Do we need new traffic data?

Use this before approving data work. Start here, choose a source on page 2, then record your decision on page 4.

FIRST, NAME THE DECISION

Write the measure, place and period you need to understand, and what you will decide with the answer. If that is unclear, clarify it before selecting data.

Check existing files: yes / no / unknown

1 **Right measure and place**

Same variable, road section, direction and movement. Approach totals cannot identify individual turns.

2 **Right period and conditions**

Relevant days and times. Check changes to access, layout, routes, works, land use and school or event activity.

3 **Enough usable coverage**

Known sample and valid intervals, including the users you need. Missing records are not zero traffic.

4 **Traceable and checked**

Owner, method, units, time zone, map and quality checks are available. Read the limits behind the headline result.

5 **Permitted and available**

The source is accessible and authorised for this use. Confirm licences, retention and handling conditions.

Choose the next action

ALL YES Reuse the result, or analyse the underlying source. No new collection is needed for this question.

UNKNOWN Ask the source owner first. Resolve access or missing metadata before commissioning more data.

A NO Could the gap change the decision? If yes, fill that gap. If no, document why the evidence is sufficient. Unauthorised use must be resolved first.

Which data answers the question?

Choose the measure first. Reuse a suitable source before arranging collection; buy analysis if the source exists but the answer does not.

Totals, classes or point speeds

Counts / point-speed survey
Check existing counters first. For a new survey, use tubes, radar or another validated method suited to the site.
Check: Check direction, intervals, classes and speed distribution with sample size. A point count does not reveal trip origins or destinations.

Journey time or corridor patterns

Connected-vehicle / probe data
Compare routes and periods using observations from a subset of vehicles, where provider coverage supports the question.
Check: Check samples, vehicle mix, missing intervals and road matching. Journey speed includes stops. A probe sample is not a total count.

Turns, crossings or queues on camera

Existing-video analysis
Inspect retained footage from the required periods. If the view and timestamps work, extract the missing counts or observations.
Check: Define counting lines and measures; manually check outputs. Do not assume video speeds are valid without a validated method.

Current movements not on record

Temporary video / sensing
Collect the missing view, users or period. Temporary XVision sensing is an option where the proposed configuration fits.
Check: Agree outputs and test visibility, lighting and obstructions. Use a simpler count or speed survey if that answers the whole question.

Visibility, kerb use or behaviour

Site visit / manual observation
Inspect obstructions and geometry. Use structured observations for parking, crossing or manoeuvring behaviour.
Check: A photo can record an obstruction; occupancy needs repeated observations. One visit cannot establish how often something happens.

Data exists; the conclusion is unclear

Engineer / analyst interpretation
Provide source files and the decision question. Ask for reconciliation of conflicting measures and a conclusion with limits.
Check: Require a specific unresolved gap before approving further collection. More records will not fix an undefined question.

CONTEXT IS NOT A SUBSTITUTE

Crash records and community reports help frame the issue; they do not supply current exposure. Signal detector counts need a lane/movement map. No observed conflict in a short sample does not establish safety.

Three questions. Three choices.

Fictional examples. Time windows describe the question; they are not prescribed survey durations.

01 / REUSE

Choose an hour to investigate

Question: Which weekday afternoon hour carries the most westbound vehicles at the council depot entrance?

Already held: Original 15-minute directional counts at the entrance. Representative days, valid intervals, method and permissions are confirmed; access is unchanged.

Recommendation: Use the existing intervals; show variation between days. No repeat count. This selects an observation window, not annual traffic or the cause of congestion.

02 / ANALYSE

The report omitted a movement

Question: How often does a queue block the service-lane exit between 4 and 6 pm?

Already held: A report has totals only, but retained footage covers the exit and relevant days. Timestamps and authorised use are confirmed.

Recommendation: Extract blocking episodes and duration; manually check the result. If visibility fails, collect only the missing view or period.

03 / COLLECT THE GAP

Corridor data cannot see the turn

Question: Which left turns coincide with people crossing the side-road entry in the morning peak?

Already held: Connected-vehicle journey times and a camera facing away from the crossing. Neither observes the required interaction.

Recommendation: Collect simultaneous turn and crossing observations using suitable video or a structured manual study. Keep journey times as corridor context.

How old is too old? This guide sets no expiry age. Check whether conditions changed and whether the precision meets the intended use and authority requirements. A recent diversion count can be less useful than an older representative one.

Record the next step

Type into the fields or print this page. Save a completed copy with the source references. Use one record per decision question.

Question + decision it will inform

Exact location / direction / movement + days and times

Sources checked: owner, file or link, dates and usable coverage

Five checks: measure/place; period; coverage; quality; permitted use (yes / no / unknown)

Decisive gap or limitation + why it could (or could not) change the decision

Next action (select one)

○ Reuse ○ Analyse ○ Clarify ○ Collect

What would be sufficient? Required result, coverage and check before relying on it

Owner / reviewer

Due date / revisit trigger

If collecting: take the selected measures and coverage into the survey scope template. This record chooses evidence; it does not approve a treatment.

References

Practical XVision synthesis. Methods: Austroads Part 3. Existing sources: Victorian counts and signal data. Probe estimation: Aljamal et al. (2020). Camera use: OAIC guidance; check applicable state and territory rules.