**Rolling Assets Technical Break Down and operational Data set**

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The data set is for fleets break downs (technical symptom cause) and operational customers count on a route and trip level. There are five types of data set of breakdown and operational trip information

1. **Break down information** – Has the duration of the breakdown, on the route name, date time stamp with the technical symptom codes. (Fleets technical breakdown0117to0618.csv)

**Meta Data**

The provided data set for Break down information is from Q1 2017 to Q2, 2018 and has 5,354 rows.

**Column\_name Column\_type Column\_desc**

DATETIME\_OCCURED DATE Incident Date

INC\_ID Number Incident ID (PK)

VEHICLE\_ID VARCHAR2 (20) Vehicle Side Number = *NOM\_VEHICLE.ID*

ROUTE VARCHAR2 Route or Line Name *= NOM\_LINE.CODE*

DELAY\_MINUTES Number Lost service minutes

SYMPTOM\_SYMPTOM VARCHAR2 (20) Symptom Codes

DESCRIPTION VARCHAR2 (200) Description of the incident

**Sample Data**

DATETIME\_OCCURRED,INC\_ID,VEHICLE\_ID,ROUTE,DELAY\_MINUTES,SYMP\_SYMPTOM,DESCRIPTION

6/29/2018 5:05:00 PM,2468682,LRV269,101,33,3100,OP ADVISED FRICTION BRAKE C-TRUCKý KEY OUT/UP DIDN`T CLEARý ADVISED TO CUT C TRUCK CONFIRMED IN A CAB. OP ADVISED AND CONFIRMED CUT OUT 7 TIMES. ADVISED ON LOCATION OF C TRUCK ROTA

6/29/2018 6:53:00 PM,2468614,LRV263,101,3,3122,LRV263 ADA RAMP BY DOOR 4ý LATCH WOULD NOT RELEASE RAMP FROM WALL EASILY. OP LEFT RAMP DOWN UNTIL PULL IN. CAB B

6/29/2018 4:08:00 PM,2468525,1534,P,19,0505,WOULDN?T START// TRADED CALLED CCS WILL PROB BE LATE

6/29/2018 1:36:00 PM,2468424,6154,51,29,0022,STOP ENGINE LIGHT; -29 MIN

6/29/2018 12:10:00 PM,2468389,6063,45,10,1030,BUS WILL NOT GO/NO LEAKS/ASKED HIM TO TURN BUS OFF FOR 30 SEC AND RESTART/IT STARTED TO MOVE AGAIN///1220 BUS BROKE DOWN AGAIN/THIS TIME HE SAID THE RAMP LIGHT IS ON/I ASKED HIM TO

1. **Trip Information** – Has Information about the Vehicle trips, all trips performed by Vehicle during a day.

**Meta Data**

The provided data set for Vehicle trip is from Q1 2017 to Q2, 2018.

Vehicle trip0418to 0618 has 1,048,535 rows; Vehicle trip0118to 0318 has 1,048,535 rows; Vehicle trip1017to 1217 has 1,045,056 rows; Vehicle trip0717to 0917 has 1,048,535 rows; Vehicle trip0417to 0617 has 1,037,185 rows, Vehicle trip0117to 0317 has 955,655 Rows with the following columns

