Historic ADT Volumes.....	3-20
3-13	2007 Commercial ADT percentages, MCRC.....	3-20
3-14	Marquette Township Historic Crash Numbers.....	3-23
3-15	MARQ-TRAN Fixed Routes in Marquette Township.....	3-15
4-1	Statewide Highest Corridor of Significance Map.....	4-2
4-2	Corridor Crossover Analysis; Existing Map.....	4-5
4-3	MDOT Corridor Crossover Analysis Proposed Improvements.....	4-6
4-4	Roundabout.....	4-8
4-5	Trowbridge, ROWs from the Original Subdivision Plats.....	4-12
4-6	Trowbridge, Developed Roads.....	4-12
4-7	Trowbridge, Developed Roads & Abandoned Right-of-Ways.....	4-13
4-8	Trowbridge, Developed Roads, Abandoned ROWs, & Utilities.....	4-14
4-9	Trowbridge, Developed Roads, Abandoned ROWs, Utilities, & Future Roads.....	4-15
4-10	Deep Parcels.....	4-16
4-11	Land Locked Parcels.....	4-16
4-12	Trowbridge, ROW Recommendations Map.....	4-17
4-13	“Eyebrow” Subdivision Design.....	4-21
5-1	MCR Proposed Road and Bridge Program in Mqt. Twp. 07-11.....	5-2
5-2	Marquette Township Millage Funded Road Improvement Projects..	5-2
5-3	Township Proposed Roads Map.....	5-4
6-1	Building Permits for New Residential Construction- Mqt. Twp.....	6-1
6-2	Marquette Township Future Land Use Map.....	6-3
6-3	Future Build Out-Impact on the Transportation System Map.....	6-8
I-1	Proposed NFC Changes Compared to the FHWA Guidelines Map..	I-3

FORWARD

It is the desire of the Charter Township of Marquette to develop a transportation plan that provides for a safe and efficient transportation system for township residents, visitors to the area, and transient traffic passing through. A well-developed transportation system contributes to the quality of life for residents and supports the economic viability of the community.

The Township has long recognized a need to perform a comprehensive assessment of road facilities in the Township and plan for ongoing road maintenance as well as accommodate future population growth and commercial development.

The Township desires to consolidate a wide variety of existing information such as vehicle counts, crash data, road function and physical conditions of roads to determine the current status of road facilities.

Population and growth trends as applied to the Townships future Land Use Plan would indicate even greater demand on existing facilities. How would the transportation system accommodate this growth?

In addition, the Township wants to consolidate plans and promote coordination of Michigan Department of Transportation, Marquette County Road Commission and local initiatives related to road facilities.

Further, Marquette Township wishes an open process with participation of all stakeholders; public, private, and the citizen on the street.