



**NEVADA  
DOT**



***SAFE AND CONNECTED***



# NDOT FLEET REPLACEMENT



- **FY 2016 Request**





# Request Transportation Board Approval to replace fleet vehicles

NRS 408.389 states that the Department shall not purchase any equipment which exceeds \$50,000, unless the purchase is first approved by the Transportation Board.

The total purchase of these vehicles is \$5,000,000 from FY 2016.



# Approved Biennial Legislative Budget

NEVADA DEPARTMENT OF TRANSPORTATION  
 BUDGET ACCOUNT 201-4660  
 BUDGET REQUEST FISCAL YEARS 2015-2016 AND 2016-2017  
 ENHANCEMENT

AGENCY REQUEST  
 AUGUST 21, 2014

NDOT OBJECT	OBJECT TITLE DESCRIPTION / JUSTIFICATION / DOCUMENTATION OF NEED	2016 REQUEST	2017 REQUEST
E710	EQUIPMENT REPLACEMENT		
REVENUE - CATEGORY 00			
00-2507	Highway Fund Authorization	\$ 5,420,000	\$ 5,420,000
<b>TOTAL REVENUE E710 - CATEGORY 00</b>		<b>\$ 5,420,000</b>	<b>\$ 5,420,000</b>
EQUIPMENT - CATEGORY 05			
05-8000	COMMUNICATIONS EQUIPMENT - 800 MHz RADIOS	\$ 420,000	\$ 420,000
<p>This decision unit requests budget authority for the replacement of approximately ten percent (10%) of the 800 MHz radios owned and utilized by the Department of Transportation (NDOT). The type of radios to be replaced reached their end of service for parts support in 2009 and 2010. 200 radios x \$4,200 estimated replacement cost per unit = \$840,000 (see attached list of NDOT radios to be replaced). The replacement radios are compatible with any P25 radio system and are vender neutral.</p> <p>The Nevada Shared Radio System (NSRS) is a statewide 800 MHz trunked radio system. The NSRS is a public private partnership shared between the NDOT, the University of Nevada Las Vegas (UNLV), and Nevada Energy participating in full legal accordance with FCC regulations. System resources and components are combined to maximize mobile radio capabilities, advanced technologies and coverage throughout Nevada, while minimizing equipment costs and associated operational costs. A portion of the NDOT operating costs are reimbursed by the non-highway funded agencies listed on the attached diagram depicting the participants in the NSRS.</p> <p>Although the backbone (mountain top) radio system has reached its end of life and will no longer be supported by the manufacture, the end user equipment is supported and needs to be replaced as described above. The replacement radios will work on any P25 radio system that is chosen as the replacement, regardless of the manufacturer.</p>			
05-8280	HEAVY DUTY REPLACEMENT EQUIPMENT	\$ 5,000,000	\$ 5,000,000
<b>ENHANCEMENT - REPLACEMENT EQUIPMENT TOTAL - E710</b>		<b>\$ 5,420,000</b>	<b>\$ 5,420,000</b>

Attachment 1



# Equipment Replacement Criteria

## Attachment 2

### EQUIPMENT REPLACEMENT CRITERIA BY VEHICLE CLASS

Criteria for NDOT licensed equipment replacement are based upon number of miles or hours, age, and/or downtime, excessive repair/recapitalization cost and parts availability.

Mileage, hour and age criteria for replacement are as follows:

