COGNISINT

CAPITAL REGION

Eastern Greenway

A regional planning and policy framework for mobility, conservation, and deliberate growth east of Meridian Township

THE PROPOSITION

Meet Greater Lansing's present and future mobility needs while permanently protecting green space and incorporating recreation, nonmotorized transportation, wildlife continuity, and water management from the beginning.

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Cognisint LLC | Lansing, Michigan

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CONCEPT PAPER

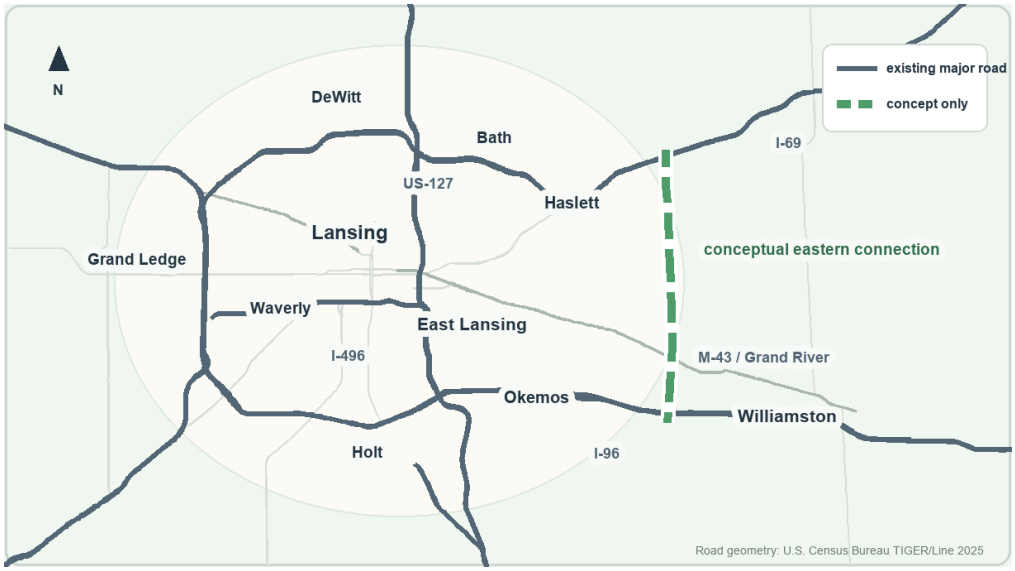
Concept paper requiring engineering, environmental, cost, route, and legal review.

EXECUTIVE PROPOSITION

A Green Edge That Carries Regional Movement

The Capital Region Eastern Greenway is a planning framework for a limited-access, four-lane, at-grade integrated mobility and conservation corridor linking I-69 and I-96 east of Haslett and Okemos. Only the I-69 and I-96 termini are conceived as fully grade-separated interchanges; selected intermediate roads meet the Greenway at grade. The Greenway would move traffic and meet present community needs while permanently preserving green space and incorporating recreation, nonmotorized transportation, habitat continuity, and water protection from the beginning.

The harder problem is how to deliver regional movement while preventing a new road from enabling the next wave of diffuse, infrastructure-intensive sprawl.



Regional context. The existing I-69, I-96, US-127, and I-496 system has no eastern connecting leg. *The off-white center identifies Greater Lansing within the surrounding regional road network. The green line shows a conceptual connection between I-69 and I-96 east of Haslett and Okemos. Exact alignment and design remain subjects for study. Existing road geometry is from the U.S. Census Bureau's 2025 TIGER/Line files.*

Time is of the essence. Meridian Charter Township grew from 39,688 residents in 2010 to 43,916 in 2020, an increase of about 10.7 percent; the Census Bureau's 2025 estimate is 44,869.[3] The Township's own planning documents pair focused development with natural-resource preservation, and its parks plan reports substantial public, quasi-public, and millage-preserved open space.[4][5] East of Meridian, however, the agricultural and ecological landscape remains coherent enough to shape before parcel fragmentation makes both transportation and preservation dramatically harder.

STUDY AND PRESERVE THE CORRIDOR

The first public action should be a regional feasibility and corridor-preservation study. Land-use commitments, access rules, conservation tools, and performance measures must be designed before capacity is added.

