

Open contributions

Contribution release records.

A proposed record linking evidence,
rights, review and outputs.



Proposed contribution model - synthetic proof.

OTI contribution study links reviewed revisions to published outputs

Open Transit Information (OTI) has completed a comparative study of how open initiatives receive contributions, check evidence and turn accepted changes into maintained public resources. The study proposes several entry routes, a record of each change and its context, and an explicit human decision before inclusion in a published output.

The research examines ten initiatives, follows six contribution-level cases and considers the historical shutdown of Mapzen as a separate continuity example. An accompanying offline proof passed 29 checks, including missing evidence, incompatible rights, changed content after review, correction and withdrawal. Those checks exercise a deliberately limited model with synthetic records. They are not observations of real OTI contributors or proof that a public submission service is operating.

The study distinguishes a proposal, an accepted source change and a released result as separate events. A discussion link does not prove acceptance. A merged change does not show that an available software version contains it. A file digest identifies bytes, but cannot establish that the information is true or that its rights have been cleared.

A correction to a stop name, a proposed symbol, a route-colour source or a software change can affect several transport-information outputs. Each needs enough context to determine what changed, why it matters, who checked it and which published version incorporates it. The study recommends preserving that chain rather than leaving the explanation in an issue thread that later becomes difficult to reconstruct.

OTI's wider purpose is to connect knowledge, user and sector needs, specifications, data, editorial decisions and tools for transport information. Its contribution model must therefore accommodate more than code. Operators, public authorities, researchers, designers and other contributors may offer evidence, editorial corrections, translations or original assets. The proposed process keeps their entry routes understandable while applying a common standard of traceability.

The result is a research and integration design, not an adopted governance policy. Its immediate recommendation is a bounded, maintainer-assisted pilot using existing repository mechanisms. The study does not recommend building a new contribution portal or creating a committee before the people and maintenance capacity exist.

What the comparison reveals

The six detailed cases span GTFS, OpenTripPlanner, MapLibre GL JS, QGIS, Transitous and Träwelling's line-colour catalogue. OpenStreetMap, Wikidata, Transitland Atlas and Blender provide additional policy and publication context. Selection favoured accessible primary evidence and mechanisms relevant to OTI; it was not a representative survey of all open projects.

In the Träwelling line-colour case, a proposed addition changed both the maintained CSV and its source record. The review also addressed file placement and formatting, and a validation workflow ran against the proposal. The OTI proposal uses a source-linked record and adds dates and source locators. The object observed was an accepted dataset revision, not a proven downstream passenger display.

The sampled GTFS clarification required a second part of the reference to be updated, preserving agreement between its summary and detailed section. OpenTripPlanner's small code case included a question about possible side effects. In another sampled OpenTripPlanner submission, a maintainer requested evidence for a claimed deployment; the submission was subsequently closed after no response. That does not establish that the deployment never existed. It shows why an unsupported claim should not become maintained knowledge merely because it has been submitted.

Release and rights evidence concern separate stages. The MapLibre change examined by the study was merged after the sampled release date, so acceptance alone could not establish inclusion in that release. A Transitous source-replacement patch removed an explicit licence block alongside the old feed reference. That omission does not independently prove that the new source is unusable, but it leaves a rights question that fetch success cannot resolve.

The comparison also found different current approaches to AI-assisted contributions. The study does not import one project's rule into OTI as a universal requirement. Its recommendation is to retain human responsibility, inspect primary sources and disclose substantive assistance under OTI's own adopted rules. An AI system cannot supply independent permission, factual authority or reviewer independence.

These cases demonstrate particular mechanisms and decisions. They do not establish typical review times, contributor retention, the economic sustainability of the projects or the effectiveness of their communications. The study preserves those limits rather than turning a benchmark into a ranking.

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One record, several entry routes

The proposed OTI model begins with an identified correction or addition. A contributor explains the current information, the proposed correction or addition, its source and the intended benefit. A maintainer helps a non-programmer turn that material into a reviewable record when necessary. Code, research, editorial data, translations and original assets can use different guidance while retaining the same core evidence chain.

The common record identifies the affected component or transport object, the relevant source revision, the proposed change and its reason. It keeps source evidence separate from rights evidence. It also records validation results, human review, limitations, credit and the actual output in which an accepted change is released.

A source link needs enough detail to be usable: the publisher, relevant passage or field, source date, retrieval date and revision where available. A route identifier must retain its dataset context. A matching name does not establish that two records describe the same place or service. Conflicting sources should be compared for the same object, period, scope and purpose rather than decided by counting how many URLs support each answer.

