RoadsIS Software Review

Created by Idaho T2 Center and U. of Idaho National Institute for Advanced Transportation Technology (NIATT).
RoadsIS version 3.0.0.10
Published 2002
Reviewed by Matthew Syphus Jan 5, 2023

SUMMARY

A simple program to track expenditures for road maintenance and projects. Expenditures are calculated from daily job and shop entries. These are based on data previously entered by the LHJ in nine "fixed data" tables. These include individual employees (with pay rates), equipment, materials, fuel, activities, etc. Provides reports to summarize by date range, project, activity type, and other parameters.

TECHNICAL

- Minimal system requirements.
- Based on MS Access database engine.
  - Does not require a separate Microsoft license or installation.
- MS Access database files can be stored anywhere, including on a network.
  - The default location is within the Program Files installation folder.
- The "About" info indicates a copyright (1999-2002) held by NIATT and the Idaho T2 Center.
  - NO software license indicated.

INSTRUCTIONS

The Help menu includes a 78-page PDF document with clear instructions on using the program. This is not available until the program is successfully installed. I've saved it separately as a file.

REVIEW

Basic job and cost tracking. Jobs can be grouped by activity (maintenance) or project. A secure login with username and password creates software administrators, editors, and viewers. The program is similar to what iWorq provides in their Work Orders product. The difference is that iWorq is browser based, allows multiple users with simultaneous editing, and integrates with several other modules (asset management, equipment maintenance, permits, etc.). I would say iWorq is more complex to use.

Pros:

- The program is simple and easy enough for most to use.
- Very low hardware requirements mean that just about any Windows computer can run it.
- Since it is file-based it doesn't require IT infrastructure or even a network connection.
- Saving the file to a shared directory allows multiple installs to use the same data.

Cons:

- Being file-based <u>does not allow simultaneous use</u>. One user locks the database.
- <u>The core cost data is not time segregated</u>. For example, the list of employees and their pay rates save previous rates. If a report is run on costs from before a pay change, the newer rate will be used and the reported cost will be inaccurate. The same applies to all other costs: fuel, equipment, etc. There are work arounds but they may be cumbersome.
- Related to the previous point, <u>historic data is problematic</u>. If an employee leaves or equipment is sold, the instructions say to delete those records from the program. Job entries which reference them will then show "NA" and that cost will be left out. Leaving the old data intact preserves the records but builds up invalid selections for new entries.
- <u>Requires entering every road in the LHJ</u> in reasonably-sized segments.

Notes

To successfully install on Windows 10 Pro:

- browse the CD files, right-click Setup.exe and choose Properties,
- select the Compatibility tab,
- Check the box for "Run this program in compatibility mode for:"
- From the dropdown menu, select "Windows XP (Service Pack 3)"
- Click OK
- Double-click Setup.exe to install.

Highway District No. 1
EMPLOYEE DAILY TIME SHEET

Date: 5-2-23

Employee: Scott Parks

HRS	O/T	ACT #	UNIT	ROAD NAME	DEPT	PROJ	HAULS	MAT	PIT/Y	EQUIP	EQ HR	FUEL	AMT
2		121	3		RD								
2		600 Shop			SH								
3		119	3		RM								
3		205 Shop			EQ					D023	2		
										D015			

REGULAR HOURS 10   COMP TIME EARNED _____   FROM 01:30 TO 5:00

VACATION HOURS _____   PTO HOURS _____   COMP HOURS _____   FROM _____ TO _____

COMMENTS: _____

| Add Record | Delete Record | Edit Record | Fiscal Year : 10/01/2022 to 09/30/2023 |

DailyJob Table

DailyJob | DailyShop | Activities | Department | District | Employee | Equipment | Fuel | Materials | Projects | Roads |