<u>Class</u>	<u>Description</u>	<u>Miles/Hours</u>	<u>Months</u>
01	Sedans	100,000	96
	Purchased after FY03	120,000	120
01A	AWD Passenger Vehicles	100,000	96
	Purchased after FY03	150,000	120
03	3/4 Ton Pickups	150,000	96
	Diesel Powered	200,000	144
04	Vans	150,000	96
	Diesel Powered	200,000	144
05	1/2 Ton Pickups	150,000	96
10	Survey Units	150,000	96
	Diesel Powered	200,000	144
11E	1 Ton Dump/Garbage Trucks	150,000	96
	Diesel Powered	200,000	144
11F	Service Trucks	150,000	96
	Diesel Powered	200,000	144
12	Single Axle Dump Trucks	200,000	144
	Purchased after FY03	250,000	180
13	Tandem Axle Dump Trucks	200,000	144
	Purchased after FY03	250,000	180
15	All Wheel Drive Dump Trucks	200,000 or 5,000hrs	180
21	S P Road Brooms	8,000	120
24	S P Pickup Brooms		72
25	Water Trucks	200,000	180
	Purchased after FY03	250,000	240
41	Mowers		180
54	Industrial Tractors		240
54A	Skid Loaders		240
54B	Backhoe Loader		240
60	Trailers – Cargo		204
63	Sign Trailers		360
63B	Programmable Message Boards		144
72	Lab/Office Trailers		240



# NDOT VEHICLE CLASSIFICATIONS

- NDOT has 80 classes of equipment within the fleet.
- Some examples for this request:



