Central Vermont Regional Planning Commission

TRANSPORTATION ADVISORY COMMITTEE

Tuesday November 24th, 2026, 6:30 p.m.

In-Person: 29 Main St, Suite 4, Montpelier VT, 05062

Join Zoom Meeting via Computer, Tablet or Smartphone:

https://us02web.zoom.us/j/86220375669?pwd=aXFEYkJna0VYeTBORmlhd2tZV3VKdz09

Meeting ID: 862 2037 5669- **Passcode:** 692202

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Agenda

6:30 1) Meeting Commencement / Verify Recording
   a) Roll Call
   b) Adjustments to the Agenda
   c) Public Comment
   d) Staff Announcements

6:45 2) Approval of October 2026 TAC Meeting Minutes (*Enclosed; Action*)

6:50 3) Mileage-based user fee for Battery Electric Vehicles (BEVs) (*discussion*)
   a) Informational update on current statute

7:00 4) Comprehensive Regional Transportation Annotated Outline (*discussion*)
   a) Opportunity for feedback and requests for included content

7:25 5) TAC Member Round Table
   a) Local concerns including project updates and other issues

7:35 6) Adjourn

Next Meeting: January 26, 2027

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Central Vermont Regional Planning Commission

Transportation Advisory Committee (TAC)

Minutes

Tuesday, October 27, 2026

Attendees:					
	Barre City			Northfield	Thomas Davis
	Barre Town				Jeff Schulz, Alt
X	Berlin	Robert Wernecke	X	Orange	Lee Cattaneo
X	Cabot	Sid Griggs	X	Plainfield	Bob Atchinson (Chair)
X	Calais	David Ellenbogen		Roxbury	Gerry D'Amico
		Jordan Keyes, Alt	X	Waitsfield	Don LaHaye
X	Duxbury	Alan Quackenbush			, Alt
				Warren	Jim Crafts
X	E. Montpelier	Adam Stanforth			Jennifer Faillace
		Jen Devine, Alt		Washington	Peter Carbee
	Fayston		X	Waterbury	Mike Hedges (Vice Chair)
	Marshfield	Todd Eaton			Doug Greason, Alt
X	Middlesex	Ronald Krauth	X	Williamstown	Richard Turner
	Montpelier		X	Woodbury	Michael Gray
	Moretown	John Lynch			
				Worcester	Bill Arrand
Staff: Keith Cubbon Guests: Johnathan Croft, Marcella Dent (VTrans)					

Bob A. brought the meeting to order at 6:34 PM.

Roll Call

- Roll was called and a quorum was present.

Adjustments to the Agenda

- None

DRAFT

Public Comments

- Stephen Whitaker raised concerns about the Regional Planning Commission's compliance with public meeting notice and public participation requirements. Specific concerns included:
    - Consistent posting of meeting notices and agendas at designated physical locations.
    - Making notices more visible and public participation easier and more accessible.
    - The need for capacity studies to support regional planning and proposed growth areas.
    - Transportation-related infrastructure and safety concerns, including Complete Streets and the Country Club Road intersection.

Staff Announcements

- Staff informed TAC on current work and plans

    - **Better Roads grants:** The application deadline was extended to November 20, 2026.
    - **Strategic Highway Safety Plan:** Staff are participating in the state's roadway safety and pedestrian/bicycle safety focus groups. Topics include improved pavement markings to reduce lane departures and safety improvements near Interstate traffic backups around Waterbury.
    - **Pedestrian data collection:** Staff retrieved pedestrian counters from Cabot, the Cross Vermont Trail, and Barre town.
    - **East Calais safety work:** Staff are working with the Town of Calais to evaluate a potential crosswalk and traffic-calming measures. Radar counters and a traffic camera were used to collect data to help assess whether the location meets the pedestrian-volume threshold for a crosswalk.

July 2026 and September 2026 meeting minutes.

- **July 2026 minutes:** A motion was made by Robert of Berlin and seconded by Mike Hedges. The motion passed, with no opposition or abstentions recorded.
- **September 2026 minutes:** A motion was made by Mike Hedges and seconded by Michael Gray. The motion passed, with no opposition or abstentions recorded.

Presentation: Maximizing Town Highway Aid Through Mileage Reporting

Presenter: Jonathan Croft, VTrans

Jonathan Croft presented information on how accurate town highway classification and mileage reporting affect state funding, highway maintenance, and town highway records.

- **State aid and highway mileage**

The presentation explained that state aid for town highways is distributed in accordance with statutory requirements and applies to Class 1, Class 2, and Class 3 town highways. Croft reported that the 2026 appropriation was slightly more than $30 million.

The presentation emphasized that eligible highway mileage affects the amount of state aid a municipality receives. Accurate mapping and reporting of highway mileage are therefore important for municipal funding.

- **Highway classifications**

Croft reviewed the four town highway classifications:

- **Class 1:** Town highways designated as extensions of state highways.
- **Class 2:** Major town routes that provide important connections within and between communities.
- **Class 3:** Town highways that meet the applicable state standards for maintenance and eligibility.
- **Class 4:** Other town highways that do not fall within the preceding classifications.

VTrans may identify Class 3 highway segments that do not meet applicable standards and work with municipalities to address their status. Croft noted that highway conditions and classifications should be reviewed carefully, as road conditions and use can change over time.

- **Mileage certificates and reporting requirements**

Croft reviewed the annual mileage certificate process. Under the requirements discussed in the presentation, municipalities must file a sworn statement of town highway and trail mileage with the town clerk by February 10 each year.

Mileage certificates document additions, removals, reclassifications, and changes involving designated scenic highways. VTrans prepares certificates using the previous year's mileage information and distributes them to municipalities for review and submission.

Croft emphasized that newly laid-out Class 3 highways may qualify for state aid in the following year, making timely and accurate reporting particularly important.

- **Establishing, changing, or discontinuing highways**

The presentation covered the procedures for laying out, reclassifying, altering, and discontinuing town highways. Croft recommended that municipalities:

- Consult a town attorney when considering complex highway changes.
- Obtain the surveys required for new highways.
- Maintain documentation of municipal decisions, public notices, surveys, deeds, and right-of-way transactions.
- Submit supporting records with mileage certificate changes so VTrans can verify and accurately map the changes.

Croft also explained that legal trails remain public rights-of-way and generally are not subject to the same maintenance requirements as town highways. A highway or trail does not cease to exist legally merely because it is no longer maintained; formal discontinuance is required.

- **Maps and resources**

VTrans is prioritizing updated town highway maps for municipalities reporting changes, given available staff and resources. Municipalities that need additional maps were encouraged to contact VTrans directly.

Croft noted that highway maps, archived maps, mileage rates, lookup tables, the Orange Book, and relevant statutes are available as resources.

- **Questions and discussion**

Committee members asked about highway classification decisions, mapping technology, scenic highway designations, and the status of legal trails. Croft explained that VTrans uses geographic information systems, aerial imagery, and LiDAR data to support mapping and review.

He clarified that state-designated scenic highways are distinct from the federal scenic byways program.

Regional Bridge Conditions and Prioritization

Regional planning commission staff presented information on a regional list of bridges requiring attention, using inspection ratings and other information to help identify structures for further review.

Staff explained that the current shortlist is based primarily on bridge inspection ratings. Consequently, some structures with significant local concerns may not appear among the highest priorities if their recorded ratings do not meet the shortlist criteria.

Members discussed concerns about specific bridges, including the Woods Road Bridge in Middlesex and the Bridge 215 area in Cabot. Staff noted that some local conditions and traffic changes may not be fully reflected in existing inspection data.

Request to municipalities: Staff asked representatives to consult with their road commissioners, select boards, and road foremen and submit bridges they believe should receive a closer review within the next month. The goal is to ensure the regional priority list reflects local knowledge and current needs.

TAC Member Round Table

- **Plainfield bridge options**

A representative reported that Plainfield had conducted a citizen survey, considered options through the Select Board, and held a hearing. The Select Board recommended bypassing two bridges. Funding has not yet been identified, but the bypass approach may cost less than reconstructing both bridges, even with the potential acquisition of additional right-of-way.

Members noted that bridge removal or bypass projects have previously received state and federal funding in other communities.

- **Communication and bridge funding priorities**

Alan Quackenbush asked how information about municipal bridge needs is communicated among towns, TAC members, the regional planning commission, and VTrans.

Staff explained that the region previously reviewed a list of bridge projects and submitted priorities through the state's former bridge funding program. Staff offered to revisit the previous list and confirm whether the Camel's Hump Road bridges remain priorities for the town.

VTrans was not accepting new bridges into the relevant funding stream at the time of the meeting. Staff explained that maintaining a regional priority list remains useful because inclusion on a recognized list can support applications for other funding opportunities.

Staff noted that inflation has slowed project delivery and that additional openings in the state funding queue depend on available funding and the status of existing projects.

- **Highway and railroad bridges**

A member asked how responsibility is determined for bridges involving both highways and railroads.

VTrans staff explained that ownership and responsibility depend on the specific location and whether the rail line or right-of-way is state-owned or privately owned. Members noted that responsibility can vary by circumstance and that exceptions exist.

- **Committee representation and next meeting**

David Ellenbogen encouraged municipalities to appoint alternates so the committee can maintain a quorum when regular representatives are unavailable.

Regional planning commission staff also indicated that they would contact at least four municipalities that did not currently have an appointed representative to encourage them to designate one.