The Integrated Proposition

The Greenway would combine two through lanes in each direction, strict access management, a wide future transit and managed-flex reserve, a separated regional trail, roadside recovery and runoff zones, naturalized stormwater treatment, wildlife crossings, agricultural and habitat conservation easements, and compact development nodes at a small number of major crossings.

The Greenway offers a potential response to transportation, green space, conservation, and growth management needs by combining the regional connectivity of a beltway, the landscape integration of a parkway, and the land protection of a greenbelt while accounting for the problems associated with each. Its institutional and spatial innovation is to treat transportation, permanent land preservation, drainage, recreation, nonmotorized and transit readiness, habitat continuity, and development policy as one corridor program. Conservation and access interests would be acquired, recorded, funded, and assigned to a responsible steward as part of the original project.

ROAD FORM	Limited-access Greenway roadway; two through lanes in each direction; major junctions selectively at grade.
GROWTH FORM	A moderately permeable regional edge: compact planned nodes, protected land between them, and no continuous frontage development.
LAND STRATEGY	Public right-of-way only where needed; adjacent land may remain privately owned under voluntary or acquired conservation/development-rights controls, subject to lawful authority.
SUCCESS TEST	Safer, reliable movement; less pressure on Marsh Road and US-127; permanent land protection; stronger trail/transit links; no unmanaged sprawl.

HISTORY AND INSTITUTIONAL LESSON

The Unfinished Network—and the Cost of the Old Doctrine

The Greenway begins with the 1961 plan as historical context. The Michigan State Highway Department's Lansing Area Trunkline Plan proposed an internal crosstown system, the I-496 urban loop, a route across the Michigan State University campus, and a Van Atta Connector from I-96 to then-US-16/Grand River Avenue, later extending north toward M-78 and the future I-69 corridor.[1] The Van Atta project was meant to serve anticipated subdivision growth and to help define the perimeter within which the plan expected most physical growth to occur.

The same report captured the era's hierarchy in a seven-word maxim: "transportation comes first—and always first."[1] That premise delivered mobility, but it treated communities, landscape, and social needs as variables to be adjusted around a road plan. The consequences are clearest in I-496.