The intended lifecycle makes its decisions visible. Submitted work can need information, need changes, be deferred, accepted or rejected with a reason. Accepted work can still await publication. A later correction can supersede an earlier result, and a rights or factual problem can lead to withdrawal from current recommendation. Historical context remains identifiable; a status change does not revoke rights already granted under an irrevocable open licence.

This model also recognises the cost of review. One person may combine editorial, technical and release responsibilities at low volume, but that is not independent review. Significant external factual claims, imported rights, safety or accessibility assertions and disputed decisions need another competent reviewer or must remain pending. A paid request does not become factually authoritative because a customer paid for it.

The study recommends retaining the existing licence structure and Developer Certificate of Origin rather than introducing an additional contributor agreement. Apache-2.0 applies to code, CC-BY-4.0 to OTI's original specifications and documentation, and imported material retains its applicable terms. Fonts, photographs, recordings, third-party marks and OSM-derived data require attention to their own rights.

Source publication, component distribution and a complete OTI edition remain distinct. The owner has separated the clean public engine repository from the private website repository. The clean engine source is now publicly accessible, but a repository version, an npm delivery and a corresponding tag or release must be checked individually. This note does not declare a synchronised new software release.

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What the offline proof establishes

The proof exercises three synthetic contribution profiles: code, an editorial correction and a translation. It tests selected metadata and lifecycle rules, including whether evidence is missing, whether the declared rights state permits progression and whether a review still applies after the underlying content changes.

Its 29 passing checks also include a correction, supersession and withdrawal. The model retains historical output references while removing a withdrawn item from the current recommended output. Submitted code is treated as text rather than executed. Those checks concern the consistency of the prototype's rules.

They are not evidence that a source is correct, a licence declaration is genuine or a reviewer is independent. The proof does not verify human identities, make a live GitHub workflow, establish production deployment, adjudicate source rights or measure real review throughput. Its rights and review flags stand for prior human findings in the synthetic scenario. A production validator needs stronger field validation, security boundaries, persistence and tests against malformed input.

The proposed next step is a small assisted pilot. It should begin only with an actual receiving route, a named review owner and a manageable set of changes. Technical issues, non-code contributions and confidential reports need suitable destinations; the existence of a public technical issue tracker does not make it a safe place for personal, security or conduct information.

The proposed website flow distinguishes review stages and published outputs without requiring knowledge of Git. A contributor should be able to see what needs checking, prepare evidence, follow a decision and locate the maintained result. An operator or researcher should be able to inspect the source and know whether a change is merely accepted or actually present in a released output.

The study proposes measuring the process through manageable review workload, unresolved evidence, correction handling and the ability to trace a published result. It does not treat issue counts, package downloads or prototypes as proof of adoption or public benefit.

The proposed assisted pilot would test the process with actual changes, a named review owner and recorded workload. No real contributor cohort has yet been evaluated.

Notes for editors

Research and evidence

Underlying study: Open publication and verifiable contributions, OTI-BD-001, living research and integration design v1.1, 23 October 2026. The report distinguishes declared policy, observed contribution examples, verified OTI baseline, interpretation and recommendation.

The international sample includes ten active initiatives and six detailed contribution cases. Mapzen's 2018 shutdown is a separate historical continuity example. The offline proof uses synthetic fixtures and passed 29 checks; no real contributor cohort or production contribution service was evaluated.

Selected primary evidence:

- [GTFS clarification and review, PR 660](#)
- [Träwelling line-colour contribution, PR 512](#)
- [OpenTripPlanner small code review, PR 8116](#)
- [OpenTripPlanner request for deployment evidence, PR 8078](#)
- [MapLibre change review, PR 8491](#)
- [Transitous source-replacement diff, PR 2604](#)

About Open Transit Information

Open Transit Information (OTI) is developing shared quality requirements, draft specifications, data conventions and experimental tools for transport information. Singularity Ingeniería currently maintains the project under a maintainer-led governance model.

The canonical website is opentransitinformation.org. The technical source is available at [opentransitinformation](#). Draft specifications, experimental software and complete product editions have separate release states. This study does not establish official-standard recognition, certification or endorsement by the organisations studied.

Editorial status and reuse

Prepared with AI assistance against the study dated 23 October 2026. Independent human editorial review remains pending. No public press contact is listed.

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