# CLASS 1

## Sedan



# CLASS 1A

## SUV





# CLASS 3

$\frac{3}{4}$  Ton PU



# CLASS 5

$\frac{1}{2}$  ton PU





# CLASS 10/11

## Medium Duty Trucks



# CLASS 12

## Single Axle Dump Trucks





# CLASS 13

Tandem Axle  
Dump Trucks



# CLASS 15

All Wheel Drive  
Dump Trucks





# CLASS 21

## Self Propelled Broom



# CLASS 24

## Street Sweeper





# CLASS 25

Water Truck



# CLASS 41

Rotary Mower





# CLASS 54

Tractor



# CLASS 54A

Skid Steer Loader





# CLASS 54B

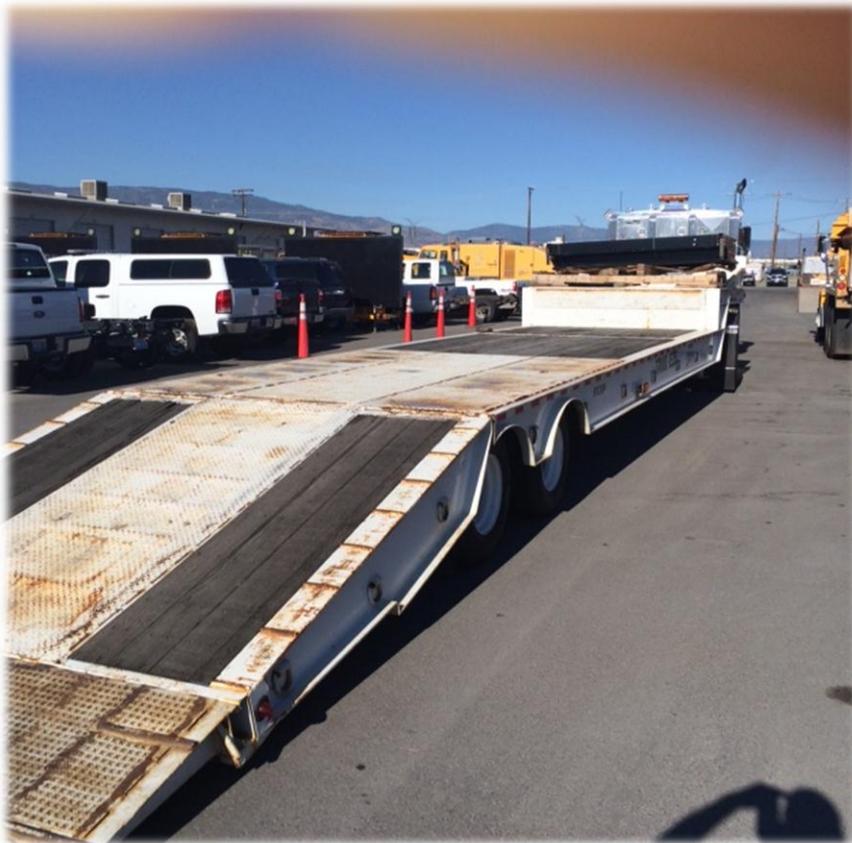
## Backhoe





# CLASS 60

## Transport Trailer



# CLASS 63B

## Programmable Message Board





# CLASS 72

## Lab Trailer





# Proposed List of Vehicles

ATTACHMENT 3  
DISTRICT I  
FY 2016 Equipment Replacement

CLASS	Unit No	Current Age (Years)	Fuel Type	ODOMETER as of 6/30/15	VEHICLE MNT COST May 2012 THRU May 2015	CLASS AVG YEARLY MAINT COST	DESCRIPTION REQUEST	ADJ CLASS	EST. COST	REPLACEMENT CRITERIA MET
25	0882	30	Dsl	219900	\$24,540	\$4,133	Tandem Axle Water Truck	25	\$250,000	MIL & AGE
11E	3123	13	Dsl	258300	\$44,909	\$6,353	1 Ton Ext Cab Dump Truck Dsl	11	\$55,000	MIL & AGE
54A	1909	23	Dsl	3610	\$17,269	\$3,079	Skid Steer Loader	54A	\$50,000	AGE*
41	1317	30	N/A	N/A	\$15,726	\$2,372	Batwing 15' Rotary Mower	41	\$42,000	AGE*
41	1318	30	N/A	N/A	\$19,261	\$2,372	Batwing 15' Rotary Mower	41	\$42,000	AGE*
12	0851	19	Dsl	179850	\$10,868	\$4,778	Tandem Axle Dump Trk W/Plow & Sander	13	\$225,000	AGE
12	0676	28	Dsl	229341	\$22,794	\$4,778	Tandem Axle Dump Trk W/Plow & Sander	13	\$225,000	MIL & AGE
12	0515	22	Dsl	238000	\$7,526	\$4,778	Tandem Axle Dump Trk W/Plow & Sander	13	\$225,000	MIL & AGE
10	1823	10	Dsl	253188	\$15,196	\$3,949	1 Ton Crew Cab 4x4 P/U Long Bed	10	\$34,000	MIL
01	3118	13	Hybrid	Salvaged- c767	\$10,274	\$1,066	4x4 SUV	01A	\$27,000	Totaled
05	0846	13	Bi-Fuel	200928	\$7,151	\$1,845	1/2 Ton 4x4 Ext Cab Short Bed P/U E-85	05	\$25,000	MIL & AGE
05	2050	10	Unl	192000	\$5,217	\$1,845	1/2 Ton 4x4 Ext Cab Short Bed P/U	05	\$25,000	MIL & AGE
05	1158	11	Unl	191000	\$9,112	\$1,845	1/2 Ton 4x4 Ext Cab Long Bed P/U	05	\$25,000	MIL & AGE
54B	2039	31	Dsl	<sup>679 (New Meter)</sup> 245740	\$18,769	\$2,397	Backhoe	54B	\$94,000	AGE
05	0845	12	Unl	245740	\$4,322	\$2,397	1/2 Ton 4x4 Ext Cab short bed P/U E-85	05	\$25,000	MIL & AGE
							UNITS HIGHLIGHTED IN ORANGE MAY NOT BE REPLACED UNLESS THERE IS ENOUGH COST SAVINGS			