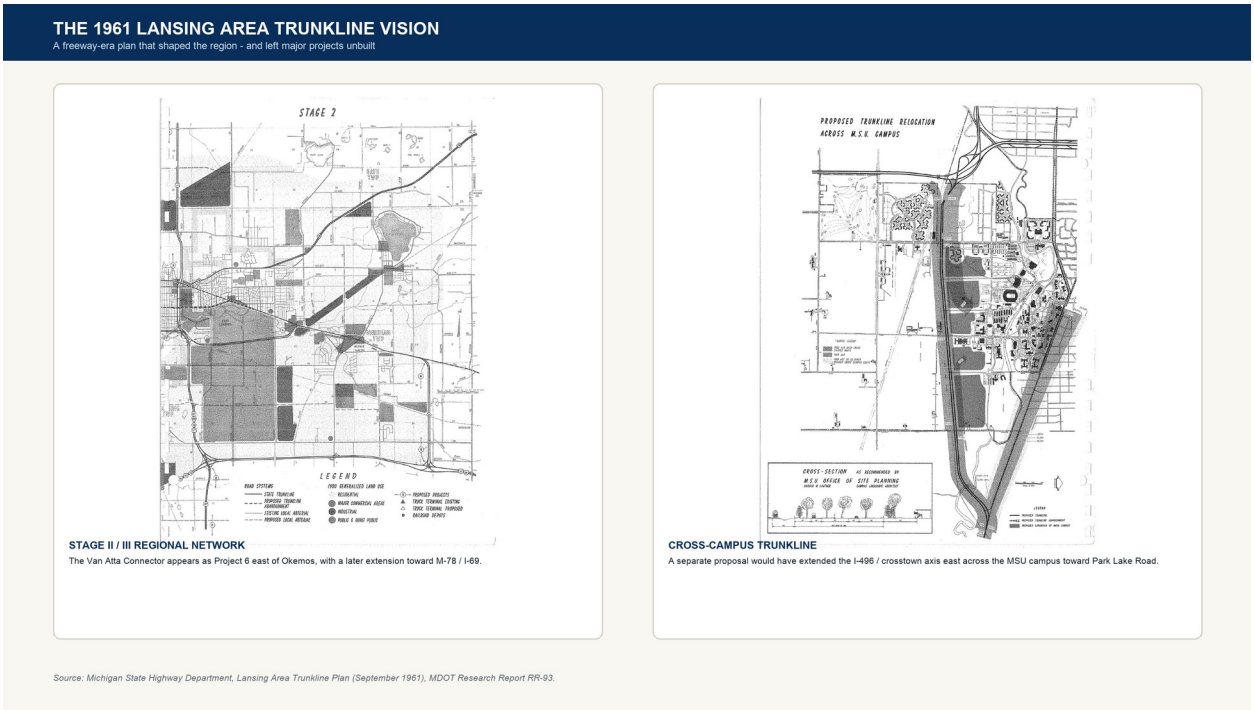


Figure 1. The freeway-era regional vision contained both the Van Atta and cross-campus concepts. *The images are reproduced from MDOT Research Report RR-93; annotations are Cognisint's.*

A Different Historical Response

Route, section, access policy, land acquisition, and governance determine what mobility infrastructure does to the place around it. The Greenway therefore treats transportation as one necessary public function within a larger civic landscape.

I-496 AND HISTORICAL LOSS

What the Freeway Erased

By the early 1960s, the Main Street–St. Joseph corridor was the residential, commercial, and institutional heart of Lansing's largest Black neighborhood. Restrictive covenants, discriminatory lending, and real-estate practices had constrained where Black families could buy or rent; within those constraints, residents built a durable community of homes, churches, schools, social clubs, and businesses serving customers who were excluded elsewhere.[2] Main Street—now Malcolm X Street—was an economic and social network far greater than a collection of parcels in a proposed right-of-way.

Construction of I-496 began in 1963. The Historical Society of Greater Lansing reports that more than 800 homes and businesses stood in the proposed corridor and that 35 streets were dead-ended.[2] Michigan Public reports that federal acquisition displaced more than 650 Black families.[20] The figures use different units and source records, but they describe the same event: a concentrated community was dispersed into a housing market that still restricted where many displaced residents could go.

PEOPLE	Families lost proximity to relatives, neighbors, schools, churches, clubs, and informal support networks beyond the reach of compensation schedules.
COMMERCE	Black-owned and Black-serving businesses lost both premises and the nearby customer base that made Main Street a functioning commercial district.
URBAN FABRIC	Thirty-five dead-ended streets, ramps, one-way conversions, and the freeway trench weakened movement between downtown, the South Side, and REO Town.
HISTORICAL RECORD	Demolition removed the physical settings through which Lansing's Black history and working-class automotive history had been made visible.

The Ransom E. Olds Mansion

The freeway also consumed a prominent civic landmark at Washington Avenue and Main Street: the 1902 Ransom E. Olds mansion. Gladys Olds Anderson donated the house in 1966 for preservation. The Historical Society of Michigan and the State Highway Department cooperated on a plan to move it, but only about 70 percent of the needed $100,000 had been raised when the building was razed.[19] The road was later named for Olds. The far greater human burden fell on the Black neighborhood. The naming makes the historical lesson unusually concrete: freeway construction erased both an irreplaceable community landscape and a landmark associated with the industrial history used to justify Lansing's growth.

THE INSTITUTIONAL LESSON

Property acquisition can compensate recognized interests in land. It cannot by itself re-create a neighborhood economy, restore severed social relationships, or recover demolished history. Those losses must enter route selection before a preferred alternative is chosen.

MAIN STREET, MEMORY, AND UNEQUAL POWER

The Landscape Before the Trench

A particularly revealing pre-freeway photograph appears in the December 5, 2018 issue of City Pulse: an undated view looking north along Logan Street—now Martin Luther King Jr. Boulevard—across Main Street and St. Joseph Highway. Its roadside signs, small businesses, ordinary traffic, sidewalks, houses, and intersecting streets show a place that was somewhat worn but unmistakably active.[30] The image matters because clearance photographs and aerial plans can make the corridor look empty before construction. The corridor was lived in and active.