**Column\_name Column\_type Column\_desc**

OPD\_DATE DATE Operational Date

VEHICLE\_ID Number ID of the vehicle

MASTER\_ID Number ID of the master-vehicle in case of coupled vehicles

EVENT\_NO Number ID of the event

EVENT\_NO\_COURSE Number

METERS Number Odometer at the time of the event

ACT\_DEP\_TIME Number Actual start time of the trip

NOM\_DEP\_TIME Number Scheduled (Nominal) start time of the trip

NOM\_END\_TIME Number Scheduled (Nominal) end time of the trip

ACT\_END\_TIME Number Actual end time of the trip

LINE\_ID Number ID of the line

COURSE\_ID Number ID of the course

TRIP\_ID Number ID of the trip

PATTERN\_ID Number ID of the pattern

PATTERN\_DIRECTION VARCHAR2 Direction on Pattern

TRIP\_TYPE Number differentiate between service journeys and dead runs

BLOCK\_ID Number ID of the block

TIME\_GRP\_ID Number ID of the time group

TRIP\_CODE Number Code of the trip

**Sample Data**

OPD\_DATE,VEHICLE\_ID,MASTER\_ID,EVENT\_NO,EVENT\_NO\_COURSE,METERS,ACT\_DEP\_TIME,NOM\_DEP\_TIME,NOM\_END\_TIME,ACT\_END\_TIME,LINE\_ID,COURSE\_ID,TRIP\_ID,PATTERN\_ID,PATTERN\_DIRECTION,TRIP\_TYPE,BLOCK\_ID,TIME\_GRP\_ID,TRIP\_CODE

3/31/2018,4308988,,1499194019,1499193951,0,91629,91620,93840,97195,4342329,2154,8949275,92798040,W-Bound,0,2154,9050721,111687574

3/31/2018,4308988,,1499194010,1499193951,0,88209,88200,90420,90326,4342329,2154,8949273,860435638,E-Bound,0,2154,9050337,111687476

3/31/2018,4308988,,1499194000,1499193951,0,84428,84420,86640,86689,4342329,2154,8949272,92798040,W-Bound,0,2154,9050732,111687578

3/31/2018,4308988,,1499193991,1499193951,0,81025,81000,83220,83108,4342329,2154,8949270,860435638,E-Bound,0,2154,9050341,111687480

3/31/2018,4308988,,1499193982,1499193951,0,77253,77220,79440,79560,4342329,2154,8949269,92798040,W-Bound,0,2154,9050736,111687582

3/31/2018,4308988,,1499193973,1499193951,0,73824,73800,76020,75953,4342329,2154,8949267,860435638,E-Bound,0,2154,9050345,111687484

3/31/2018,4308988,,1499193961,1499193951,0,70154,70020,72240,72713,4342329,2154,8949266,92798040,W-Bound,0,2154,9050751,111687586

3/31/2018,4308988,,1499193952,1499193951,0,66617,66600,68820,68749,4342329,2154,8949264,860435638,E-Bound,0,2154,9050349,111687488

3/31/2018,4308986,,1498063487,1498063441,0,89828,89820,92040,92422,4342329,2153,8949235,92798040,W-Bound,0,2153,9050729,111687575

3/31/2018,4308986,,1498063478,1498063441,0,86480,86400,88620,88558,4342329,2153,8949233,860435638,E-Bound,0,2153,9050338,111687477

3/31/2018,4308986,,1498063469,1498063441,0,82628,82620,84840,84890,4342329,2153,8949232,92798040,W-Bound,0,2153,9050733,111687579

3/31/2018,4308986,,1498063460,1498063441,0,79209,79200,81420,81324,4342329,2153,8949072,860435638,E-Bound,0,2153,9050342,111687481

3/31/2018,4308986,,1498063451,1498063441,0,75427,75420,77640,77744,4342329,2153,8949071,92798040,W-Bound,0,2153,9050737,111687583

3/31/2018,4308986,,1498063442,1498063441,0,72018,72000,74220,74172,4342329,2153,8949069,860435638,E-Bound,0,2153,9050346,111687485

3/31/2018,4308986,,1498063432,1498063301,0,68227,68220,70440,70498,4342329,2157,8949673,92798040,W-Bound,0,2157,9050752,111687587

3/31/2018,4308986,,1498063423,1498063301,0,64883,64800,67020,67025,4342329,2157,8949671,860435638,E-Bound,0,2157,9050350,111687489

3/31/2018,4308986,,1498063414,1498063301,0,61926,61920,64140,64171,4342329,2157,8949670,92798040,W-Bound,0,2157,9050818,111687621