The chair stated that the next meeting was scheduled for **November 24, 2026**, and asked members to notify the committee in advance if holiday plans would prevent their attendance.

Adjourn

- At 7:47 PM Robert Wernecke moved to adjourn Alan Quakenbush 2nd the motion.
    - Group voted; Motion passed.

VERMONT MILEAGE FEE OVERVIEW

PREPARED BY
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UVM Transportation Research Center

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PREPARED FOR
Vermont General Assembly and
Agency of Transportation

April 2026

HOW VERMONT CURRENTLY FUNDS ROADS - AND WHY THAT'S CHANGING

A sustainable transportation system needs a sustainable source of revenue to continue funding roads, bridges, bike lanes/rail trails, sidewalks, public transit, electrification efforts and more. Vermont's transportation system is partially funded by the gas tax - a fee drivers pay each time they fill up at the pump. In the last decade, gas tax revenue has been declining as vehicles get more efficient, electric vehicle (EV) adoption grows, and inflation erodes the purchasing power of revenue.

Until 2025, battery electric vehicles (BEVs) did not pay Vermont road usage charges like the fuel tax. To cover this gap, the Vermont Legislature set an annual $89 fee for BEVs — but most gas and diesel vehicle owners pay twice this amount in gas taxes each year. As EV adoption grows, this gap in roadway funding contributions is expected to widen.

PROPOSED MILEAGE FEE FOR BEVS

1.4 CENTS PER MILE
Charged based on miles travelled between existing annually required inspections

MAXIMUMS & DEFAULTS
$178 cap on annual payments
$178 default fee if vehicle is not inspected with refunds based on actual miles travelled if vehicle inspected within 60 days

CURRENT FEE FOR BEVS
$ 89
CURRENT FLAT ANNUAL FEE FOR BEVS

COMPARE TO GAS / DIESEL
$ 154
AVERAGE ANNUAL STATE GAS TAX PAYMENTS

PROPOSED MILEAGE FEE PROGRAM

$154
AVERAGE ANNUAL MILEAGE FEE FOR BEVS
11,000 MILES PER YEAR

$178
MAX ANNUAL MILEAGE FEE FOR BEVS
12,700 MILES PER YEAR

SOURCE: 2023 VERMONT VEHICLE RECORDS (DMV)

Many other states (Oregon, Utah, Hawaii, Virginia, California, and others) are actively implementing or piloting mileage fees for BEVs and high efficiency vehicles, while also exploring mileage fees as a future alternative to fuel-based taxes for all vehicles.

WHY NOT KEEP THE FLAT FEE FOR BEVS?

The current $89 flat fee charges every EV owner the same amount regardless of how much they drive (someone driving 3,000 miles per year pays the same as someone driving 30,000 miles per year). This means some low mileage drivers are paying more than their fair share, and high-mileage drivers are paying less than their fair share on a per mile basis. A mileage fee charges people based on their actual driving.

WHY NOT TAX EV CHARGING STATIONS, LIKE GAS TAXES AT THE PUMP?

The State has explored this option. The main challenges are:

- 80-90% of EV charging happens at home, making it costly and difficult to meter.
- Public chargers vary in efficiency, making a per-kilowatt-hour fee inconsistent across charging stations.
- Charging per-kilowatt-hour has the same inequities as the gas tax - drivers with more efficient EVs use less electricity and pay less.
- EV efficiency is rapidly increasing, so per-kilowatt-hour fees are not a sustainable revenue source over time.

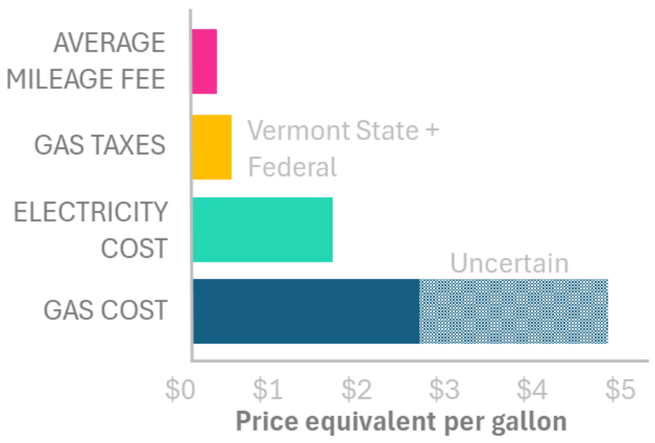
BEVS HAVE LOWER EMISSIONS - HOW DOES THIS FACTOR IN?

The gas tax was established in the 1920s when all vehicles travelled similar miles per gallon, and gallons were easier to measure and tax than actual road use. As vehicles diversified, gas taxes were less representative of road use - BEVs are just one extreme example, since they don't pay any gas taxes.

A mileage fee for BEVs is a stepping stone towards restoring the idea of paying for road use regardless of fuel type. There are other ways to account for pollution impacts in the future without eroding transportation funds.

COULD THIS DISCOURAGE EV ADOPTION?

EVs still offer substantial cost savings even with a 1.4 cent per mile fee.



EV drivers pay the electricity equivalent of $1.75 per gallon, compared to gas vehicles which deal with fluctuating gas prices (now above $4 per gallon). EV drivers also pay no federal road charges at all, which further lowers their burden relative to gas vehicles who pay federal gas taxes.

WHAT ABOUT DRIVERS WHO TRAVEL A LOT OUT OF STATE?

Odometer readings capture total miles driven, including out-of-state miles. The State expects to refine mileage reporting options as the program matures, so drivers can eventually only pay for in-state miles.

Notably, gas taxes have similar issues - even if you fill up in Vermont, you may drive out of state. No nearby states currently charge out-of-state EVs a fee, so no Vermont BEV drivers are currently at risk of double taxation.

HOW WILL VERMONT'S MILEAGE FEE WORK FOR DRIVERS?

BEV drivers won't notice much difference at first — they'll pay the usual $89 at registration. Each $89 payment is deposited as a credit in their myDMV account. After two vehicle inspections, drivers will see their first mileage fee (1st inspection provides a baseline).

MILEAGE FEE = $0.014 X (MILES DRIVEN BETWEEN INSPECTIONS)

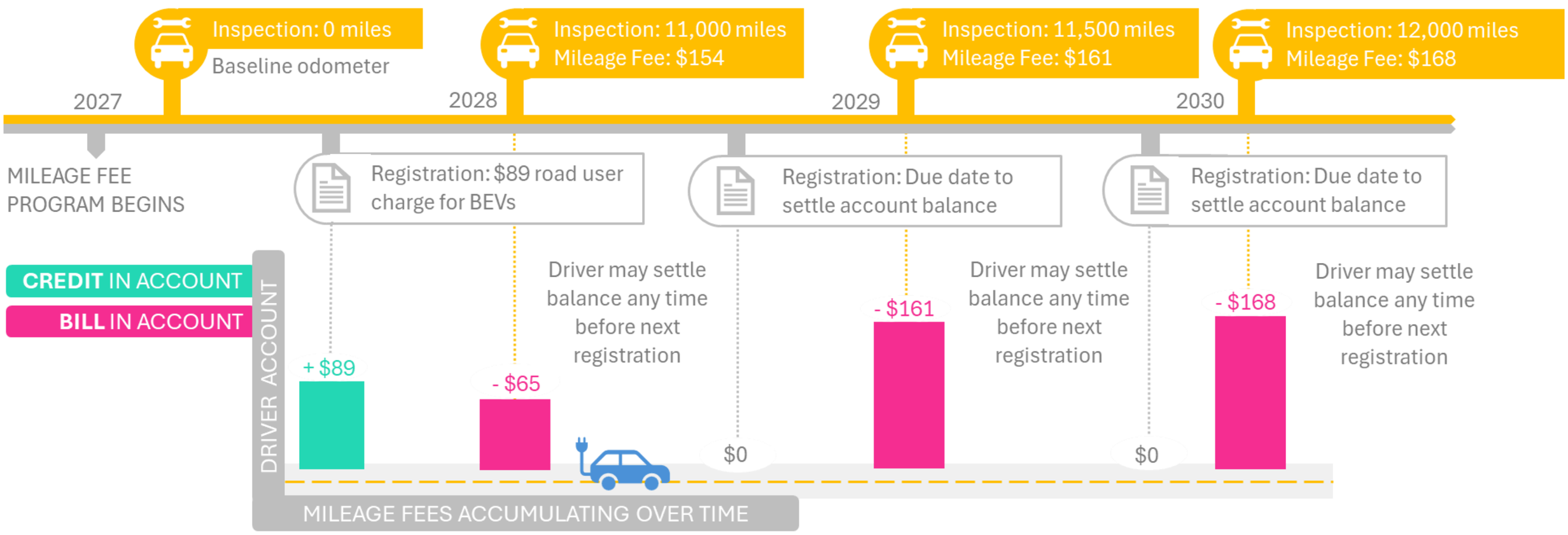
Through myDMV, drivers can track their odometer readings recorded at inspections and pay their balance at any time. Their account will show the net balance — so if a driver has paid the required $89 for their BEV at registration and then receives a mileage fee of $154 at their next inspection, their account will show a bill for $65.

Drivers can pay their mileage fee at any time in their **myDMV account**, or in person at their local DMV. Drivers can also pre-pay their chosen amount to avoid larger lump-sum bills.