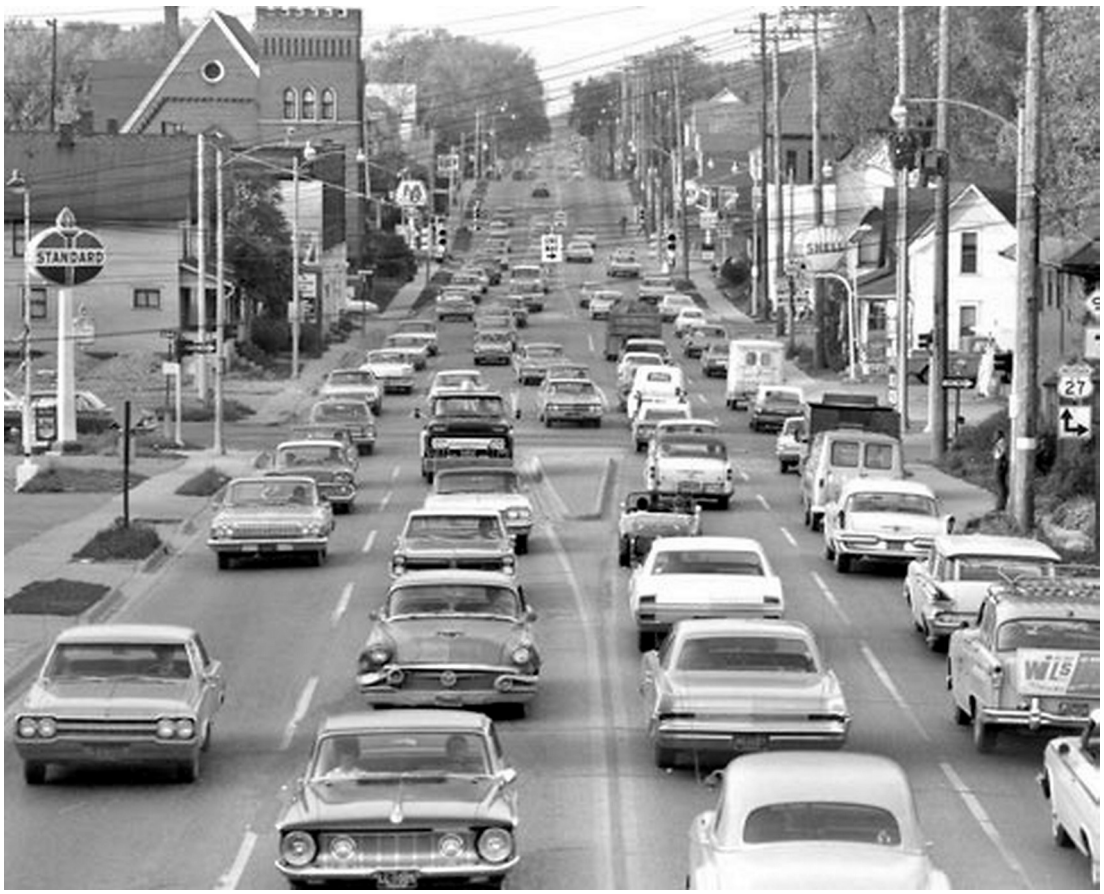


Figure 2. Logan Street looking north across Main Street and St. Joseph Highway before I-496. *The lively traffic corridor is flanked by Standard service-station signs, homes, businesses, sidewalks, and utility infrastructure. Undated photograph published in City Pulse, December 5, 2018, p. 12; the page caption leaves the original photographer and rights holder unidentified.*

This is the landscape the freeway-era plans reduced to a line on a map. Its congestion and modest buildings demonstrate that Main Street was already a functioning urban place whose homes, commerce, institutions, and daily movement were intertwined.

BUILT THROUGH MAIN STREET; STOPPED AT MSU

Black Lansing And MSU: Same Region, Unequal Result

The 1961 trunkline plan treated I-496 and the cross-campus freeway as two halves of the same crosstown route. The proposed campus segment would have continued east from the end of I-496 at US 127, generally along the railroad corridor, toward Grand River Avenue and Park Lake Road.[1] At that stage Michigan State University tentatively supported the route and indicated willingness to provide right-of-way.