Rec #	Date	Empl Code	Reg Hrs	OT Hrs	Equip Code	Equip HR/MI	Fuel Code	Fuel Amt	Matrl Cod
1	10/03/2022	Adamsen	10	0	NA	0	NA	0	NA
2	10/03/2022	Barker	10	0	21	10	NA	0	NA
3	10/03/2022	Baskett	10	0	2	10	NA	0	NA
4	10/03/2022	Cockerum	10	0	NA	0	NA	0	NA
5	10/03/2022	Flannery	10	0	12	10	DE	50	3/4
6	10/03/2022	Hinson	7	0	4	7	NA	0	NA
7	10/03/2022	Hinson	3	0	NA	0	NA	0	NA
8	10/03/2022	Phillips	10	0	31	10	DE	10	NA
9	10/04/2022	Adamsen	10	0	NA	0	NA	0	NA
10	10/04/2022	Barker	10	0	21	10	DE	14	NA
11	10/04/2022	Baskett	10	0	2	10	NA	0	NA
12	10/04/2022	Cockerum	9	0	1	9	NA	0	NA
13	10/04/2022	Flannery	10	0	12	10	DE	43	3/4

Activities List

Number	Activity Code	Activity Description	Money Spent this Year	Money Spent Last Year
1	002	Safety School	$7,515.82	$2,829.32
2	004	Election	$0.00	$0.00
3	005	Supervisor	$20,186.96	$30,046.19
4	006	Board Meeting	$461.68	$1,539.48
5	007	Office	$34,255.28	$51,671.70
6	008	Permits	$301.00	$1,093.52
7	009	Conference or Meeting	$1,578.69	$5,343.69
8	010	Admin Leave - injured or jury duty	$1,922.36	$8,156.43
9	011	Engineering	$0.00	$0.00
10	012	Drug testing	$69.08	$528.55
11	10	Misc	$0.00	$0.00
12	101	Grading - Regular Maintance	$0.00	$0.00
13	102	Material or equipment hauling	$17,026.88	$63,263.56
14	103	Install non-existing culvert	$0.00	$0.00
15	104	Rd rebuilt, realign or overlay	$0.00	$438.44
16	105	Rolling	$213.15	$3,824.13
17	107	Gradding/blade patch	$1,022.88	$20,603.33
18	108	Remove mud or debris	$657.66	$3,254.94
19	109	Hand Patching	$7,538.12	$16,980.93

Department List

Number	Department Code	Department Description
1	AC	Administrative - Clerk
2	AD	Administrative - Director
3	BM	Bridge Maintenance
4	BN	New bridge non-existing bridge
5	BR	Replacement - existing bridge
6	CM	Culvert Maintenance (Cleaning ect.)
7	CO	Work done on Payette County Roads
8	COV	COVID19 pd time off
9	CR	Replacing - existing culvert
10	CS	Chip Sealing for Highway District No 1
11	CU	Non-exisitng culvert
12	DR	Drug testing
13	EQ	Equipment Maintenance
14	FC	Culvert - flagging
15	FG	Rd maint - flagging
16	FH	Floating Holiday
17	FL	Flooding
18	FN	New construction - flagging
19	FO	Overlay - flagging
20	FR	Work done on City of Fruitland roads

District List

Number	District Code	District Description	Comments
1	1&2	Unit 1 and Unit 2	When work is done in both units
2	1&3	Unit 1 and Unit 3	When work is done in both units
3	1&4	Unit 1 and Unit 4	When work is done in both units
4	2&3	Unit 2 and Unit 3	When work is done in both units
5	2&4	Unit 2 and Unit 4	When work is done in both units
6	3&4	Unit 3 and Unit 4	When work is done in both units
7	All roads	All roads in all four units	All roads in all four units
8	County	Payette County Roads	When work is done on Payette County R&B
9	Fruitland	City of Fruitland Roads	When work is done on City of Fruitland road
10	New Plymouth	Ctiy of New Plymouth Roads	When work is don on City of New Plymouth
11	Payette	City of Payette	Work done in the City of Payette
12	State	When Hwd works on State roads	When Hwd works on State roads
13	Unit 1	Unit 1 West	West of Elmore/west of US 95
14	Unit 2	Unit 2 North	North of HWY 30 and East of Elmore
15	Unit 3	Unit 3 East	East of HWY 30 and S of Idaho Street
16	Unit 4	Unit 4 South	South of HWY 30 and East of US95
17	Unit 5	General	Out of working units

