Appendix A: Fleet Management

ODOT maintains a fleet of vehicles and equipment with an inventory totaling more than 6,000. The fleet is divided into 232 active categories as follows in the table below:

Table A-1 ODOT Fleet Categories

1000 - GENERIC EQUIPMENT CLASS CODE	550 - KETTLE TAR UNDER 300 GAL		
101 - SEDAN, STANDARD	551 - KETTLE TAR OVER 300 GAL		
132 - 1/4 TON, 4 WHEEL DRIVE	580 - LIFT, LITTER		
133 - PASS. VEHICLE 1/2T.ALL TERRAIN	589 - BACKHOE, TRACTOR ATTACHMENT		
201 - VAN, MINI, PASSENGER	590 - LOADER, FRONT, TRACTOR ATTACH		
202 - VAN, 3/4 TON, 8-12 PASSENGER	591 - LOADER, SKID STEER		
203 - VAN, CARGO	592 - LOADER FRONT END SELF 4WH		
204 - VAN, 1 TON, 12-15 PASSENGER	594- LOADER MINI		
210 - SEWER EQUIPMENT INSPECTION	598 - LOADER FORCE FEED		
213 - UTILITY TRUCK 1 TON	610 - MAINTAINER, TRACTOR MTD		
214 - UTILITY TRUCK 3/4 TON AND OVER	615 - MILLING MACHINE, PAVEMENT		
221 - PICKUP, 1/2 TON	621 - MIXER CONCRETE		
222 - PICKUP, 3/4 TON	630 - MOTOR OUTBOARD		
223 - PICKUP, 1 TON	635 - TREE MOVER, TRL MTD		
231 - STAKE, 1 TON, STANDARD	639 - MOWER, REMOTE CONTROLLED		
232 - STAKE, 1 TON, W/LIFT GATE	640 - MOWER, ROTARY, TOW TYPE 10'-20'		
233 - STAKE, 1 1/2 & OVER, STANDARD	641 - MOWER, 60" & OVER FRONT RIDING		
234 - STAKE, 1 1/2 & 2 TON, W/LFT GATE	642 - MOWER, EXT TYPE, ROTARY OR FLAIL		
235 - REFUELLER, AIRCRAFT, TRUCK MTD	643 - MOWER, ROTARY, BELLY		
236 - DATA COLLECTION VEHICLE	644 - MOWER, ROTARY, TOW TYPE		
238 - SWAP LOADER TRUCK, GVWR <= 26,000 LB	645 - MOWER, FLAIL/HAMMER KNIFE, TOWED		
241 - WELDER, TRUCK	647 - MOWER, RIDING, 72" OR UNDER		
242 - WRECKER	648 - MOWER, UNDER 60IN.SELF PROPELL		
252 - DUMP TRUCK, GVWR > 26,000 LB	650 - MOWER, ROTARY, OVER 60 IN.		
253 - DUMP TRUCK, GVWR <= 26,000 LB	652 - MOWER, FLAIL 72 IN. DUAL SIDE MTD		
254 - DUMP TRUCK, S&I, SINGLE AXLE, GVWR > 26,000 LB	654 - MOWER, ROTARY, SIDE MTD, 60 IN & OV.		
255 - TRUCK, SINGLE AXLE, HOOK LIFT SYSTEM, GVWR > 26,000 LB	655 - DITCHER, ATTACHMENT		
256 - DUMP TRUCK, S&I. TANDEM AXLE, ALL GVWR	657 - PATCHER		
257 - TRUCK, TANDEM AXLE, HOOK LIFT SYSTEM, ALL GVWR	659 - MOWER, GUARDRAIL		
258 - STAKE TRUCK, MULTI-USE	661 - PLANT LIGHT OVER 5KW		
262 - TRUCK TRACTOR, OVER 50,000 GVW	670 - PLOW, FARM TYPE		
270 - TRAILER, UNDER 7 TON	679 - PLOW SNOW 7FT9FT PWR REV.		