John A. Hannah, MSU's president from 1941 to 1969, oversaw MSU's rise to national prominence and served in prominent federal roles involving defense, civil rights, and foreign assistance.[28] Two years after his presidency ended, sustained student, faculty, neighborhood, and municipal opposition led the MSU Board of Trustees to reject the route; East Lansing also withdrew support.[29] The decisive contrast is institutional. MSU controlled a consolidated campus, possessed a constitutionally powerful governing board, could mobilize professional and student constituencies, and dealt with the state as a major institution. Black residents and merchants along Main Street—already constrained by discriminatory housing and credit systems—had no comparable landholding institution, governing board, or practical veto.

MAIN STREET / I-496	A predominantly Black neighborhood, commercial district, churches, schools, and social networks were acquired and dispersed. Opposition could be heard, but the corridor lacked an institution with the power to stop the project.
MSU CROSS-CAMPUS ROUTE	The University and East Lansing could reverse earlier support, organize opposition, and stop the route before construction crossed the campus.
HISTORICAL CONCLUSION	Unequal political and institutional power joined engineering considerations in determining which landscape was sacrificed and which community could force reconsideration.

INSTITUTIONAL LEVERAGE

The politically formidable university built during Hannah's presidency possessed land, wealth, governing authority, and political leverage unavailable to Black Main Street. Those institutional advantages helped MSU and East Lansing force reconsideration of the route in 1971.

The Canceled Campus Route

Today the western approach to the canceled alignment is the comparatively tranquil, landscaped Trowbridge Road entrance between I-496, Harrison Road, and Farm Lane. It uses at-grade intersections, separated paths, green setbacks, selective access, and a clear transition into campus. Although its scale is different, Trowbridge offers a local example of efficient movement integrated with landscape rather than a continuous freeway trench.

WHAT ROADS SOLVE—AND WHAT THEY CAN CREATE

Mobility Is Real. So Are the System Effects.

Freeways, expressways, and high-volume arterials were built to connect cities, shorten travel, carry freight, open access to jobs, and reduce some kinds of conflict. Those are real public benefits. The older planning hierarchy often treated vehicle movement as the controlling objective and everything else as a secondary effect. Decades of experience now make the broader consequences visible. Their magnitude and form vary by route, speed, access, land use, network context, and governance. They therefore belong in the first definition of a project rather than in a mitigation appendix.

Displacement Followed Unequal Political and Economic Power

As demonstrated by the 1961 plan, the Lansing record belongs to a national pattern. USDOT's Beyond Traffic review reports that urban Interstate routes were often placed where land cost less or political resistance was weakest and, in practice, cut through low-income and minority communities disproportionately. It connects those decisions to displacement, enduring physical barriers, suburbanization, weakened urban tax bases, and reduced transit ridership.[35] USDOT's 2024 transportation-equity history further documents how highway construction and urban renewal were intertwined; in some cities, clearance of Black or poor neighborhoods was an articulated objective rather than an unforeseen side effect.[36]

Michigan's I-375 record provides a direct example. In public materials for converting the depressed freeway to a street-level boulevard, MDOT acknowledges that the original freeway and related urban renewal cleared the red-lined Black Bottom and Paradise Valley neighborhoods.[42] In Detroit, MDOT's environmental record identifies Hastings Street as the central business corridor that connected the two neighborhoods before freeway construction obliterated it. The record describes the resulting divide between downtown and neighborhoods to the east and acknowledges disproportionate harm to Black, low-income, and minority populations.[43]

Working-class, immigrant, and rural communities also lost homes, businesses, farms, and gathering places. These outcomes arose because nominally neutral cost and engineering criteria operated within unequal housing markets and unequal political systems. Lower land prices often reflected prior discrimination; weaker resistance often reflected exclusion from governing power. A route-selection process that ignores those conditions reproduces them.

A highway or other high-speed transportation facility can remain a barrier even after construction is complete. USDOT's Reconnecting Communities program treats high speeds, grade separation, and other design factors as potential barriers to mobility, access, and economic development.[41] That institutional recognition matches the local I-496 lesson: severed streets and dispersed people can weaken social and economic cohesion in ways that parcel compensation cannot restore.