All charges must be settled by the driver's next registration. Drivers can pre-pay into the system at any time to avoid larger bills at registration using one of two options:

1) **Flat fee of $178** (lump sum upfront)
2) **Pay-as-you-go (**based on self-reported miles)

HOW IT WORKS: A TYPICAL DRIVER'S EXPERIENCE

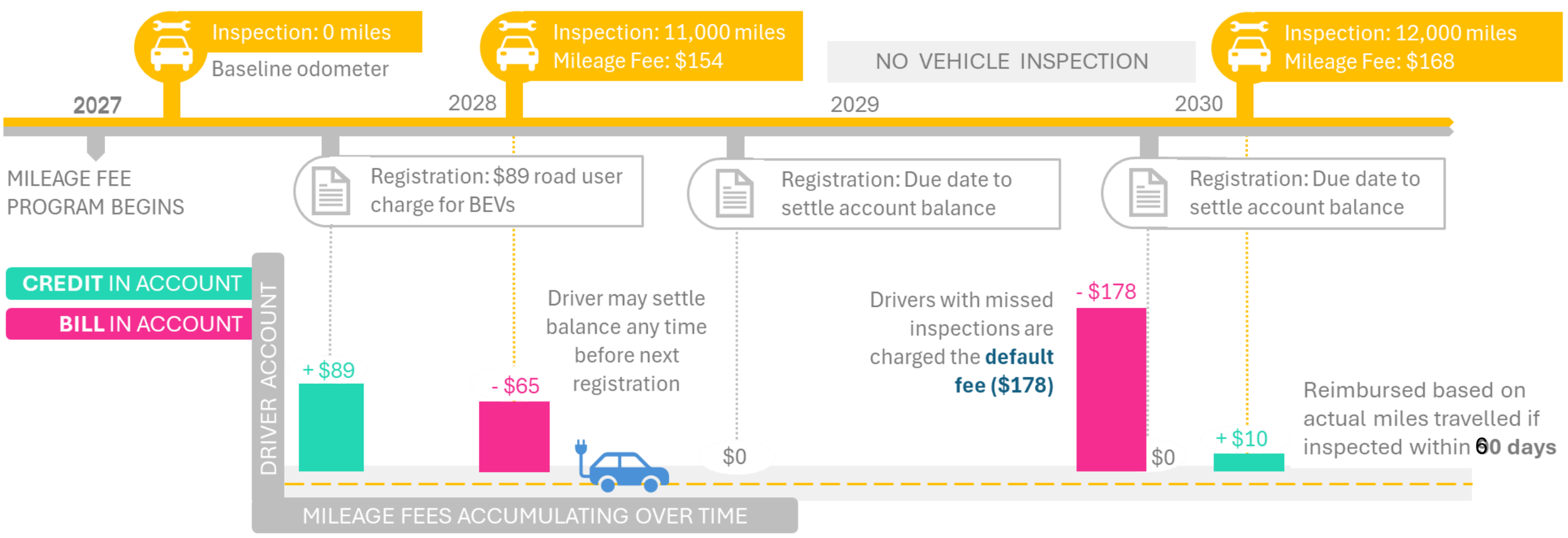


WHAT IF A DRIVER MISSES AN INSPECTION?

Drivers must pay their mileage fees before registering a car: a default fee allows them to register their car, even if they miss an inspection. Drivers will be charged a **default $178 fee.**

IS A DEFAULT FEE FAIR?

Drivers may be **reimbursed if they get a vehicle inspection within 60 days** of paying the default fee. The difference will be refunded to their account based on their actual miles travelled.



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April 2026

CVRPC Comprehensive Regional Transportation Plan 2050 Annotated Outline

Revision 12 | Portrait single-column edition | November 13, 2026

This outline defines the intended argument and production structure for a 200-300 page regional transportation plan. It keeps analysis at the regional scale, uses maps and tables as primary evidence, and reserves detailed methods and project design for supporting work.

- Plan chapters describe the decisions and major content the adopted document must contain, not every task required to produce it.
- Maps show spatial conditions; tables identify projects, challenges, and comparable attributes; prose explains meaning and policy implications.
- Internal development notes are separated from proposed plan contents and are intentionally limited to the controls needed to complete the work.

Document structure

Proposed plan chapters 0-5	Proposed plan chapters 6-11 and supporting material
0 Executive summary and transportation element	6 Active transport and trails
1 Purpose goals governance and participation	7 Transit shared mobility and passenger connections
2 Regional context and travel	8 Freight rail aviation and economic connections
3 Access affordability and mobility gaps	9 Energy environment and resilience
4 Roadways assets and operations	10 Future choices and regional strategy
5 Safety accessibility and public health	11 Implementation finance and performance
Appendices A-D Internal development notes	End registers Sources and proposed visuals

Part I Proposed plan contents

The chapters below establish the plan's regional narrative from existing conditions through implementation. Each subsection identifies the intended contribution to that narrative and the principal exhibit that should carry the evidence.

0 Executive summary and transportation element

0.1 Regional conditions and the 2050 direction

Summarize the few conditions that most strongly shape regional transportation policy: settlement pattern, access to essential destinations, safety, system condition, economic connections, and resilience. State the direction of change through 2050 and distinguish regional priorities from local implementation details.

Primary exhibit: *Regional conditions map and a concise indicator table tied to the plan goals.* Register: F0.1, T0.1.

0.2 Regional network and priorities

Present the region's principal multimodal connections, major constraints, and the projects or programs that warrant regional attention. Clearly distinguish existing facilities, committed improvements, candidate projects, and longer-term concepts.

Primary exhibit: *Regional strategy map and a priority project and program table.* Register: F0.2, T0.2.

0.3 Implementation and accountability

Identify the principal actions, responsible organizations, general timing, and funding status. Summarize how progress will be reviewed without reproducing the full implementation program.

Primary exhibit: *Condensed implementation table with links to Chapter 11.* Register: T0.3.

1 Purpose goals governance and participation

1.1 Purpose and relationship to other plans

Explain the plan's statutory and practical role, its relationship to the Regional Plan and municipal plans, and how it informs state programming and regional work. Keep the discussion focused on decisions this plan is intended to guide.

Primary exhibit: *Simple diagram showing the relationship among regional policy, municipal planning, state programming, and project development.* Register: F1.1.

1.2 Goals and decision framework

Consolidate the adopted goals that will guide the plan, including safety, access, reliability, affordability, stewardship, resilience, land use compatibility, and economic function. Describe at a high level how competing benefits, burdens, feasibility, and uncertainty will be considered.

Primary exhibit: *Goals and decision criteria table.* Register: T1.1.

1.3 Roles participation and transparency

Clarify the respective roles of the Commission, Transportation Advisory Committee, staff, municipalities, the Vermont Agency of Transportation (VTrans), operators, and other partners. Organize public and partner participation around the major plan decisions and document how evidence and comments affect those decisions.

Primary exhibit: *Decision roles table and participation timeline.* Register: T1.2.

1.4 Transportation proximity and access

Explain the economic geography of transportation in plain language before introducing regional conditions. Use the following concepts to frame the plan's goals, access analysis, land-use choices, and performance measures.

Why travel occurs: Transportation moves people and goods between places. Most demand for it is derived from another activity: working, learning, obtaining care, buying goods, producing goods, or visiting people. Freight movement connects production, distribution, and consumption. Recreational travel can also be valued for the journey itself.

Transportation and proximity: Transportation can substitute for proximity by allowing activities to remain separated. Locating housing, jobs, and services closer together can reduce the travel required to reach them. These are partial substitutes: a nearby destination may be inaccessible across a river or an unsafe road, and specialized services may need to serve a large region.

Mobility and accessibility: Mobility concerns movement; accessibility concerns the opportunities people and businesses can actually reach. Accessibility depends on destination locations, network connections, travel time, cost, reliability, physical usability, and service availability. Faster travel or more traffic does not by itself establish better access.

The economic cost of distance: Travel requires time and money and can impose uncertainty, physical effort, and risk. These costs influence where households live, where firms locate, and which opportunities are feasible. A low-cost home far from work and services can create a substantial transportation burden.

Land use and transportation interact: Development patterns generate travel needs; transportation changes alter which locations are attractive and feasible. People and firms can respond by changing destinations, routes, modes, departure times, and eventually locations. Evaluate these responses and their distribution rather than assuming that today's trips remain fixed.

Central Vermont implications: Village and town centers can support nearby services, shorter trips, and shared transport. Dispersed settlements and specialized employment or health services require reliable regional connections. Deliveries and remote services can replace some personal trips, but may create other travel and depend on digital access. Reduced travel can indicate improved proximity or unmet needs; distinguish the two.

Primary exhibits: [FIGURE F1.2] Paths to access through proximity, transportation, and remote service; [FIGURE F1.3] Land-use and transportation feedback; [TABLE T1.3] Illustrative rural and village access choices. Register: F1.2, F1.3, T1.3.

Sources: S03–S05 provide the conceptual basis; S06–S07 support translation into regional planning and measures. Examples are explanatory and must not be presented as estimated local effects.

2 Regional context and travel

2.1 Settlement land use and landscape

Describe the region's centers, villages, rural areas, river valleys, terrain, and major connecting corridors. Explain how settlement pattern and physical geography influence travel choices, infrastructure needs, and feasible transportation responses.

Primary exhibit: *Regional settlement and transportation context map.* Register: F2.1.