3/31/2018,4308986,,1498063405,1498063301,0,58506,58500,60720,60607,4342329,2157,8949668,860435638,E-Bound,0,2157,9050501,111687520

3/31/2018,4308986,,1498063396,1498063301,0,55626,55620,57840,57838,4342329,2157,8949667,92798040,W-Bound,0,2157,9050759,111687594

3/31/2018,4308986,,1498063387,1498063301,0,52206,52200,54420,54340,4342329,2157,8949665,860435638,E-Bound,0,2157,9050373,111687496

1. **Vehicle Trip Passengers** – Lists of all trips performed by vehicles during a day with passenger information.

Vehicle tripPassenger0117to 0617 has 1,048,543rows; Vehicle tripPassenger0117to 0617 has 1,048,543rows and Vehicle tripPassenger0118to 0618 has 1,048,543 rows. Trip detail, route name and Vehicle Side Number can be found from **Vehicle Trip** using an event number, id from **nom\_vehicle** and Route name using ‘Code’ from **Nom\_Line** respectively.

**Column\_name Column\_type Column\_desc**

OPD\_DATE DATE Operational Date

VEHICLE\_ID Number ID of the vehicle (fk) nom\_vehicle. Vehicle\_ID

MASTER\_ID Number ID of the master-vehicle for coupled vehicles (fk) nom\_vehicle. Vehicle\_ID

EVENT\_NO Number Unique ID of the event (pk)

EVENT\_NO\_COURSE Number Event Course

METERS Number Odometer at the time of the event

ACT\_DEP\_TIME Number Actual start time of the trip

NOM\_DEP\_TIME Number Scheduled (Nominal) start time of the trip

NOM\_END\_TIME Number Scheduled (Nominal) end time of the trip

ACT\_END\_TIME Number Actual end time of the trip

LINE\_ID Number ID of the line (fk) nom\_line.Line\_id

COURSE\_ID Number ID of the course

TRIP\_ID Number ID of the trip (fk) nom\_trip. Trip\_ID

PATTERN\_ID Number ID of the pattern (fk) nom\_pattern.Pattern\_ID

PATTERN\_DIRECTION VARCHAR2 Direction on Pattern

TRIP\_TYPE Number differentiate between service journeys and dead runs

BLOCK\_ID Number ID of the block (fk) p\_nom

TIME\_GRP\_ID Number ID of the time group (fk) p\_nom

TRIP\_CODE Number Code of the trip

DATA\_SOURCE NUMBER Indicator for the source of the data and validation module processing

IS\_ADDITIONAL\_TRIP NUMBER FLAG

PASSENGER\_IN NUMBER Number of boarding passengers

PASSENGER\_OUT NUMBER Number of alighting passengers

PASSENGER\_AVG NUMBER Average number of passengers on board

**Sample Data**

OPD\_DATE,VEHICLE\_ID,MASTER\_ID,EVENT\_NO,EVENT\_NO\_COURSE,METERS,ACT\_DEP\_TIME,NOM\_DEP\_TIME,NOM\_END\_TIME,ACT\_END\_TIME,LINE\_ID,COURSE\_ID,TRIP\_ID,PATTERN\_ID,PATTERN\_DIRECTION,TRIP\_TYPE,HIGHWAY\_TYPE,PATTERN\_QUALITY,BLOCK\_ID,PASSENGER\_DATA,TIME\_GRP\_ID,TRIP\_CODE,DRIVER\_ID,DATA\_SOURCE,IS\_ADDITIONAL\_TRIP,PASSENGER\_IN,PASSENGER\_OUT,PASSENGER\_AVG

1/5/2017,9317,,1044821982,1044821636,179072,76156,75660,78360,78345,83,1741,6121931,653785005,E-Bound,0,,94,1741,1,6426385,110494354,15769,4,0.000000000000000,9,9,4.18864986446739