THE EQUITY TEST

- **Who receives faster travel?**
- **Who loses land or access?**
- **Who can force reconsideration?**
- **Who will live with the resulting barrier?**

TRAVEL, SAFETY, LAND, AND PUBLIC COST

A Road Changes More Than Travel Time

The displacement and physical division described in the preceding pages arise most directly when freeways cut through already developed communities. The effects below can occur in many settings, but automobile dependence, dispersed development, habitat and farmland loss, wildlife conflicts, and expanded service obligations are especially relevant when high-volume roads extend through suburban and rural land.

Additional capacity can change route, time, destination, mode, trip frequency, vehicle ownership, and development location. FHWA therefore requires induced travel and induced growth to be examined rather than assumed away; its guidance also cautions that the magnitude and mix of effects vary by corridor and may be incompletely represented in conventional models.[6] Metropolitan research likewise finds that vehicle travel tends to rise with Interstate lane supply over time.[7]

Land use and transportation choices reinforce one another. FTA explains that transit benefits from compact, mixed-use corridors and that many dispersed residential patterns are difficult to serve.[39] High-speed road environments also make walking and bicycling less comfortable and more difficult to connect safely. If a pedestrian crash occurs, FHWA's speed-management research shows that the risk of death rises sharply with impact speed.[37]

Crash risk must be described with care. More driving creates more exposure, high speeds increase severity, and every driveway or intersection adds potential conflict points. Access control can reduce vehicle, pedestrian, and bicycle conflicts relative to a stroad, but it cannot eliminate roadway departures or vehicle-to-vehicle crashes.[837] Roads can also fragment habitat and create wildlife-vehicle interactions; FHWA's crossing handbook treats animal-movement barriers, habitat loss, wildlife mortality, and crossing design as transportation-system problems.[38]

The land and fiscal effects continue beyond the pavement. Dispersed growth consumes more land, extends roads and utilities, and requires public services to cover a larger area. EPA's review concludes that compact development generally requires less infrastructure and that street maintenance, water and sewer service, emergency response, and other operating costs are higher per person when development is dispersed.[9]

TRAVEL BEHAVIOR	Capacity can attract diverted trips, new trips, longer trips, mode shifts, and development that generates additional travel; congestion relief may therefore be smaller or shorter-lived than a static forecast suggests.
WALKING AND TRANSIT	High-speed, separated, low-density patterns can make short nonmotorized trips indirect and fixed-route transit difficult to support unless safe connections and compact nodes are designed deliberately.
CRASH EXPOSURE	Vehicle-to-vehicle, roadway-departure, pedestrian, bicycle, and wildlife collisions remain design risks. Speed, access points, crossings, roadside geometry, and total travel affect their likelihood or severity.
LAND AND RESOURCES	Pavement, grading, drainage, utilities, and induced development use materials and energy, consume or fragment green space, and alter water and habitat systems.
COMMUNITY FABRIC	Acquisition and physical barriers can separate people from neighbors, institutions, customers, jobs, parks, and services, weakening social and economic networks.
PUBLIC BALANCE SHEET	New capacity creates lifecycle obligations for pavement, bridges, drainage, landscape systems, police and emergency service, utilities, and local roads serving development.

CORRIDOR CONCEPT

An Eastern Alignment That Follows Existing Infrastructure

The concept shifts east of the proposed but never-built Van Atta corridor because development in Meridian Township has made that older alignment costly, disruptive, and poorly suited to a growth-edge function. The conceptual route map establishes the proposal's planning geography between the developed edge of Haslett and Okemos and the Williamston area. Much of the alignment—particularly its southern half—follows farm-property lines through fields rather than existing public roadways.