2.2 People economy and essential destinations

Summarize demographic, household, employment, housing, and economic conditions that materially affect transportation. Map major concentrations of residents, jobs, services, and essential destinations at a level suitable for regional planning.

Primary exhibit: *Demographic and economic trend charts plus an essential-destinations map.* Register: F2.2, F2.3, F2.4, T2.1.

2.3 Travel patterns

Describe major internal, inbound, and outbound travel patterns, including commuting and important nonwork travel. Emphasize the regional relationships that inform investment rather than attempting to reconstruct every trip or individual journey.

RITIS and Replica application: Use Replica seasonal trip and demographic tables to estimate regional origin-destination flows, mode, purpose, time of day, and resident or visitor patterns. Treat the results as modeled typical-day estimates, aggregate them to analytically appropriate geographies, and test whether material findings change across reasonable geographic aggregations. Use the Regional Integrated Transportation Information System (RITIS) to describe observed roadway travel-time conditions associated with those flows, not to infer multimodal trip purposes.

Primary exhibit: *Regional travel-flow map and a compact mode and trip-purpose summary.* Register: F2.5, F2.6, T2.2.

2.4 Future growth and development

Identify adopted future land use, known development proposals, housing priorities, and infrastructure constraints that could change travel demand. Distinguish policy targets and proposals from committed construction and observed growth.

Primary exhibit: *Future land use and development context map.* Register: F2.7, T2.3.

3 Access affordability and mobility gaps

3.1 Regional access by mode

Assess how well the regional transportation system connects residents to major employment, education, health care, food, civic, and recreational destinations. Use regionwide evidence, a complete set of material regional destination categories, multiple representative travel conditions, and clearly stated assumptions rather than establishment-level operating inventories.

RITIS and Replica application: Use Replica to screen multimodal origins, destinations, routes, and representative travel times; compare roadway travel times with RITIS on covered segments. Neither platform independently establishes physical accessibility, service eligibility, or the practical usability of a complete trip.

Primary exhibit: Multimodal access map series covering all material regional destination categories and multiple representative travel conditions. Register: F3.1, F3.2, F3.3, F3.4, T3.1.

3.2 Affordability and transportation disadvantage

Describe how vehicle availability, transportation costs, time burdens, disability, age, income, and rural isolation affect mobility. Combine regional indicators with documented local experience without implying precision unsupported by available evidence.

Replica application: Join modeled trips to synthetic population attributes such as age, income, vehicle availability, employment, home location, and resident or visitor status to compare travel burdens across multiple regional geographies and population groups. Test consistency with American Community Survey estimates, provider or administrative records, and documented local experience; do not treat synthetic records as observed individuals or as a substitute for disability evidence.

Primary exhibit: *Transportation disadvantage map and summary table.* Register: F3.5, F3.6, T3.2.

3.3 Priority mobility gaps

Identify the places and populations where network gaps, service limitations, cost, or physical barriers have the greatest regional consequence. Carry the resulting needs into the modal chapters and the geographic priorities in Chapter 10.

Primary exhibit: *Priority access and mobility gaps map with a short explanatory table.* Register: F3.7, T3.3.

4 Roadways assets and operations

4.1 Network function ownership and condition

Describe the roadway, bridge, culvert, sidewalk, parking, and related assets that support regional movement. Show ownership, functional role, critical connections, and the coverage and limitations of available condition information.

Primary exhibit: *Regional asset and critical-link map with a condition coverage table.* Register: F4.1, T4.1.

4.2 Preservation and maintenance

Summarize preservation needs, lifecycle considerations, municipal delivery capacity, seasonal operations, and opportunities to coordinate roadway, drainage, utility, safety, and accessibility work. Focus on regional implications and recurring municipal needs.

Primary exhibit: *Preservation challenges and coordinated-work opportunities table.* Register: T4.2, F4.2.

4.3 Traffic conditions and localized constraints

Present observed traffic volumes, travel-time reliability, seasonal variation, freight effects, and the limited locations where delay or queuing creates a meaningful safety or access issue. Treat detailed operational modeling as a project-development activity when a proposal is sufficiently defined.

RITIS and Replica application: Use RITIS archived probe data for speed, travel time, reliability, bottlenecks, seasonal and time-of-day variation, and incident or work-zone context on covered roads. Assess spatial and temporal coverage, sample sufficiency, and missingness before interpreting results. Use Replica link volumes and route assignments as model-based context, validate them against VTrans counts and other available observations, and do not substitute either platform for project-specific traffic operations analysis.

Primary exhibit: *Selected-corridor traffic map and concise reliability or seasonal profiles.* Register: F4.3, F4.4, T4.3.

4.4 Roadway policy and project implications

Connect documented conditions to preservation, safety, access-management, and context-sensitive operational responses. Identify where additional study is warranted without turning the regional plan into an intersection or development-impact analysis.

Primary exhibit: *Roadway challenges and candidate responses table.* Register: T4.4.

5 Safety accessibility and public health

5.1 Safety conditions and systemic risk

Incorporate the regional Safety Action Plan's principal findings, severe-crash patterns, and systemic risk factors. Explain data coverage and uncertainty while keeping the transportation plan focused on the policy and investment consequences.

RITIS and Replica application: Use RITIS speed, reliability, incident, and congestion measures to help interpret roadway operating context. Replica network volumes may support exposure screening. Vermont crash records and the regional Safety Action Plan remain authoritative for crash outcomes; neither platform supplies observed crash or near-miss evidence.

Primary exhibit: *Severe-crash and systemic-risk map with key findings table.* Register: F5.1, F5.2, F5.3.

5.2 Safe System priorities

Organize the most consequential infrastructure, speed-management, behavioral, vehicle, and post-crash strategies around fatal and serious-injury prevention. Identify which priorities are already established and which require further development.

Primary exhibit: *Safe System priorities table linked to projects and programs.* Register: T5.1.

5.3 Physical accessibility

Describe significant barriers affecting sidewalks, crossings, transit stops, station approaches, and connections to important destinations. Use available municipal plans and targeted observations to identify regional patterns, while leaving facility design to project-level work.

Primary exhibit: *Accessibility barriers map or representative photo and location table.* Register: F5.4, T5.2.

5.4 Health and implementation connections

Explain how active transportation, access to health care, exposure to traffic, and safe mobility relate to regional transportation priorities. Cross-reference the projects, programs, and partner responsibilities that carry these findings forward.

Primary exhibit: *Crosswalk between safety and health needs and the action program.* Register: T5.3.

6 Active transport and trails

6.1 Existing network and usability

Describe the sidewalks, crossings, shoulders, shared-use paths, and trails that function as part of the transportation network. Assess continuity and practical usability using available information on stress, grade, surface, maintenance, and destination connections.

Primary exhibit: *Regional active transportation network map with facility type and known usability limitations.* Register: F6.1, T6.1.

6.2 Gaps and barriers

Identify missing links, difficult crossings, indirect routes, and intercommunity gaps that materially limit walking, bicycling, or mobility-device travel. Distinguish verified deficiencies from areas requiring field confirmation.

Replica application: Use modeled walking and bicycling origins, destinations, routes, and network volumes as one component of a regionwide assessment of demand and potential gaps. The active-transport model excludes recreational trips and does not distinguish e-bikes or scooters; validate priorities through facility inventories, all available counts, field review, municipal evidence, and user experience.

Primary exhibit: *Active transportation gaps and barriers map.* Register: F6.2, T6.2.

6.3 Network priorities and projects

Present priority connections and policy actions, including small links with substantial network benefit. Describe concepts at a planning level and note major feasibility, ownership, maintenance, or environmental dependencies without implying completed design.

Primary exhibit: *Priority projects and concepts table supported by selected corridor or village diagrams.* Register: T6.3, F6.3.

7 Transit shared mobility and passenger connections

7.1 Services and passenger facilities

Describe fixed-route, commuter, demand-responsive, volunteer, eligibility-based, intercity, and passenger-rail services, together with park-and-rides and major transfer points. Show the broad geography and general availability of service rather than reproducing operating manuals.

Primary exhibit: *Regional transit and passenger-connections map with a service summary table.* Register: F7.1, T7.1.

7.2 Performance and unmet needs

Summarize ridership, service supplied, reliability, capacity constraints, and documented unmet needs using comparable measures where possible. Distinguish boardings from people served and identify important limitations in provider or survey data.

Replica application: Use modeled transit origins and destinations, line or agency volumes, trip purposes, and traveler attributes to assess markets and underserved connections across the full service area. Test findings against operator records, schedules, surveys, and local evidence. Operator records and the National Transit Database remain authoritative for actual ridership, service supplied, reliability, denials, and capacity.

Primary exhibit: *Transit performance trends and unmet-needs summary.* Register: F7.2, F7.3, T7.2.

7.3 Service and access priorities

Identify the most consequential opportunities involving frequency, span, timed connections, flexible service, volunteer transportation, employer programs, shared rides, passenger information, and first- and last-mile access. Relate recommendations to operating and funding realities.

Primary exhibit: *Candidate service and access improvements table.* Register: T7.3.

7.4 Intercity services and gateways

Assess regional access to passenger rail, intercity bus, and external air gateways, including the function of Montpelier Junction and Waterbury. Focus on connections, transfer quality, parking, bicycle access, information, and coordination across regions.

Primary exhibit: *Intercity and gateway connections map.* Register: F7.4, T7.4.

