

6). Conflicts within the ORV community tended to be primarily between motorcyclists and ATV riders. There were conflicts with ORV riders and non-motorized users who walk, ride horses or use mountain bikes on designated motorcycle and ATV trails. There were also conflicts on ORV trails/routes that are also designated snowmobile trails. These were between ORV and snow machine users and those who groom snowmobile trails. These include situations of ORV use immediately prior to winter resulting in a less than smooth treadway surface and uses during periods of minimal snow in winter by ORV and snowmobile users. There were trespass issues in some locations where ORV users strayed from the designated trail and entered private lands.

Some conflicts seemed regional in nature. For example, in the UP there were some short-term conflicts on UP forest roads used for logging traffic that are also designated ORV routes. Also in the UP there were also conflicts where ORV riders use routes through communities as transportation from town to town. This appears to involve many under 16 who are waiting to “move up” to a car or truck but cannot obtain a driver’s license. The key concern is that it involves considerable noise and dust in populated areas and much of this riding also appears to lack of direct adult supervision (a violation). In the Lower Peninsula, there were conflicts in northeastern Lower Michigan with the oil and gas industry. ORV riders illegally rode on oil and gas service roads and had unplanned interactions with oil and gas service vehicles, often large trucks. Also, the Black Mountain area, with its array of motorized trail and non-motorized pathway opportunities along with designated state forest campgrounds, there is reported conflict among trail users and between ORV oriented campers and non-ORV campers. Specific suggestions to reduce or eliminate these conflicts are provided by the evaluators in Table 10.

Finally, on 20 (25%) of trails, evaluators made additional substantive comments about challenges faced and improvements needed. Some key themes in the UP were to better use alternate routes in areas with water and rocky outcrops and to consider ways to hard surface portions of routes running through villages/towns where dust is a serious problem. In the Lower Peninsula, suggestions included better signing on the ground of existing designated scramble areas, connectors between cycle and ATV trail loops that would lengthen riding opportunities and provide access to goods and services, specific infrastructure repairs/improvements, clearer signage about where snowmobile and/or ORV use is appropriate and different approaches to managing camping on or near selected ORV trails and routes.

Trends in Michigan ORV Use and Users

This section provides information about ORV use and users from ORV registration and license data and three statewide Michigan ORV studies published in 1977, 1989 and 2000. Copies of these major reports (Alexander and Jamsen 1977; Nelson 1989; Nelson et al. 2000) can be found in the appendices of this plan. Key trends across the 24-year (1976-1999) span encompassed by the three studies are summarized in Nelson and Lynch (2001). All three studies used mail questionnaires sent to a representative sample of ORV registrants (1977 and 1989) or ORV licensees (2000) to elicit information.

ORV Registration and Licensing

ORVs were registered in Michigan with the Secretary of State from 1975-1991. This was phased out from 1991-94 and fully replaced by ORV licensing with the DNR which began in 1991 and was fully in place in 1994 and continues to the present. The Michigan Secretary of State maintains ORV registration records from 1976 – 1994 and the Michigan DNR maintains ORV license records from 1991 – present.

The trend in registrations/licenses is steadily upward over the past 30 years (Table 11). While there are declines in some individual years (often coinciding with poor economic conditions such as FY 1982-83) the trend is clearly upward. It is not unreasonable to assume 200,000 registered ORVs in 2004-05 by the conclusion of the license year.

Table 11. Michigan ORV registrations (1975-1991) and licenses (1992-2004).

Year	Number Registered (a) (b)	Year	Number Registered/ Licensed (a) (b)
1975-76	16,003	1990-91	105,555
1976-77	25,774	1991-92	NA
1977-78	67,779	1992-93	NA
1978-79	30,238	1993-94	NA
1979-80	76,322	1994-95	78,060
1980-81	90,457	1995-96	97,931
1981-82	40,325	1996-97	81,918
1982-83	52,095	1997-98	110,488
1983-84	111,363	1998-99	123,471
1984-85	81,283	1999-00	124,749
1985-86	139,411	2000-01	146,259
1986-87	184,715	2001-02	150,137
1987-88	146,266	2002-03	142,042
1988-89	175,538	2003-04	174,651
1989-90	179,834	2004-05	180,673 (c)

- (a) Registration data from the Michigan Secretary of State (1975-76 – 1990-91); No data available 1991-92 – 1993-94; DNR licensing data from the DNR Office of Contracts, Grants and Customer Service (1994-95 – 2004-05)
- (b) Secretary of State changed method of reporting registrations in 1986-87. Prior to that time only 3 year registrations transacted within the license year were reported. For 1986-87 and beyond, all registrations in force were reported.
- (c) Incomplete data as license year was not completed when plan was drafted

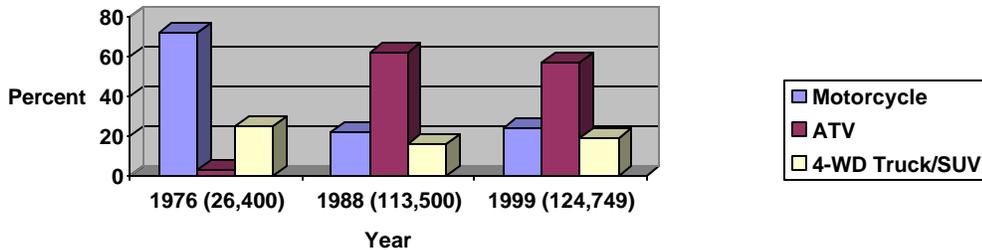
Statewide ORV Use and User Studies

Three statewide ORV use and user studies have been conducted in Michigan: Alexander and Jansen (1977); Nelson (1989) and Nelson et al. (2000). Each involved a mail survey that was used to sample more than 1,500 riders.

