# MetroCount®
## Traffic Data Specialists

# Individual Vehicles

## MTE User Manual - Classification Reports

3.21

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# Individual Vehicles

The Individual Vehicles report displays speed, wheelbase, headway, class and a scaled wheel picture for every vehicle. Each line of the report represents a single vehicle, with the time and date the vehicle was logged by the Roadside Unit.

```
DS Axle Num Ht YYYY-MM-DD hh:mm:ss Dr Speed    Wb   Hdwy    Gap Ax Gp  Rho Cl Nm          Vehicle
01 00002b45 04 2002-04-27 07:07:17 AB  75.8   2.8    1.0    0.9  2  2 1.00  2 00000020     SV o o
01 00002b49 04 2002-04-27 07:07:18 AB  76.8   3.0    1.3    1.1  2  2 1.00  2 00000020     SV o o
01 00002b4d 10 2002-04-27 07:07:19 AB  73.4   9.3    1.3    1.2  5  3 1.00  9 00000010   ART5 o  oo    oo
01 00002b57 12 2002-04-27 07:07:35 AB  79.6  14.1   15.3   14.9  6  3 1.00 10 00000010   ART6 o  oo      ooo
01 00002b63 04 2002-04-27 07:08:05 AB  92.5   2.8   29.9   29.3  2  2 1.00  2 00000010     SV o o
01 00002b67 04 2002-04-27 07:08:10 AB  75.7   4.9    5.2    5.1  2  2 1.00  4 00000020    TB2 o   o
01 00002b6b 04 2002-04-27 07:08:13 AB  79.7   2.4    3.4    3.2  2  2 1.00  2 00000020     SV o o
01 00002b6f 04 2002-04-27 07:08:17 AB  78.8   2.2    3.7    3.6  2  2 1.00  2 00000010     SV o o
01 00002b73 06 2002-04-27 07:08:27 AB  72.2   6.5   10.2   10.1  3  3 1.00  3 00000020    SVT o o    o
        ...        ...      ...        ...    ...    ...    ...          ...         ...
```

**Individual Vehicle report sample**

| Column | Description |
|---|---|
| DS | Tagged dataset index. |
| Axle Num | Dataset axle index. |
| Ht | Number of axle hits in the vehicle. |
| Date and Time | Date and time of the first axle in the vehicle. |
| Dr | Direction of travel of the vehicle. |
| Speed | Speed of the vehicle. Units of measurement are determined by the report Profile. |
| Wb | Wheelbase of the vehicle. Units of measurement are determined by the report Profile. |
| Hdwy | Headway - time since the *first* axle of the last vehicle travelling in the same direction. |
| Gap | Gap - time since the *last* axle of the last vehicle travelling in the same direction. |
| Ax | Number of axles in the vehicle. |
| Gp | Number of axle groups in the vehicle. |
| Rho | Sensor correlation factor. |
| Cl | Class of the vehicle. |
| Nm | Not defined - technical purposes only. |
| Vehicle | Class name and scaled wheel picture of the vehicle. |

A graphical representation of the axle events for each individual vehicle may be obtained using the Axle Inspector. This is a timeline of sensor hits that MCReport has partitioned into a vehicle, based on the selected classification scheme. To display, simply double-click any row in the report.
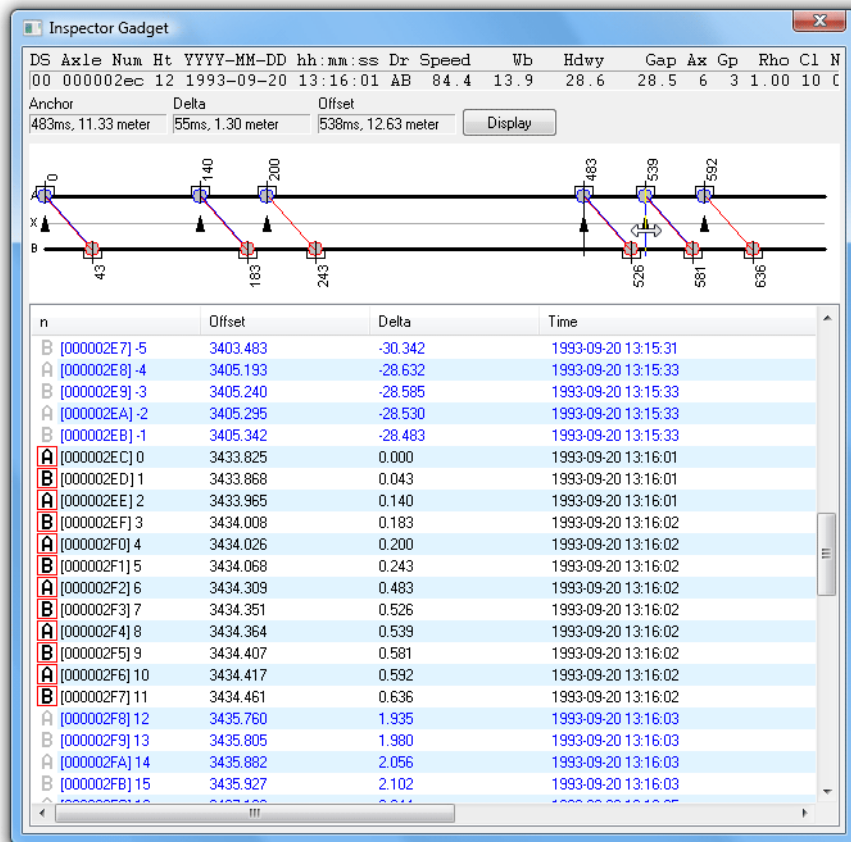


**Examining individual vehicles using the Axle Inspector**

The two sensor hit streams in a dataset are represented by the black lines, marked A and B. A circle indicates axle hits on each sensor and are labelled with the time in milliseconds since the first hit. A line is drawn from each hit at an angle determined by the speed of the vehicle. Since the speed of each vehicle is determined by the first A and B hits, then the first A and B hit lines will always overlap.

Subsequent hit lines are drawn at the same angle, and under perfect operating conditions the corresponding A and B pairs will overlap. Any gap between these pairs of hits indicates a lateral movement in the sensors, or a change in vehicle velocity.

The black triangles on the **X** line represent "axles" used by MCReport, after processing and filtering, to classify the vehicle

The time and distance between sensor hits can be measured using the inspector's time markers. Moving the mouse over the timeline moves the **Offset** marker. Clicking will move the **Anchor** marker to the current location. The **Delta** field at the top is the difference between the anchor and offset markers.

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