8 Freight rail aviation and economic connections

8.1 Freight and economic network

Describe the highways, local roads, rail facilities, airports, and transfer points that support goods movement and regional industries. Identify important restrictions, seasonal constraints, and reliability issues using the full available state evidence and structured input from carriers, employers, operators, municipalities, and other partners.

RITIS and Replica application: Use RITIS to measure truck travel time and reliability on covered roadway segments and to examine seasonal or incident-related delay. Use Replica commercial-trip origins, destinations, routes, and link volumes to describe modeled roadway goods movement. Cross-check both against VTrans freight information, traffic counts, operator records, and structured partner evidence. Do not infer commodity, tonnage, rail demand, or business constraints not represented in the data.

Primary exhibit: *Freight and economic-connections map with major constraints table.* Register: F8.1, T8.1, F8.2.

8.2 Rail and intermodal opportunities

Summarize current rail operations, industrial access, transfer facilities, and opportunities identified in state or regional planning. Distinguish documented needs from concepts that require market, operational, ownership, or financial analysis.

Primary exhibit: *Rail and intermodal facilities map and opportunity table.* Register: F8.3, T8.2.

8.3 Aviation and specialized access

Describe the regional roles of Knapp and Warren-Sugarbush airports and connections to external commercial airports. Address emergency, business, freight, land-use, and ground-access considerations at the level appropriate to a regional plan.

Primary exhibit: *Aviation facilities and ground-access summary.* Register: T8.3.

8.4 Tourism seasonal travel and cultural resources

Identify transportation issues associated with major recreational destinations, events, scenic corridors, and historic transportation resources. Emphasize recurring regional challenges and practical management or investment responses.

RITIS and Replica application: Use RITIS to quantify observed travel-time effects across all relevant available dates and corridors, with focused profiles of the locations that have material regional effects. Use Replica to compare modeled seasonal weekday and weekend patterns and resident or visitor travel. Pair both with local counts, event records, and partner evidence to distinguish recurring seasonal conditions from exceptional events.

Primary exhibit: *Seasonal travel and recreation-access map or profile, limited to locations with material regional effects.* Register: F8.4, F8.5, T8.4.

9 Energy environment and resilience

9.1 Transportation energy and emissions

Establish a transparent regional baseline for transportation energy use and emissions, consistent with available travel, fleet, and energy-planning information. Focus on the scale and direction of change rather than unsupported geographic precision.

RITIS and Replica application: Use Replica trip distance, mode, route, and link-volume outputs as modeled inputs to vehicle-miles-traveled estimates. RITIS may supply observed speed profiles and model-

based energy or emissions estimates where coverage is adequate. Reconcile platform outputs with regional energy planning and document accounting boundaries, fleet assumptions, and model versions.

Primary exhibit: *Energy and emissions trend chart with a short assumptions table.* Register: F9.1, T9.1.

9.2 Electrification and travel-demand strategies

Describe the regional role of charging, fleet transition, land use, shared mobility, and mode shift. Identify broad charging and fleet needs while reserving utility engineering, site design, and procurement analysis for implementation projects.

Primary exhibit: *Charging coverage and regional need map plus strategy table.* Register: F9.2, T9.2.

9.3 Hazards and continuity of access

Show where flood and other hazards threaten important transportation links and access to critical destinations. Combine mapped exposure with documented closures or damage and identify where loss of access has significant regional consequences.

Primary exhibit: *Hazard exposure and access-continuity map.* Register: F9.3, F9.4, T9.3.

9.4 Adaptation and environmental stewardship

Compare maintenance, retrofit, redundancy, relocation, and other adaptation approaches at a policy level. Address lifecycle cost, continued access, water quality, habitat, and scenic or historic resources without selecting project designs prematurely.

Primary exhibit: *Adaptation approaches and decision considerations table.* Register: T9.4.

10 Future choices and regional strategy

10.1 Plausible futures and key uncertainties

Test a small number of consequential uncertainties involving growth location, travel behavior, service availability, energy costs, funding, and disruption. Use bounded comparisons to reveal strategic implications rather than presenting a calibrated travel forecast the region cannot maintain.

RITIS and Replica application: Use Replica Scenario, if included in the license or separately commissioned, for bounded tests of population, employment, work-from-home, or road-closure assumptions. Use RITIS historical distributions to define baseline variability and plausible operational stress. Do not characterize either product as a locally calibrated 2050 forecast.

Primary exhibit: *Compact scenario table showing assumptions, directional effects, and material limitations.* Register: T10.1, F10.1.

10.2 Robust and conditional strategies

Distinguish actions justified under current conditions from options that preserve future choices or should advance only if circumstances change. Keep conditional strategies at the policy and program level; detailed trigger administration belongs in implementation procedures.

Primary exhibit: *Strategy pathways diagram showing near-term actions and conditional branches.* Register: F10.2, T10.2.

10.3 Geographic priorities

Synthesize the evidence into a regional network concept and a limited set of priority corridors, centers, rural catchments, and critical connections. Explain the regional significance of locally situated projects and challenges.

Primary exhibit: *Regional strategy map supported by concise corridor or place profiles.* Register: F10.3, T10.3.

10.4 Project program and policy prioritization

Apply the goals and decision criteria to candidate projects, programs, studies, and policy actions. Present priority, readiness, responsibility, and funding as separate attributes so that an important but undeveloped need is not mistaken for an implementation-ready project.

Primary exhibit: *Prioritization table with an explanatory narrative; avoid false scoring precision.* Register: T10.4.

11 Implementation finance and performance

11.1 Action program and ownership

Translate the preferred strategy into an action program identifying the responsible organization, supporting partners, next step, general timing, and current readiness. Include both project delivery and continuing regional or municipal responsibilities.

Primary exhibit: *Implementation table organized by action, geography, lead, timing, readiness, and status.* Register: T11.1.

11.2 Costs funding and delivery capacity

Present planning-level capital and operating cost ranges where defensible, identify committed and prospective funding, and describe significant match or staffing constraints. Record estimate basis and uncertainty without implying engineering-level cost precision.

Primary exhibit: *Funding and delivery summary tied to the action program.* Register: T11.2.

11.3 Performance and plan maintenance

Use a limited set of maintainable outcome and delivery measures to track progress. Define a practical review cycle, responsibility for updates, and the circumstances that may require a plan amendment or a focused follow-up study.

RITIS and Replica application: Use RITIS for repeatable observed roadway-performance measures with stable definitions and explicit coverage checks. Use Replica for periodic modeled-pattern checks only when product vintage, methodology, licensing, and comparable geography can be maintained across updates.

Primary exhibit: *Performance table with baseline, direction or target, source, update interval, and owner.* Register: T11.3.

11.4 Unresolved needs and next studies

Identify important questions that cannot be resolved during plan development and state the next proportionate step. This section preserves legitimate needs without converting missing evidence into unsupported recommendations.

Primary exhibit: *Short table of unresolved needs, decisions affected, and recommended follow-up work.* Register: T11.4.

Part II Internal development notes

These appendices guide plan production and are not proposed chapters of the adopted plan. They define the minimum controls needed to reuse prior work, close consequential evidence gaps, sequence the work, and assure quality.

Appendix A Carry forward review

A.1 Existing material

Review the current transportation plan, Regional Plan, modal studies, Safety Action Plan, geographic information system (GIS) projects, data tables, and analytical code. Classify useful material as retain, update, rebuild, or retire, and recover underlying data rather than reusing obsolete chart images.

Primary exhibit: *A concise carry-forward ledger identifying the source item, intended use, required update, and responsible staff member.* Register: TA.1.

A.2 Priority for reuse

Protect material that supports the plan's central regional story: settlement and travel relationships, safety, access, system condition, resilience, economic connections, and established project concepts. Do not reproduce legacy structure merely because content already exists.

Primary exhibit: *A bounded reuse package for each chapter before new analysis begins.* Register: TA.2.

Appendix B Evidence and data plan

B.1 Core regional evidence

Assemble a full, robust, and current regional evidence base covering population and land use, travel patterns, network and asset conditions, safety, transit, active transportation, freight, energy, hazards, projects, and funding. Use all relevant, credible, and reasonably obtainable sources; triangulate material findings across independent observed, modeled, administrative, reported, and policy evidence where practicable. Test geographic and temporal coverage, missingness, comparability, and sensitivity before drawing regional conclusions. Document conflicting evidence and limitations rather than narrowing the evidence set to simplify the analysis.

Platform evidence rule: Treat RITIS primarily as observed or probe-derived roadway performance and event evidence, and Replica primarily as synthetic or modeled trip-demand, traveler, activity, route, and scenario evidence. Use them together where their evidence is complementary, and cross-check each against authoritative state, operator, count, survey, field, or adopted-plan evidence. For each use, record the product, release, retrieval date, temporal basis, network or geographic coverage, filters, model or expansion status, validation sources, sensitivity tests, and limitations.

Primary exhibit: Comprehensive source ledger, source-coverage matrix, and chapter-level evidence and validation checklist. Register: TB.1, TB.2, TB.3.

B.2 Targeted collection

After completing the full evidence inventory, use partner requests, field observations, interviews, surveys, and focused counts to close material gaps or test uncertain findings. Design collection to cover the relevant geographies, seasons, travel periods, facilities, and user groups. Do not substitute indiscriminate inventories for decision-relevant work, but do not leave a material evidence gap unaddressed merely because collection is difficult; document an explicit fallback and the consequence for the affected decision.