Efficient

Effective

Transparent

	T		
271 - TRAILER 7 TO 10 TON	680 - PLOW, SNOW, 7 FT & UNDER		
272 - TRAILER, OVER 10 TON	681 - PLOW, SNOW, 7-10 FEET		
273 - WETTING SYSTEM-SEMI TYPE	685 - PLOW, SNOW, 11 FT.		
277 - FLATBED TRAILER SEMI-TYPE	686 - PLOW, SNOW, POWER REV, 11 FT.		
279 - TRAILER, TOW-PLOW	687 - PLOW, SNOW, 12-13 FT.		
280 - TRAILER, SEMI-VAN 10 TO 15 TON	688 - PLOW, SNOW, POWER REV, 12 FT.		
281 - TRAILER, SEMI-VAN OVER 15 TON	689 - PLOW, SNOW, V-TRUCK MTD		
282 - TRAILER FAIR	690 - PLOW, SNOW, V-GRADER MTD.		
283 - TRAILER MOUNTED WATER SUPPLY PUMP FOR HYDRODEMOLITION	691 - PLOW, SNOW, BLOWER, TRUCK MTD.		
303 - QUEUE DETECTION WARNING SYSTEM	692 - PLOW, SNOW, BLOWER WALK TYPE		
304 - SOLAR PWR PORT BARRICD-SPEED	693 - UNDER-CHASSIS SNOW PLOW		
305 - PLANER, COLD, MNT	694 - PLOW, BOX, SNOW, 12'		
306 - MOBILE RADIO STATION	695 - PLOW, SNOW, POWER REV, 14'		
307 - SOLAR PWR CAMERA, TRAILER MOUNTED	696 - PLOW, BOX, SNOW, 14'		
308 - SOLAR PWR BARRICD-MSG CENTER	710 - PUMP, WATER, UNDER 2 IN.		
309 - TRAFFIC SIGNAL, PORTABLE	711 - PUMP, WATER 2 IN.		
310 - BARRICADE-PORTABLE-MSG CNTR	712 - PUMP, WATER 3 IN.		
311 - BACKHOE, TRACTOR W/LOADER	713 - PUMP, WATER, 4 IN. & OVER		
312 - BACKHOE, TRUCK MTD	730 - REMOVER, PAINT		
313 - BALL, DROP	744 - ASPHALT FLOAT		
314 - ARROW BOARD PORTABLE	745 - ASPHALT RECLAIMER		
316 - ARROW BOARD MOUNTED	746 - ASPHALT RECLAIMER, TRLR MNTED		
317 - BLADE, DOZER, BULL OR STRAIGHT	750 - ROLLER, COMPACTION		
318 - SIDE DOZER ATTACHMENT	751 - ROLLER, 1-3 TON		
319 - BOAT	752 - ROLLER, PATCH, 4-6 & 5-8 TON		
320 - BROOM, TOWED & PUSHED TYPE	754 - ROLLER, 7-12 TON, 3 WHEEL		
321 - BROOM, SELF-PROPELLED	755 - ROLLER, SHEEPFOOT		
322 - ATTENUATOR, TRUCK MOUNTED	759 - ROLLER, TOW TYPE		
324 - SCRUBBER, FLOOR SELF PROPELLED	771 - SAW, CONCRETE, WALK BEHIND		
326 - BLOWER, WHEELED, PUSH TYPE	774 - SAW, HYDRAULIC, CHAIN TYPE		
327 - ATTENUATOR, TRAILER MOUNTED	775 - HYDRODEMOLITION EQUIPMENT		
328 - MOBILE BARRIER - TRAILER	780 - SEALER, PAVEMENT JOINT		
330 - BUCKET, AERIAL, HYD. MTD	785 - BLADE, SCRAPER, TRACTOR MTD.		
334 - GRAPPLE, ATTACHMENT	786 - BLADE, GRADER F/SKID STEER 8'		
340 - CHIPPER, BRUSH	788 - STRAW KRIMPER		
341 - SHREDDER, TREE	790 - SEEDER, HYDRO		
342 - ALL TERRAIN TREE TRIMMER	791 - SEEDER, TOW-TYPE		
354 - CLEANER, FLUSHER, VACUM, MTD	792 - SEEDER, POWER HARROW		
334 - CLEANER, FLOSHER, VACUM, WID	792 - SEEDER, POWER HARROW		
355 - CLEANER, SEWER-HI VEL-TRL MTD	792 - SEEDER, POWER HARROW 801 - SHREDDER, SOIL & MULCH		