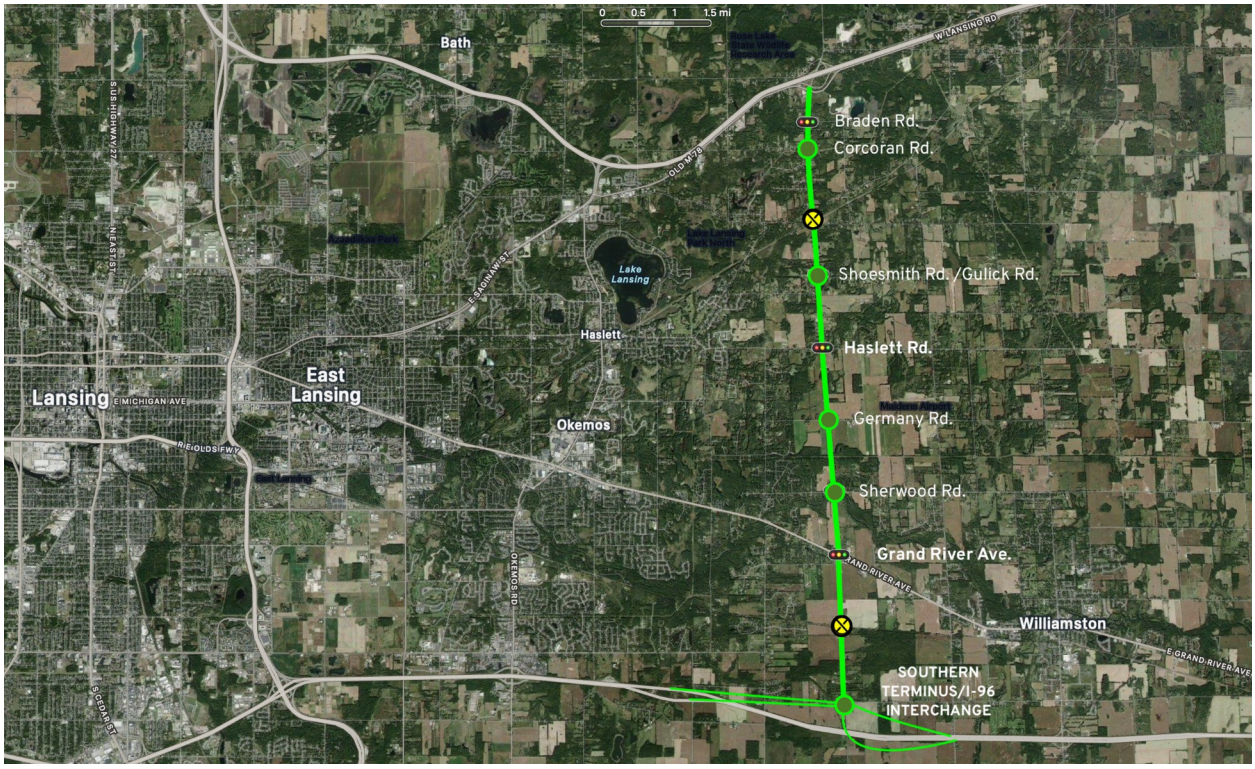


Figure 3. Conceptual route map supplied by the proposal's author. *The highlighted route establishes the proposal's planning geography. Surveying and traffic-control study will determine its precise form.*

Planning-Level Route Narrative

The concept begins at the I-69 interface in the Braden–Corcoran area; proceeds south through the route map's selected at-grade junctions at Braden, Corcoran, Shoesmith/Gulick, Haslett, Germany, Sherwood, and Grand River; crosses two rail lines; and reaches a compact I-96 terminus.

Only I-69 and I-96 are grade-separated roadway junctions. Intermediate road junctions remain at grade, with crossings limited to selected roads. The Red Cedar River bridge is a water crossing, and the two railroad crossings are assumed to be grade separated—likely flyovers—unless later coordination establishes another treatment.

DEFINING THE TYPOLOGY

How to Read the Road Vocabulary

Transportation terms describe different things: legal access rights, physical design, network function, and traffic control. Public debate often uses them interchangeably. The distinctions below follow MDOT road terminology and FHWA's access-and-mobility hierarchy and define how this paper uses each term.[2122]

EXPRESSWAY AND FREEWAY

Two separate questions are often collapsed into one. Access control asks whether adjoining parcels receive driveways or frontage connections. Grade separation asks whether public roads meet at the same elevation. The Greenway combines limited parcel access with selected at-grade public-road intersections. Michigan law and historical usage sometimes blur these categories; this paper keeps them distinct.