Primary exhibit: Targeted collection register stating the decision, required evidence, validation standard, coverage, owner, timing, fallback, and consequence of deferral. Register: TB.4.

Appendix C Work program

C.1 Frame and baseline

Confirm the adoption pathway, chapter structure, source holdings, principal analytical questions, engagement decisions, and production responsibilities. Complete the regional baseline and test methods on actual data before expanding analysis.

Primary exhibit: *Months 1-6, ending with an approved baseline and methods review.* Register: TC.1.

C.2 Needs and alternatives

Complete the principal condition and needs analysis, targeted validation, partner and public engagement, and a bounded set of alternatives. Separate established needs from uncertain findings and defer project-design questions.

Primary exhibit: *Months 7-14, ending with an agreed needs and alternatives package.* Register: TC.2.

C.3 Strategy implementation and adoption

Develop geographic priorities, the project and action program, cost and funding information, performance measures, and the draft plan. Complete technical, source, map, policy, accessibility, and publication review before adoption.

Primary exhibit: *Months 15-24, with separately justified contingency for unresolved seasonal, partner, or adoption dependencies.* Register: TC.3.

Appendix D Production and quality control

D.1 Technical review

Maintain complete and reproducible source records, full documentation of material analytical assumptions and transformations, robust validation of consequential findings, and proportionate peer review. Distinguish observed, modeled, administrative, reported, and policy evidence; test material findings against independent sources where available; and state uncertainty, conflicting evidence, and residual gaps in the relevant chapter.

Primary exhibit: *Chapter review package containing sources, methods, draft findings, visuals, and unresolved questions.* Register: TD.1.

D.2 Publication review

Use a consistent heading hierarchy, accessible maps and tables, complete captions and sources, plain-language interpretation, and stable cross-references. Verify that every action is supported by an identified need and that the executive summary matches the adopted plan.

Primary exhibit: *Final editorial, accessibility, source, and cross-reference checklist.* Register: TD.2.

Reference registers

Expanded sources and analytical uses

Preliminary research register reviewed November 13, 2026. Source IDs connect the outline and exhibit register. Links identify source publications or official access points; linked portals are not substitutes for recording the exact dataset, release, adopted version, retrieval date, and analytical transformations used. Local records and licensed exports require acquisition. Confirm adoption status and applicable standards during drafting.

Build a full and robust evidence base. Record geographic and temporal coverage, uncertainty, missingness, comparability, validation, and conflicting findings. Test whether apparently independent sources share underlying inputs. National benchmarks and modeled estimates require explicit checks before local application. Add material sources discovered during development; this register remains open.

ID and source	Section	Analytical use and evidence limits
S01 CVRPC Regional Plan and future land use	0–3, 9–11	Policy, settlement pattern, growth context. Distinguish draft proposals from adopted policy and observed development.
S02 CVRPC transportation plans and studies	All; A	Carry-forward studies, projects and underlying evidence; request current Safety Action Plan, municipal studies, and GIS holdings from staff.
S03 Rodrigue Transportation as a Derived Demand	1.4, 2, 8	Conceptual basis for passenger and freight demand; explanatory framework, not a local demand estimate.
S04 Rodrigue Core Principles of Transport Geography	1.4, 2–3	Spatial separation, connectivity, and economic relationships; explain why access is a planning outcome.
S05 Rodrigue Transportation and Land Use Interactions	1.4, 2.4, 10	Feedback between accessibility, location, development and travel; distinguish conceptual mechanisms from causal estimates.
S06 FHWA integrating safety in rural planning	1, 5, 10–11	Federal Highway Administration (FHWA) guidance on rural planning, participation, analysis, prioritization and monitoring; adapt to Vermont governance.
S07 Performance Based Planning and Programming Guidebook	1, 10–11	Connect goals, measures, investment choices and evaluation. Avoid treating state or metropolitan requirements as automatically applicable to CVRPC.
S08 National Academies rural transportation planning synthesis	1, C–D	Transportation Planning in Non-Metropolitan/Rural Areas; practice and institutional capacity. Consult full report for transferable methods.
S09 VTrans policy and planning publications	1, 4–11	Vermont Agency of Transportation (VTrans) statewide and modal policies; record version and adoption status.
S10 VTrans Long Range Transportation Plan	1, 2, 10–11	Statewide strategy and coordination; reconcile differing horizons and regional priorities.

ID and source	Section	Analytical use and evidence limits
S11 American Community Survey commuting tables	2–3, 7, 9–10	American Community Survey (ACS) five-year commuting baseline; also acquire population, age, disability, income, vehicle availability and housing tables. Use margins of error; commuting is not all travel.
S12 Census LEHD data and OnTheMap	2–3, 7–8	Longitudinal Employer-Household Dynamics (LEHD); LEHD Origin-Destination Employment Statistics (LODES) link jobs and residences. Jobs are not observed daily trips; check employment coverage and disclosure treatment.
S13 National Household Travel Survey downloads	2–3, 6–7, 9	National Household Travel Survey (NHTS): purpose, mode, distance and household behavior. Use weighted benchmarks; establish sample adequacy before Vermont or regional inference.
S14 Vermont Open Geodata Portal	2–9, B	Base mapping, parcels, addresses, elevation and transportation layers. Record owner and vintage; inspect topology and coverage before network analysis.
S15 EPA Smart Location Database	2–3, 10	Environmental Protection Agency (EPA) built-environment indicators for context and comparison. Older inputs and index design can limit rural interpretation.
S16 RITIS platform and tool documentation	2–5, 8–11	Regional Integrated Transportation Information System (RITIS): archived roadway operations and probe-derived performance. Verify licensed feeds, sample coverage, truck measures, quality flags and historical continuity.
S17 RITIS developer resources	4, 8, 11, D	Document available exports and repeatable queries. Application programming interface (API) access is entitlement-dependent; preserve query parameters and returned quality fields.
S18 Replica licensed workspace	2–11, B–D	Acquire release-specific methodology and validation reports with exports. Synthetic trip, demographic, network and scenario products differ in scope; verify licensed modules, travel categories and available seasons before use.
S19 VTrans traffic counts	2, 4, 8–9, B	Annual average daily traffic (AADT), continuous and short counts, classification and seasonal factors. Local road coverage is incomplete; compare like dates and units with modeled volumes.
S20 FHWA Traffic Monitoring Guide	4, 6, 8, B–D	Count design, temporal adjustment, quality control and motorized and active transport monitoring. Plan seasonal coverage and avoid unsupported annualization.

ID and source	Section	Analytical use and evidence limits
S21 VTrans Data and Analysis Section	4–5, 11	Crash records, high-crash locations and safety dashboards; request analysis-ready records. Check severity definitions, geocoding, reporting changes and multiyear stability.
S22 FHWA Proven Safety Countermeasures	5–6, 10	Evidence for candidate safety interventions; match context and applicability before using effectiveness estimates.
S23 Public Right of Way Accessibility Guidelines	5–7	United States Access Board guidance (PROWAG). Use with municipal accessibility inventories; confirm applicable adopting agency rules for each facility and project.
S24 Small Town and Rural Multimodal Networks	5–6	Rural facility and network planning practice; use for concept development with field context, not as completed engineering design.
S25 Vermont Public Transit Policy Plan	3, 7, 10–11	Statewide needs, service policy and coordination; confirm current adopted version and subsequent service changes.
S26 Federal Transit Administration National Transit Database	7, 11	Federal Transit Administration (FTA); National Transit Database (NTD) operating, financial and asset evidence. Reporting definitions and service areas may not match the region; boardings are not unique riders.
S27 VTrans public transit records and plans	3, 7, 11	Performance, asset management and intermodal planning; request regional breakdowns and current provider reports.
S28 Vermont Freight Plan	8, 10–11	Goods movement, constraints and recommendations; verify whether the 2026 update is draft or adopted before citing policy.
S29 Vermont Rail Plan and reports	7–8, 10–11	Rail facilities, services and investment needs; validate current operations with owners and carriers.
S30 BTS Freight Analysis Framework	8, 10	Bureau of Transportation Statistics (BTS); Freight Analysis Framework (FAF) commodity flows and scenarios. Broad zones cannot directly establish CVRPC tonnage or local routes.
S31 BTS National Transportation Atlas Database	4, 7–8	National Transportation Atlas Database (NTAD): multimodal facilities and connections; reconcile with current Vermont and operator records.
S32 Alternative Fuels Data Center station downloads	9.2, 11	Alternative Fuels Data Center (AFDC) charging locations and attributes. Distinguish stations from ports, access restrictions, power and connector type; listing does not establish uptime.
S33 EPA Motor Vehicle Emission Simulator	9.1, 10	Motor Vehicle Emission Simulator (MOVES) methods and emission factors. Coordinate with energy staff on fleet, geography and accounting boundaries; document version and input sensitivity.