Efficient • Effective • Transparent

370 - COMPRESSOR UNDER 125CFM	811 - SPRAYER, CHEMICAL OVER 600 GAL		
371 - COMPRESSOR 125CFM	813 - SPREADER, DUMP BODY CONVEYOR		
372 - COMPRESSOR OVER 125CFM	814 - SPREADER, BERM, CHIP		
381 - CONVEYOR, BELT, CANVAS, METAL, RUB	816 - WETTING SYSTEM-PRE		
382 - TRAFFIC CONE RETRIEVER TRK. MTD	817 - WETTING SYSTEM-COMBINATION		
393 - CRANE, WHEELED	818 - SPREADER, SALT		
395 - CRANE, HYDR. BOOM, TRUCK MOUNTED	819 - LIFT GATE, PORTABLE, HYDRAULIC		
411 - CUTTER, SOD	820 - SPREADER, AGGREGATE, CHIP & GRIT		
412 - CUTTER STUMP	821 - MISC. HOPPER SPREADER PKUP MNTD		
413 - CUTTER, CONCRETE	822 - SPREADER, TAILGATE, HYDR.84 IN.		
414 - ATTACHMENT, SOIL CONDITIONER	823 - WETTING SYSTEM-DIRECT APPLICAT		
420 - DIGGER, DERRIC, TRK MTD.	824 - SPREADER, ICE CNTRL, HOPPER TYP		
421 - DIGGER, POSTHOLE, TRACTOR MOUNT	826 - SPREADER, MULCH		
422 - DIGGER, POSTHOLE	827 - SPREADER, PATCH		
425 - SILT FENCE ATTACHMENT	829 - SPREADER, UNDER TAILGATE		
430 - DISTRIBUTOR LOW PRESS MTD	831 - SPREADER, TOW TYPE		
431 - DISTRIBUTOR HIGH PRESS MTD	832 - SPREADER, STONE CHIP, SELF PRO		
432 - DISTRIBUTOR, TRL. MTD.	837 - BOX CHIPPER, TRUCK MOUNTED		
440 - DITCHER/TRENCHER	840 - STRIPER, CENTERLINE, WALK TYPE		
441 - DITCHER/TRENCHER, SELF-PROPELLED	841 - STRIPER, CENTERLINE TRUCK MTD		
443 - DITCHER/ TRENCHER, TRUCK MOUNTED	842 - PAINT REMOVER WALK BEHIND		
452 - DRILL, CORE, TRK MTD	843 - PALLETIZED TRUCK MTD. STRIPER		
454 - DRILL, PORTABLE GASOLINE/ELECT	855 - TAMPER, VIBRATOR, PATCH		
455 - DRILL, TRACK MOUNTED	857 - WATER TANK OVER 500 GAL TRK MT		
456 - DRILL, CONCERT, EQUIPMENT MTD	860 - TANK, WATER, UNDER 500 GAL.		
457 - BORING MACHINE	861 - TANK, WATER, OVER 500 GAL.		
459 - DRIVER, AUGER, POST, TRAILER MOUNTED	871 - TILLER, DISC		
460 - DRIVER, POST	872 - ROCKHOUND, THATCHER, SOIL STRIPPER/PREPPER		
461 - PULLER, POST	880 - TOWER, AERIAL, HYD.		
468 - EXCAVATOR, RUBBER WHEELED, ALL OPERATING WEIGHTS	885 - TOWER, AERIAL, HYD. UNDER BRI		
469 - EXCAVATOR, TRACKED, OPERATING WEIGHT < 20,000 LBS	886 - TOOL CARRIER, W/ MOUNTED BOOM MOWER		
470 - EXCAVATOR, TRACKED, OPERATING WEIGHT > 19,999 LBS & < 37999 LBS	888 - ALL TERRAIN VEHICLE 4 WHEELED		
471 - EXCAVATOR, TRACKED, OPERATING WEIGHT > 38,000 LBS	889 - ALL TERRAIN VEHICLE 6 WHEELED		
477 - LIFT TRUCK, STOCK PICKER	890 - TRACTOR, UNDER 140 CU. IN.		
480 - FORKLIFT, ALL SIZES	892 - TRACTOR, 165-190 CU. IN.		
485 - FORK, PALLET, ALL SIZES	893 - TRACTOR, 190 CU. IN. & OVER		
490 - GRADER, SMALL, UNDER 13,000 LBS	894 - TRACTOR, CRAWLER, UNDER 10 TON		
491 - GRADER, MED, 13,000 TO 23,000 LB	895 - TRACTOR, CRAWLER, OVER 10 TON		
492 - GRADER, LRG, OVER 23,000 LBS	896 - TUG TRACTORS		