1/5/2017,9354,,1045100696,1045100617,133061,34695,34680,36060,35941,1000560,1071,6114213,239682211,S-Bound,0,,100,1071,1,6414950,110482918,18547,4,0.000000000000000,33,33,29.0044359622427

1/5/2017,6286,,1044953804,1044953213,177040,50782,50760,54600,54714,121,1639,6113103,328162651,N-Bound,0,,100,1639,1,6415143,110483154,21661,4,0.000000000000000,18,18,4.73303708129504

1/5/2017,9349,,1045100127,1045100126,175,20601,21360,22980,23181,4447227,1142,6438881,217788578,,2,,100,1142,1,6438644,953879569,19936,4,0.000000000000000,0,0,0

1/5/2017,1000000,,1046338929,1046338787,0,40410,40440,42720,42995,103,103,6129298,397899170,E-Bound,0,,100,103,1,6413274,110481265,,4,0.000000000000000,19,19,11.0821770110632

1/5/2017,1000007,,1046339213,1046339209,0,66824,66824,-1,66924,101,0,,156150115,N-Bound,0,,66,0,1,,0,,4,0.000000000000000,2,2,0

1/5/2017,9380,,1044961138,1044960795,149116,51865,51660,56400,56566,1000589,1661,6129192,622405341,E-Bound,0,,100,1661,1,6417551,110485500,21594,4,0.000000000000000,67,67,17.0843175177976

1/5/2017,9375,,1044823984,1044823966,61177,52927,52800,56100,56466,83,1757,6110261,276631208,E-Bound,0,,80,1757,1,6426377,110494368,20337,4,0.000000000000000,24,24,9.26221285986558

1/5/2017,9379,,1044824621,1044824620,78269,56021,56040,59040,56021,1000589,1765,6443539,135792705,,2,,50,1765,1,6443468,956623836,14006,4,0.000000000000000,0,0,0

1/5/2017,9389,,1044825313,1044825303,343,16526,16200,18900,19188,1000589,1637,6115641,973960365,W-Bound,0,,100,1637,1,6417713,110485542,17792,4,0.000000000000000,8,8,3.35917670896875

1/5/2017,6289,,1045095672,1045095371,89664,29112,29100,35400,35604,21,1648,6116854,824610992,W-Bound,0,,100,1648,1,6419557,110487501,17860,4,0.000000000000000,23,23,2.67012303103738

1/5/2017,9390,,1044961813,1044961807,13225,20089,20100,20940,20799,1000586,1074,6128212,266493530,N-Bound,0,,100,1074,1,6409788,110478038,15138,4,0.000000000000000,7,7,6.89315393747527

1. Nom\_Line – Lists of all line definitions, aka RTD Routes

**Column\_name Column\_type Column\_desc**

Line\_ID Number Unique ID

CODE VARCHAR2 Line Code or Route name

VALID\_FROM DATE Date the line is valid from (inclusive)

VALID\_UNTIL DATE Date of last day the line is valid (exclusive)

SNAME VARCHAR2 Line Short Name

LNAME VARCHAR2 Line Long Name

**Sample Data**

ID,CODE,VALID\_FROM,VALID\_UNTIL,SNAME,LNAME

1000496,MDCR,1/1/1970,1/1/2036,682,Meridian call-n-Ride

1000497,NICR,1/1/1970,1/1/2036,683,North Inverness call-n-Ride

30,30,1/1/1970,1/1/2036,30,South Federal Blvd

1. Nom\_Vehicle – Lists of all Revenue fleets

**Column\_name Column\_type Column\_desc**

ID Number Unique Vehicle ID

CODE VARCHAR2 Vehicle Side Number

VEHICLE\_CLASS VARCHAR Type of the fleet

**Sample Data**

ID,CODE,VEHICLE\_CLASS

1606,1606,BUS

1631,1631,BUS

1633,1633,BUS

1635,1635,BUS

1000000,LRV101,LRV

1000001,LRV103,LRV