ID and source	Section	Analytical use and evidence limits
S34 VTrans Transportation Resilience Planning Tool	4, 9–11	Transportation Resilience Planning Tool (TRPT): vulnerability, criticality and risk screening. Check modeled hazard coverage and validate against event records.
S35 Vermont Flood Ready Atlas	9.3–9.4	Mapped flood exposure, critical facilities and transport links. Regulatory flood maps do not capture every hazard or future condition.
S36 Vermont hazard mitigation planning resources	9–10	State and local hazard plans, vulnerability resources and environmental mapping; incorporate documented closures, damage and isolation.
S37 FHWA scenario planning guidebook	10, C	Scenario construction and comparison; define plausible assumptions and evaluate strategies without assigning unsupported probabilities.
S38 Scenario planning for performance based planning	10–11	Methods connecting scenarios to goals and measures; adapt for conditional responses and monitoring triggers.
S39 Vermont Project Selection and Prioritization	10–11	Vermont Project Selection and Prioritization (VPSP2): current criteria and program entry process. Distinguish regional priority from state selection and funding commitment.
S40 VTrans transportation equity framework	1, 3, 10–11	Distributional analysis and participation; combine demographic evidence with lived experience and documented unmet travel needs.
S41 FHWA rural operations planning	4, 8, 10	Transportation systems management and operations practice for rural areas; connect operational problems to regional outcomes.
S42 Vermont planning statutes and local governance records [request / verify] Vermont TPI framework	1, 11	Retain Title 19 section 10l and Title 24 sections 4345a and 4348a from prior register; verify current text, Commission and committee procedures before adoption. Legal scope review is separate from this source sweep.
S43 Municipal plans and development records [request / verify]	2, 4, 6, 10–11	Request adopted future land use, housing allocations, development pipeline, capital plans and project lists. Distinguish permitted, proposed, funded and constructed development.
S44 Asset owners and municipal maintenance records [request / verify]	4, 6, 9, 11	Request bridge, culvert, pavement, sidewalk and trail condition, ownership and maintenance records. Separate property ownership, legal access rights and maintenance responsibility.
S45 Transit operators and passenger service providers [request / verify]	3, 7, 11	Request Green Mountain Transit and Rural Community Transportation schedules, General Transit Feed Specification (GTFS) feeds if available, ridership, costs, reliability, denied-trip and survey records. Acquire current rail and intercity schedules; protect individual records.

ID and source	Section	Analytical use and evidence limits
S46 Regional safety and active transport evidence [request / verify]	5–6, B	Acquire Safety Action Plan outputs, facility and barrier inventories, counts, municipal accessibility plans and user reports. Validate connectivity and physical usability; counts alone miss suppressed demand.
S47 Energy planner and state energy records [request / verify] Comprehensive Energy Plan 2025 Climate Action Plan	9–10	Acquire current Climate Action Plan, Comprehensive Energy Plan, regional energy model, fleet registrations and utility planning information. Reconcile territorial versus resident-travel emissions and electricity assumptions.
S48 Carrier employer airport and recreation records [request / verify]	8, 9, B	Request goods movements, deliveries, loading, supply-chain constraints, airport activity and seasonal/event patterns. Record confidentiality, coverage and observation periods; commuting is a separate inquiry.
S49 Programming finance and project delivery records [request / verify] State transportation improvement program State capital programs	10–11	Request Statewide Transportation Improvement Program (STIP), current state capital program, municipal budgets, grant awards, cost estimates and staffing assumptions. Distinguish committed funding from potential eligibility.
S50 Engagement and targeted primary collection [request / verify]	All; B–D	Structured partner interviews, public engagement, field observations, surveys and counts. Document recruitment, nonresponse, observation design and underrepresented groups; report residual gaps and fallback evidence.
S51 Additional relevant evidence identified during development [request / verify]	All	Maintain an open source ledger for credible, material studies and datasets; document provenance, access, coverage, quality, validation and consequences of unresolved conflicts.

Preliminary figures and tables by section

One row identifies one proposed communication item. F denotes a figure, including maps, charts and diagrams; T denotes a table. IDs are preliminary production references, not final publication numbers. A single multi-panel figure has one question, legend and caption; independently titled outputs receive separate rows. Chapter 0 uses simplified derivatives of later evidence. Appendix items are internal working products, not proposed adopted-plan exhibits.

Bracketed highlighted labels identify proposed outputs, not completed analyses. The full preliminary list is a production scope to refine as findings emerge; record any additions, combinations or retirements. Captions must name source IDs, exact release and period, geographic scope, observed or modeled status, uncertainty and important gaps. Avoid false precision, misleading map scales and inaccessible color encodings.

Section and ID	Proposed item	Purpose and evidence
0.1 F0.1	[MAP] Regional conditions overview	Centers, connections and principal challenges; derive from Chapters 2–9. Sources: S01–S02
0.1 T0.1	[TABLE] Regional baseline indicators	Small summary of material access, safety, condition and energy findings. Sources: S11, S19, S21, S26, S47
0.2 F0.2	[MAP] Regional strategy overview	Existing, committed and proposed connections distinguished. Sources: S01–S02, S43, S49
0.2 T0.2	[TABLE] Regional priorities	Cross-reference Chapter 10 priorities without duplicating scoring. Sources: S39, S49–S50
0.3 T0.3	[TABLE] Executive implementation summary	Lead, action, timing and funding status from Chapter 11. Sources: S49
1.1 F1.1	[DIAGRAM] Plan relationships	Regional and municipal policy, state programming and project development. Sources: S01, S09–S10, S42
1.2 T1.1	[TABLE] Goals and decision criteria	Define access, safety, stewardship and other goals and tradeoffs. Sources: S06–S07, S40
1.3 T1.2	[TABLE] Responsibilities and participation	Commission, committee, staff, municipalities, state, operators and public roles. Sources: S42, S50
1.4 F1.2	[DIAGRAM] Alternative ways to obtain access	One activity reached through proximity, travel or remote service; show constraints. Sources: S03–S04
1.4 F1.3	[DIAGRAM] Land use and transportation feedback	Location, travel cost, accessibility and behavioral responses over time. Sources: S05

Section and ID	Proposed item	Purpose and evidence
1.4 T1.3	[TABLE] Rural and village access examples	Illustrative work, groceries, specialist care and freight choices; no fabricated local estimates. Sources: S03–S05
2.1 F2.1	[MAP] Settlement and transportation context	Centers, rural areas, terrain, rivers and main connections. Sources: S01, S14
2.2 F2.2	[CHART] Population age and household change	Comparable geographies and periods; uncertainty shown. Sources: S11
2.2 F2.3	[MAP] Employment and housing distribution	Locate major concentrations; distinguish jobs from workers. Sources: S11–S12, S43
2.2 F2.4	[MAP] Essential regional destinations	Material destination categories, including external centers. Sources: S14, S43, S45, S50
2.2 T2.1	[TABLE] Regional demographic and economic indicators	Full relevant indicator set with vintage, denominator and uncertainty. Sources: S11–S12
2.3 F2.5	[MAP] Internal and external travel flows	Aggregate modeled origin–destination flows with readable thresholds. Sources: S12, S18
2.3 F2.6	[CHART] Travel purpose mode and time of day	Compatible definitions; separate modeled patterns from survey benchmarks. Sources: S13, S18
2.3 T2.2	[TABLE] Travel evidence reconciliation	Compare counts, surveys, job flows and models; record conflicts and gaps. Sources: S11–S13, S16–S20
2.4 F2.7	[MAP] Future land use and development	Adopted policy, housing allocations, proposals and committed construction. Sources: S01, S43
2.4 T2.3	[TABLE] Material growth and land use changes	Location, scale, status, dependencies and transport implications. Sources: S01, S43
3.1 F3.1	[MAP] Access to employment	Comparable representative conditions by mode and geography. Sources: S12, S14, S16, S18, S45
3.1 F3.2	[MAP] Access to health care	Regional and external care destinations; physical usability addressed separately. Sources: S14, S18, S45, S50

Section and ID	Proposed item	Purpose and evidence
3.1 F3.3	[MAP] Access to food and everyday services	Travel time and available modes; document destination completeness. Sources: S14, S18, S43, S45
3.1 F3.4	[MAP] Access to education civic and recreation opportunities	Coordinated panels by destination category; regional level of detail. Sources: S14, S18, S43, S45
3.1 T3.1	[TABLE] Access assumptions and coverage	Modes, destinations, travel conditions, impedances and missing evidence. Sources: S14, S16, S18, S45
3.2 F3.5	[MAP] Transportation disadvantage	Vehicle availability, income, age and disability; disclose uncertainty. Sources: S11, S40, S50
3.2 F3.6	[CHART] Travel time and cost burdens	Compare groups and settlement contexts; distinguish estimates from reported experience. Sources: S11, S13, S18, S50
3.2 T3.2	[TABLE] Affordability and disadvantage findings	Who faces which barriers, supporting evidence and limits. Sources: S11, S18, S40, S50
3.3 F3.7	[MAP] Priority mobility gaps	Regional access consequences and affected communities. Sources: S14, S18, S45–S46, S50
3.3 T3.3	[TABLE] Mobility gap register	Location, issue, affected users, evidence and response pathway. Sources: S43, S45–S46, S50
4.1 F4.1	[MAP] Roadway assets and critical links	Ownership, functional role, bridges and major connections. Sources: S14, S31, S44
4.1 T4.1	[TABLE] Asset condition and coverage	Condition by asset class; unknown condition remains visible. Sources: S44
4.2 T4.2	[TABLE] Preservation and maintenance needs	Regional significance, lifecycle considerations and responsible owner. Sources: S44, S49
4.2 F4.2	[DIAGRAM] Coordinated maintenance opportunities	Illustrate sequencing of pavement, drainage, utility and access work. Sources: S43–S44
4.3 F4.3	[MAP] Traffic volumes and operational constraints	Observed counts, probe coverage and priority locations. Sources: S16, S19