Efficient • Effective • Transparent

506 - HAMMER-BREAKER HYD. MTD	930 - WELDER,PORTABLE,200-300 AMP		
512 - HAMMER, PILE DRIVER	935 - WIDENER ROAD SELF PROPELLED		
530 - HEATER, AGGREGATE	936 - WIDENER ROAD, MTD.		
531 - EMULSION TANK MOUNTED	940 - WING, SNOW		
533 - PAVEMENT HOT AIR TORCH HEATER	999 - UNIVERSAL (FITS ALL EQUIPMENT)		

Our analysis reviewed lease costs for a 2, 4, and 6 year lease. The table below identifies the annual costs for a lease compared to the current annual cost for all vehicle categories used in **R1.1**. The table uses a 5 percent lease rate which was the most conservative rate used for purposes of analysis. Note: N/A suggests that under ODOT's current cycling practice, the equipment category would be disposed of before the end of the certain lease model so it is not comparable.

Table A-2 Lease Cost Analysis

ODOT					
Category		Annual Cost	Annual 2		Annual 6
Number	Category Name	Current State	Year	Annual 4 Year	Year Lease
101	Passenger Sedan	\$2,657.32	\$5,068.10	\$4,375.93	\$3,955.22
201	Minivan	\$2,774.14	\$5,197.89	\$4,562.50	\$4,186.63
202	3/4 Ton Passenger Van	\$2,393.96	\$3,903.84	\$3,575	\$3,424
203	Cargo Van	\$3,243.34	\$6,492.28	\$5,731.03	\$5,233.34
204	1 Ton Cargo Van	\$3,669.15	\$6,598.53	\$5,569.24	\$5,095.11
213	1 Ton Utility Truck	\$5,787.10	\$14,462.25	\$10,574.52	\$9,088.33
214	3/4 Ton Utility Truck	\$4,272.77	\$7,495.43	\$6,496.63	\$6,081.68
221	1/2 Ton Pickup	\$2,947.70	\$5,528.76	\$4,832	\$4,479
222	3/4 Ton Pickup	\$3,757.13	\$7,380.79	\$6,167.28	\$5,726.82
223	1 Ton Pickup	\$3,983.44	\$7,818.87	\$6,879.81	\$6,417.09
253	Small Dump Truck	\$4,802.43	\$8,956.16	\$8,038.54	\$7,641.65
254	Single Axle Dump Truck	\$12,152.61	\$23,660.50	\$20,353.31	\$18,957.68
256	Tandem Axle Dump Truck	\$15,782.67	\$32,121.44	\$28,038.17	\$25,981.57
311	Backhoe Tractor	\$6,036.12	\$12,314.52	\$11,813.64	\$11,543.63
330	Bucket Truck	\$8,321.34	\$16,033.11	\$15,224.62	\$14,706.28
470	Medium Excavator	\$14,256.12	\$32,329.70	\$29,691.54	\$27,467.15
471	Large Excavator	\$12,680.76	\$28,498.25	\$26,416.21	\$24,765.63
591	Skid Steer	\$8,427.36	\$13,645.45	\$10,802.80	N/A
592	Front End Loader	\$13,245.49	\$23,348.19	N/A	N/A
827	Patch Spreader	\$19,512.66	\$30,837.35	\$27,385.82	\$29,991.68
893	Large Tractor	\$7,354.44	\$12,110.70	N/A	N/A

The annual lease costs for each vehicle category were compared to the average annual costs currently incurred by ODOT based on the number of years a particular piece of fleet was kept, for standardization purposes the most frequent year of disposal was used. The charts below show the analysis for each individual category reviewed in **R1.1**. Lease options were only considered if the vehicle was currently kept for a period of time longer than the proposed lease term. Note: The shapes of the lease graphs are due to the short length of the lease and the reoccurrence of those early high maintenance costs for new equipment.

Chart A-1 Individual Fleet Category Analyses









