# Proposed List of Vehicles

ATTACHMENT 3  
DISTRICT III  
FY 2016 Equipment Replacement

CLASS	Unit No	Current Age (Years)	Fuel Type	ODOMETER as of 6/30/15	UNIT AVG YR MNT COST Dec 2011 THRU Dec 2014	CLASS AVG YEARLY MAINT COST	DESCRIPTION REQUEST	ADJ CLASS	EST. COST	REPLACEMENT CRITERIA MET
13	0623	12	Dsl	249000	\$22,184	\$8,404	Tandem Axle Dump Trk W/Plow & Sander	13	\$230,000	MIL & AGE
13	3032	15	Dsl	248000	\$30,922	\$8,404	Tandem Axle Dump Trk W/Plow & Sander	13	\$230,000	MIL & AGE
13	0243	14	Dsl	246000	\$34,299	\$8,404	Tandem Axle Dump Trk W/Plow & Sander	13	\$230,000	MIL & AGE
03	2154	07	Unl	226000	\$9,839	\$2,868	3/4 ton 4x4 Reg Cab Long Bed Pickup	03	\$26,000	MIL
03	0078	09	Unl	219000	\$9,363	\$2,868	3/4 ton 4x4 Reg Cab Long Bed Pickup	03	\$26,000	MIL & AGE
03	0822	12	Unl	209000	\$11,614	\$2,868	3/4 ton 4x4 Reg Cab Long Bed Pickup	03	\$26,000	MIL & AGE
03	0048	14	Unl	227507	\$15,497	\$2,868	3/4 ton 4x4 Reg Cab Long Bed Pickup	03	\$26,000	MIL & AGE
11F	0811	13	Unl	193692	\$7,616	\$4,569	3/4 ton 4x4 Reg Cab Long Bed Pickup	03	\$26,000	MIL & AGE
03	0153	07	Unl	195149	\$14,230	\$2,868	3/4 ton 4x4 Reg Cab Long Bed Pickup	03	\$26,000	MIL
11E	0561	13	Dsl	249000	\$14,462	\$6,353	1 Ton Reg Cab Dump Bed Dsl	11E	\$45,000	MIL & AGE
11E	1860	09	Dsl	246000	\$46,619	\$6,353	1 Ton Reg Cab Dump Bed Dsl	11E	\$45,000	MIL
11E	1208	16	Unl	222000	\$31,576	\$6,353	1 Ton Reg Cab Dump Bed Dsl	11E	\$45,000	MIL & AGE
05	0989	18	Unl	177531	\$5,637	\$1,845	1/2 Ton Reg Cab Short Bed Pickup	05	\$21,000	MIL & AGE
63B	1850	17	Dsl	N/A	\$318	\$962	Programmable Message Board	63B	\$23,000	AGE*
03	0815	12	Dsl	223000	\$30,360	\$2,868	3/4 Ton Reg Cab Long Bed Pickup	03	\$23,500	MIL & AGE
41	2051	31	N/A	N/A	\$0	\$2,373	15' Rotary Mower	41	\$45,000	AGE*
63B	2713	19	Dsl	N/A	\$2,327	\$189	Programmable Message Board	63B	\$23,000	AGE*
10	3153	14	Dsl	218445	\$40,000	\$3,949	Replace with 3/4 ton Crew cab with survey	03	\$42,000	MIL & AGE
05	0079	14	Unl	184334	\$5,524	\$1,845	1/2 Ton Reg Cab Short Bed Pickup	05	\$22,000	MIL & AGE
63B	2712	19	Dsl	N/A	\$3,320	\$189	Programmable Message Board	63B	\$23,000	AGE*
1A	2918	15	Unl	219355	\$3,196	\$1,066	4x4 SUV	1A	\$28,000	MIL & AGE
1A	417	13	Unl	179367	\$11,532	\$1,066	1/2 Ton Crew Cab 4x4	05	\$27,000	MIL & AGE
21	1638	19	Dsl	41777	\$47,552	\$1,066	Self Propelled Broom	21	\$60,000	AGE



# Proposed List of Vehicles

ATTACHMENT 3  
CARSON CITY DIVISIONS AND CONSTRUCTION CREWS  
FY 2016 Equipment Replacement