Section and ID	Proposed item	Purpose and evidence
4.3 F4.4	[CHART] Travel time and reliability profiles	Selected consequential corridors; daily and seasonal distributions. Sources: S16–S17, S19
4.3 T4.3	[TABLE] Localized operational findings	Condition, evidence quality, context and need for further investigation. Sources: S16–S20, S41
4.4 T4.4	[TABLE] Roadway challenges and responses	Preservation, safety, access management and operational concepts. Sources: S02, S22, S41, S44
5.1 F5.1	[MAP] Severe crash patterns	Multiyear crashes and high-injury or priority network as locally defined. Sources: S02, S21, S46
5.1 F5.2	[CHART] Crash severity and type trends	Counts, denominators where sound, and small-number instability. Sources: S21
5.1 F5.3	[MAP] Systemic safety risk	Risk factors and exposure; distinguish observed crashes from risk screening. Sources: S21–S22, S46
5.2 T5.1	[TABLE] Safety priorities and countermeasures	Evidence, context, expected mechanism and implementation connection. Sources: S02, S22, S46
5.3 F5.4	[MAP] Physical accessibility barriers	Known barriers and inventory coverage; avoid implying unassessed facilities comply. Sources: S23, S44, S46
5.3 T5.2	[TABLE] Accessibility challenges	Location, affected users, physical issue and responsible entity. Sources: S23, S44, S46
5.4 T5.3	[TABLE] Health and implementation connections	Connect safety, active transport and health access to actions. Sources: S22–S24, S40, S50
6.1 F6.1	[MAP] Active transport network	Facility type, continuity, known usability and coverage. Sources: S14, S44, S46
6.1 T6.1	[TABLE] Active transport conditions	Stress, grade, surface and maintenance evidence at regional scale. Sources: S24, S44, S46
6.2 F6.2	[MAP] Active transport gaps and barriers	Crossings, indirect routes, missing connections and validation status. Sources: S18, S46

Section and ID	Proposed item	Purpose and evidence
6.2 T6.2	[TABLE] Gap evidence and network implications	Observed, modeled and reported needs; distinguish low counts from low potential. Sources: S18, S20, S46, S50
6.3 T6.3	[TABLE] Active transport priority projects	Concept, benefit, feasibility dependencies and readiness. Sources: S02, S24, S43–S46
6.3 F6.3	[DIAGRAM] Priority corridor or village connections	One coordinated concept plate; add separately identified plates if needed. Sources: S24, S43–S46
7.1 F7.1	[MAP] Transit and passenger connections	Routes, broad service areas, transfer points and park-and-rides. Sources: S25, S27, S45
7.1 T7.1	[TABLE] Service availability summary	Service type, broad frequency or span, eligibility and principal connections. Sources: S25, S45
7.2 F7.2	[CHART] Transit performance trends	Ridership, service supplied and cost with consistent definitions. Sources: S26–S27, S45
7.2 F7.3	[MAP] Transit markets and service gaps	Compare modeled demand with actual services and documented needs. Sources: S18, S45, S50
7.2 T7.2	[TABLE] Unmet transit needs	Source, geography, affected users and operating implications. Sources: S25–S27, S45, S50
7.3 T7.3	[TABLE] Candidate service improvements	Frequency, connections, flexible services and operating requirements. Sources: S25, S45, S49
7.4 F7.4	[MAP] Intercity services and gateways	Rail, bus and external airports linked to regional access. Sources: S29, S31, S45, S48
7.4 T7.4	[TABLE] Gateway connection challenges	Transfer, information and first- or last-mile issues. Sources: S45, S48, S50
8.1 F8.1	[MAP] Freight and economic connections	Highway, rail, airports, industrial access and transfer points. Sources: S28–S31, S48
8.1 T8.1	[TABLE] Freight constraints	Restrictions, loading, seasonal reliability and supply-chain access. Sources: S16, S19, S28, S48

Section and ID	Proposed item	Purpose and evidence
8.1 F8.2	[CHART] Freight travel reliability	Covered truck routes; document vehicle classification and coverage. Sources: S16, S19, S28
8.2 F8.3	[MAP] Rail and intermodal facilities	Current operations and prospective opportunities distinguished. Sources: S29, S31, S48
8.2 T8.2	[TABLE] Rail and intermodal opportunities	Need, market evidence, ownership and next analysis. Sources: S28–S30, S48
8.3 T8.3	[TABLE] Aviation facilities and ground access	Regional role, connection issues and planning implications. Sources: S31, S48
8.4 F8.4	[MAP] Seasonal travel and recreation access	Material destinations, scenic corridors and constraints. Sources: S14, S18–S19, S48
8.4 F8.5	[CHART] Seasonal and event travel profiles	Comparable dates; distinguish recurring effects from exceptional events. Sources: S16, S18–S19, S48
8.4 T8.4	[TABLE] Tourism and cultural resource considerations	Regional issue, evidence, management option and resource sensitivity. Sources: S43, S48, S50
9.1 F9.1	[CHART] Transportation energy and emissions	Baseline and trends with consistent boundaries and fleet assumptions. Sources: S18–S19, S33, S47
9.1 T9.1	[TABLE] Energy and emissions assumptions	Travel basis, factors, fleet, electricity and uncertainty. Sources: S33, S47
9.2 F9.2	[MAP] Charging provision and regional needs	Access, ports and power; differentiate destination and corridor needs. Sources: S32, S47
9.2 T9.2	[TABLE] Electrification and demand strategies	Land use, mode shift, fleets and charging; dependencies and regional role. Sources: S01, S32–S33, S47
9.3 F9.3	[MAP] Hazard exposure of transport links	Flood and other material hazards with coverage limits. Sources: S14, S34–S36
9.3 F9.4	[MAP] Access continuity and isolation	Critical destinations, vulnerable links and feasible alternative paths. Sources: S14, S34–S36, S44
9.3 T9.3	[TABLE] Documented disruptions and access consequences	Dates, closures, damage and community consequences. Sources: S36, S44, S50

Section and ID	Proposed item	Purpose and evidence
9.4 T9.4	[TABLE] Adaptation and stewardship options	Maintenance, retrofit, redundancy and relocation; environmental tradeoffs. Sources: S34–S36, S44, S47
10.1 T10.1	[TABLE] Scenario assumptions	Growth, behavior, energy, service, funding and disruption assumptions. Sources: S01, S18, S37–S38, S47, S49
10.1 F10.1	[CHART] Scenario outcomes and sensitivity	Comparable regional outcomes; modeled estimates versus judgments. Sources: S16, S18, S37–S38
10.2 F10.2	[DIAGRAM] Strategy pathways to 2050	Established actions, contingent branches and review points. Sources: S37–S39, S49
10.2 T10.2	[TABLE] Conditional responses and triggers	Condition, indicator, threshold rationale, response and responsible lead. Sources: S37–S38, S49
10.3 F10.3	[MAP] Regional strategy and priority geography	Corridors, centers, rural catchments and critical connections. Sources: S01–S02, S43–S50
10.3 T10.3	[TABLE] Priority corridor and place profiles	Issue, regional importance, evidence and proposed response. Sources: S02, S43–S50
10.4 T10.4	[TABLE] Project program and policy priorities	Priority, readiness, responsibility and funding separated. Sources: S07, S39, S49–S50
11.1 T11.1	[TABLE] Action program	Lead, partners, next step, time period and status. Sources: S39, S43, S45, S49
11.2 T11.2	[TABLE] Costs funding and delivery capacity	Capital and operating ranges, estimate year, commitments and gaps. Sources: S26, S43, S45, S49
11.3 T11.3	[TABLE] Performance and review framework	Baseline, desired direction, update cycle, owner and source continuity. Sources: S07, S16–S21, S26, S49
11.4 T11.4	[TABLE] Unresolved needs and next studies	Decision affected, evidence gap, next step and consequence of deferral. Sources: S50–S51
A.1 TA.1	[TABLE] Carry forward ledger	Source, reuse decision, required update and staff owner. Sources: S01–S02

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A.2 TA.2	[TABLE] Chapter reuse packages	Underlying datasets and methods to retain, update or replace. Sources: S01–S02
B.1 TB.1	[TABLE] Comprehensive source ledger	Exact releases, provenance, access, transformations and limitations. Sources: S01–S51
B.1 TB.2	[TABLE] Evidence coverage matrix	Chapter questions versus geography, time, populations and source coverage. Sources: S01–S51
B.1 TB.3	[TABLE] Validation and conflict checklist	Independent comparisons, shared inputs, sensitivity and unresolved conflicts. Sources: S01–S51
B.2 TB.4	[TABLE] Data gaps and collection register	Required evidence, design, effort, owner, timing, fallback and consequence. Sources: S20, S50
C.1 TC.1	[TABLE] Baseline phase work program	Months 1–6; tasks, staff effort, dependencies and review deliverables. Sources: S08, S50
C.2 TC.2	[TABLE] Needs and alternatives work program	Months 7–14; collection, analysis, engagement and review effort. Sources: S08, S50
C.3 TC.3	[TABLE] Strategy and adoption work program	Months 15–24 plus justified contingency; staff and review dependencies. Sources: S08, S42, S49
D.1 TD.1	[TABLE] Technical review checklist	Sources, methods, assumptions, validation, uncertainty and findings. Sources: S20, S50–S51
D.2 TD.2	[TABLE] Publication review checklist	Accessibility, captions, sources, cross-references and plan consistency. Sources: S50–S51