The three studies show some key trends/changes in ORV use and users, yet they also illustrate some on-going challenges that have changed little since the first study was

published in 1977. ORV distribution across time by machine type has shifted from primarily motorcycles to primarily ATVs (Figure 1).

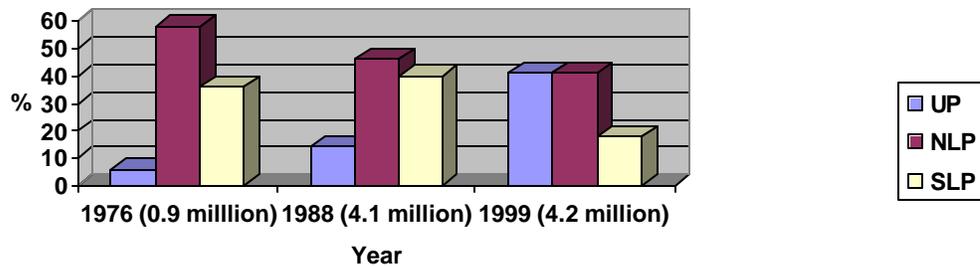
Figure 1. Proportion (number) of Michigan ORV registrations/licenses



Geographically, ORV use in Michigan has shifted northward over the past 25 years. The key factors involved include development of the designated ORV system in the northern 2/3 of Michigan, less restrictive ORV use rules on UP state and national forests, law enforcement to limit illegal ORV use in southern Michigan and the increasing use of ATVs (the most common ORV in 1988 and 2000) for non-trail related recreation (hunting, ice fishing) and work/land management activities on large blocks of private lands mostly found in the northern 2/3 of Michigan (Figure 2).

From 1976-1999, annual ORV use days (an ORV use day is the use of one ORV for any

Figure 2. Proportion (number) ORV Uses by Region 1976-1999



portion of a day) have risen from approximately 900,000 to 4.2 million. Based on the 1989 and 2000 studies, the proportion of total ORV use on the designated system has increased from 21% to 27%. Of all estimated ORV use in 1999, 44% was on private lands for purposes other than hunting and fishing (e.g. land management, trail riding, etc.), 25% was solely for hunting or fishing purposes on public and private lands and 31% was for trail riding purposes on public land, some not on the designated system (e.g. Upper Peninsula state or national forest roads).

When ORV users were asked an open-ended question in the 1989 and 2000 studies about the one most important thing to change in the ORV program, in both studies “providing more places to ride” was the most frequent suggestion. Of the other five most commonly suggested improvements, allowing the use of road shoulders, improving trail maintenance and improving trail signage were noted in both years. In 1989, two other concerns rounded out the top five suggestions: better information about riding opportunities and

more designated riding opportunities in southern Michigan. In 2000, these two were replaced in the top five by reduce ORV license fees for those only using ORVs for hunting/fishing and who do not use the designated system and increase ORV law enforcement. With provision of ORV information on the DNR website including the availability of maps there and the shift in ORV use northward, the study authors suggest that the need for better information may have been at least partially met and riders are increasingly used to using the designated system and other opportunities in northern Michigan. New concerns about reduced fees for those solely supporting hunting and fishing (in particular deer hunting and ice fishing) with ORV use may be linked to the quarter of all ORV use for this purpose. Further, requests for increased ORV enforcement may be linked to concerns about environmental damage from illegal ORV use and illegal riders giving legal ones a bad reputation. As always, there is a desire to have more places to ride.

Statewide Economic Impacts

The economic impact of ORV use in Michigan was also studied in Nelson et al. 2000. The average licensee spent \$1,944 from July 1998-June 1999 to support ORV use on items not related to ORV oriented trips. This included ORVs and trailers (equipment), insurance and storage. Equipment accounted for 80% of these expenditures. In total this non-trip spending was estimated to amount to \$134 million annually. Considering that the number of ORVs has since almost doubled, it is reasonable to assume this non-trip spending has risen in a similar manner. However, because most ORVs (other than some full-size vehicles) are manufactured outside of Michigan, the economic benefit of much of this equipment spending to the state is limited to dealer markups on vehicles.

Concerning ORV trips of 100 or more miles from home or those involving an overnight stay **and** where the primary purpose was ORV riding (not hunting, fishing, working around one's property, etc.), it was estimated that licensees and their friends and family took 152,000 such trips during July 1998-June 1999. Those trips generated \$40 million in spending in the local area where riding took place and en route to and from riding area. The spending does not include spending at home in preparation for the trip and thus is conservative in its estimate of economic impact.

Coupled with the \$134 million in equipment spending, this was estimated to have supported 822 Michigan jobs, provided \$16.4 million of income to Michigan workers, generated \$ 2.4 million in state sales taxes (at the former 4% level) and generated \$336,000 in state income taxes. This provides a substantial economic benefit to economies in northern Michigan. In particular, many businesses that support outdoor recreationists such as private campgrounds, motels, convenience stores, restaurants, parts and repair facilities, etc. are locally owned, providing substantial local economic benefit to small towns and rural areas.

Recent Surveys of Michigan Local Government Entities

County Sheriffs