CLASS	Unit No	Current Age (Years)	Fuel Type	ODOMETER as of 6/30/15	UNIT AVG YR MNT COST 2010 THRU 2013	CLASS AVG YEARLY MAINT COST	DESCRIPTION REQUEST	ADJ CLASS	EST. COST	REPLACEMENT CRITERIA MET
01	0059	19	Unl	80000	\$3,895	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0404	13	Unl	150000	\$2,719	\$1,066	4 Door Sedan	01	\$18,500	MIL & AGE
01	0406	13	Unl	140000	\$3,208	\$1,066	4 Door Sedan	01	\$18,500	MIL & AGE
01	0415	13	Unl	150000	\$7,004	\$1,066	4 Door Sedan	01	\$18,500	MIL & AGE
01	0809	12	Unl	155000	\$4,784	\$1,066	4 Door Sedan	01	\$18,500	MIL & AGE
01	1710	10	Unl	128000	\$3,259	\$1,066	4 Door Sedan	01	\$18,500	MIL & AGE
01	1711	10	Unl	118000	\$4,916	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0097	19	Unl	66000	\$1,269	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0014	17	Unl	73000	\$2,209	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0036	18	Unl	59000	\$7,896	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0050	20	Unl	76000	\$2,359	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0075	18	Unl	51000	\$1,002	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0158	18	Unl	68000	\$1,392	\$1,066	4 Door Sedan	01	\$18,500	AGE
01	0261	17	Unl	82000	\$674	\$1,066	4 Door Sedan	01	\$18,500	AGE
01A	0095	22	Unl	130000	\$5,166	\$2,051	4x4 SUV	01A	\$28,000	MIL & AGE
05	0138	09	Unl	215857	\$10,845	\$1,845	1/2 Ton Ext Cab Short Bed 4x4 Pickup	05	\$25,000	MIL & AGE
03	0482	07	Unl	177399	\$13,310	\$2,868	1/2 Ton Ext Cab Short Bed 4x4 Pickup	05	\$25,000	MIL & AGE
04	3258	09	Unl	151377	\$8,248	\$1,690	1/2 Ton Ext Cab Short Bed 4x4 Pickup	05	\$25,000	MIL & AGE
01A	1120	11	Unl	80843	\$4,412	\$2,051	1/2 Ton Crew Cab Short Bed 4x4 Pickup	05	\$27,000	AGE
01A	3152	13	Unl	100516	\$3,951	\$2,051	4x4 SUV	01A	\$28,000	MIL & AGE
10	1105	16	Unl	115954	\$12,324	\$3,950	1/2 Ton Crew Cab Short Bed 4x4 Pickup	05	\$27,000	AGE
11J	0940	12	Unl	215969	\$9,061	\$5,042	F450 Ext Cab 4x4 Utility Bed Dsl	11	\$50,000	MIL & AGE
11F	2762	17	Unl	192000	\$16,569	\$4,569	F450 Ext Cab 4x4 Utility Bed Dsl	11	\$50,000	MIL & AGE
11F	0325	29	Unl	71000	\$4,413	\$4,569	1/2 Ton Ext Cab Long Bed 4x4 Pickup	05	\$25,000	AGE
11F	2756	17	Unl	154000	\$7,913	\$4,569	3/4 Ton Ext Cab Service Truck	03	\$34,000	MIL & AGE
05	2907	16	Unl	159000	\$4,392	\$1,845	1/2 Ton Ext Cab Long Bed 4x4 Pickup	05	\$25,000	MIL & AGE
60	2201	27	N/A	N/A	\$6,457	\$1,132	50 Ton Transport Trailer	60	\$72,000	AGE*
72	2365	27	N/A	N/A	\$275	\$329	10x50 Lab Trailer	72	\$149,000	AGE*



# Cost and Benefits Analysis

## Attachment 4 - for the following Classes

- **Class 11 One Ton Truck**
- **Class 13 Dump Truck**
- **Class 15 AWD Dump Truck**
- **Class 21 Sweeper**
- **Class 24 PM-10 Sweeper**
- **Class 25 Water Truck**
- **Class 54 Tractor**
- **Class 54A Skid Steer Loader**
- **Class 54B Backhoe**
- **Class 60 – 50 Ton Transport Trailer**
- **Class 72 Lab Trailer**



# QUESTIONS ?



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