Equipment List

Number	Code	Description	Serial Number	Rental Cost	Rental Base	Purchase Value	Salvage Value	Life Expt.
1	00	2009 Kenworth T800 - deicer truck	1NKDL00X39R25774	$115.81		$231,628.00	$231,628.00	15
2	1	2008 Chev CC20953 pick up truck	1GCHC29KX8E1974	$12.05		$24,107.00	$29,000.00	10
3	10	1984 Ford LN800 10 yard dump truck	1FDYS80K3EVA229	$18.11		$36,216.00	$5,000.00	10
4	11	1996 Volvo 10 yard dump truck	4V5JCBBEXTR8524	$41.64		$83,280.00	$83,280.00	10
5	12	1992 GMC/White 12 yard dump truck	4V2JCBBE5PR81858	$34.55		$69,100.00	$69,100.00	10
6	14	2012 Asphalt zipper	50000642	$58.25		$116,490.00	$116,490.00	10
7	15	2002 Volvo 10 yard dump truck	4V5KC9GG62N33	$46.50		$93,000.00	$93,000.00	10
8	16	1992 Veermer Wood Chipper	3302	$6.87		$13,750.00	$13,750.00	10
9	17	2001 International 4900	1HTSDAAR91H3542	$10.00	10.00	$20,000.00	$20,000.00	12
10	18	2000 Econoline 7 ton trailer	42ETPFG26Y100099	$2.57		$5,135.00	$5,135.00	10
11	19	1978 Fruehuff Trailer	BK0021	$1.00		$800.00	$800.00	10
12	2	2016 Chevy Silverado 2500	1GC2KUEG2GZ3750	$20.21		$40,427.00	$40,427.00	10
13	20	1997 928 Loader	6XR00589	$32.50		$65,000.00	$65,000.00	10
14	21	1994 Cat 140G Grader 14'	72V16459	$60.90		$121,800.00	$121,800.00	10
15	22	2020 CAT 938M Loader	P5K01149	$103.13		$206,250.00	$206,250.00	20
16	23	2002 580 Super M Backhoe	JJG0022048	$22.84		$45,689.00	$45,689.00	10
17	24	BT001 trailer - zipper	109FS0823CU021109	$4.50		$9,000.00	$9,000.00	0
18	25	1972 Rayco Roller 500A VI	01-J-1372	$10.00		$20,000.00	$20,000.00	10
19	26	2000 Vibromax Roller	JKC5304013	$12.38		$24,750.00	$24,750.00	10

Daily Job Summary Report

From '04/01/2023' To '04/30/2023'

Activities: All

Departments: RM : Road Maintenance

Districts: All

Employee: All

Equipment: All

Fuel: All

Materials: All

Projects: All

Roads: All

Totals For Daily Job Report

Total Reg Hours: 73
Total OT Hours: 0
Total Equip Mi/Hr: 67
Total Material Quantity: 0
Total Employee Costs: $2,242.60
Total Equipment Costs: $3,123.53
Total Materials Costs: $0.00
Total Fuels Costs: $225.14
Total All Costs: $5,591.27

Daily Job Summary Report

From '03/27/2017' To '09/30/2023'

Activities: All

Departments: All

Districts: All

Employee: All

Equipment: All

Fuel: All

Materials: All

Projects: 257 : Adams culvert

Roads: All

Totals For Daily Job Report

Total Reg Hours:	46
Total OT Hours:	0
Total Equip Mi/Hr:	40
Total Material Quantity:	15
Total Employee Costs:	$1,373.64
Total Equipment Costs:	$825.18
Total Materials Costs:	$101.25
Total Fuels Costs:	$234.13
Total All Costs:	$2,534.20