Project:

126	6:20	Helensbe	Dead	Dapto Station	6:55	Sun 02-Jul-2023		0:05		0:35	0	45.965				
126	7:00	Dapto Sta	WAD	Dapto Station	11:30	Sun 02-Jul-2023	4:30	0:00			0	0				
126	11:31	Meal Bre	MB	Meal Break End	12:01	Sun 02-Jul-2023	0:00	0:01	0:30		0	0				
126	12:02	Dapto Sta	WAD	Dapto Station	17:00	Sun 02-Jul-2023	4:58	0:01			0	0				
126	17:01	Meal Bre	MB	Meal Break End	17:31	Sun 02-Jul-2023	0:00	0:01	0:30		0	0				
126	17:32	Dapto Sta	WAD	Dapto Station	19:00	Sun 02-Jul-2023	1:28	0:01			0	0				
126	19:05	Dapto Sta	Dead	Helensberg	19:39	Sun 02-Jul-2023		0:05		0:34	0	45.863				
				Roster_Total	13:19		10:56	0:14	1:00	1:09	0	91.828	$67.95	$1,601.17	$1,669.12	$318,080.38
127	6:48	Helensbe	Dead	Helensburgh Station	6:55	Sun 02-Jul-2023		0:05		0:07	0	4.263				
127	7:00	Helensbu	WAD	Helensburgh Station	11:00	Sun 02-Jul-2023	4:00	0:00			0	0				
127	11:01	Meal Bre	MB	Meal Break End	11:31	Sun 02-Jul-2023	0:00	0:01	0:30		0	0				
127	11:32	Helensbu	WAD	Helensburgh Station	15:00	Sun 02-Jul-2023	3:28	0:01			0	0				
127	15:05	Helensbu	Dead	Helensberg	15:12	Sun 02-Jul-2023		0:05		0:07	0	4.461				
				Roster_Total	8:24		7:28	0:12	0:30	0:14	0	8.724	$6.46	$1,027	$1,033.46	$319,113.84
128	14:52	Helensbe	Dead	Charles Harper Park	14:55	Sun 02-Jul-2023		0:05		0:03	0	1.633				
128	15:00	Charles H	WAD	Charles Harper Park	19:00	Sun 02-Jul-2023	4:00	0:00			0	0				
128	19:01	Meal Bre	MB	Meal Break End	19:31	Sun 02-Jul-2023	0:00	0:01	0:30		0	0				
128	19:32	Charles H	WAD	Charles Harper Park	22:00	Sun 02-Jul-2023	2:28	0:01			0	0				
128	22:05	Charles H	Dead	Helensberg	22:08	Sun 02-Jul-2023		0:05		0:03	0	1.667				
				Roster_Total	7:16		6:28	0:12	0:30	0:06	0	3.3	$2.44	$879.67	$882.11	$319,995.95
				Sum_OF_AllRoster_Toals	2272:18:00		1504:52:00	494:24:00	97:00:00	247:04:00	43015.426	16550.943	$40,142.77	$279,853.17		

Key: [h]:mm, Dim avariableName as currency

Description: after a set of bus driver rosters is made, the office decided to reduce the lengths of the driver shifts by add extra driver for the trip, which means two new routs will be added for each roster, more specifically, the running bus A will be added one routine to drive back depot and at almost same time of bus A driver starts driving back, the bus B will drive out from depot to replace the returning bus.

After all new routines are added, the system will need to count the total-operating hours, layover hours, dead hours, operation Distance and dead distance.

Tool: Excel, VBA

Significant issue solved:

(1) Over 24-hour time calculation.
(2) "Currency" Variable type

Solutions:

(1) Applying Format ("11:30", "hh:mm")
(2) Setup format as [h]:mm in excel first, and string display in VBA :

1. Code:

```
Dim hour1 as double

Dim converthour as string

hour1 = hour1 + Cells(startone, 6).Value  'the 11:30 time length

converthour = hour1

Cells(1943, 6) = converthour
```

2. Code:

```
Dim converthour as string

converthour = Cells(startone - 1, 6) - Cells(reverseClock + 1, 2)
```

```
Cells(startone, 6) = converthour
```

3. code:

```
Dim converthour as Currency
```