Access Control: Who May Connect, and Where

ACCESS REGIME	PHYSICAL CONSEQUENCE	GREENWAY APPLICATION
Full control	No direct property access. Entry, exit, and transfer occur by ramps; crossroads pass over or under.	Reserved for the I-69 and I-96 termini and any location where later analysis proves full separation necessary.
Limited or partial control	Driveways are prohibited or exceptional, but selected public-road intersections may remain at grade.	The proposed corridor form: a small number of planned, durable crossing nodes separated by long access-controlled segments.
Access management	Spacing, medians, shared access, turn restrictions, and local land-use rules manage conflict on roads that still serve property.	A supporting policy for intersecting roads and growth nodes. Acquiring legal access rights requires a separate action.

Road Type and Network Function

TERM	CORE IDEA	RELATION TO THE GREENWAY
Freeway	A divided arterial with full access control and grade-separated crossings.	Reserved in this concept for the I-69 and I-96 termini.
Expressway	**A high-mobility roadway with limited or partial access control. Unlike a freeway, it may include selected at-grade intersections.**	**The proposed Greenway form: divided, limited access, and selectively at grade. This paper uses freeway and expressway as distinct terms despite overlapping historical usage in Michigan and some other states.**
Arterial	A functional class emphasizing longer trips and regional mobility; it may be a freeway, expressway, or conventional highway.	The Greenway would function as a principal arterial.
Collector	A road that gathers traffic from local roads and distributes it to arterials.	Existing collectors should connect at selected nodes without becoming continuous frontage routes.
Stroad	Planning shorthand for a corridor that tries to combine high-speed movement with dense property access; it has no official functional classification.	Continuous frontage, dense driveway access, strip development, and accumulated turning conflicts are excluded from the Greenway concept.

SELECTIVE PERMEABILITY

At Grade, Grade Separated, and Deliberately Connected

Access control answers only part of the intersection question. A crossing may merely pass over or under the Greenway, or it may allow traffic to transfer. At-grade intersections can be signalized or unsignalized, and several geometric families can relocate or remove the most hazardous turning conflicts. MDOT and FHWA guidance distinguish median U-turns, RCUTs, roundabouts, and other alternatives according to the movements they relocate or eliminate.[232425]

AT-GRADE INTERSECTION	Roads meet at the same elevation. Movements conflict in shared space and are assigned by signals, stop control, yield control, or geometric priority.
GRADE SEPARATION	One route passes over or under another. Ramps are required for the crossing to function as an interchange.
INTERCHANGE	A grade-separated junction with ramps that permit traffic to transfer between routes. Full access control depends on interchanges rather than at-grade intersections.

Intersection-Control Families

FORM	HOW MOVEMENT IS ASSIGNED	POTENTIAL GREENWAY ROLE
Conventional signal	Traffic signals assign right-of-way by phase; direct left and through movements may be permitted.	Major nodes where traffic, trail crossings, transit, and pedestrian demand justify positive control.
Stop- or yield-controlled	Signs assign priority without a traffic signal; suitability depends on speed, visibility, and traffic balance.	Low-volume local connections only if the safety analysis supports them.
Modern roundabout	Entering traffic yields to counterclockwise circulating traffic; geometry creates low-speed deflection.	A major-node option where continuous low-speed operation and safe crossing design can be achieved.
Michigan Left / median U-turn	Direct left turns are relocated to downstream median crossovers; the main intersection may be signalized or unsignalized.	A possible access-management tool selected only where analysis supports it.
RCUT / J-turn	Minor-road left and through movements first turn right, then use a downstream U-turn; major-road movements may remain direct.	A possible rural treatment for lower-volume crossroads, with pedestrian and freight effects studied explicitly.
Other alternatives	RIRO, high-T, displaced-left, quadrant-roadway, and related forms remove, relocate, or simplify selected conflicts.	A screening set for later engineering and site-specific selection.

THE OPERATING PRINCIPLE

A freeway separates nearly every crossing. A stroad accumulates conflicts until access defeats movement. The Greenway preserves mobility through a small, evidence-based set of durable crossing forms, with safe pedestrian and wildlife passages designed as part of the same system.

The Greenway's Functional Cross Section

The principal conceptual cross section shows a broad constructed and managed corridor within flanking conservation land. Much of the protected land could remain privately owned under development-rights, conservation, view, and access controls. The dimensions organize the concept; professional safety, drainage, environmental, geotechnical, operational, and property analysis must establish the final survey and design values.

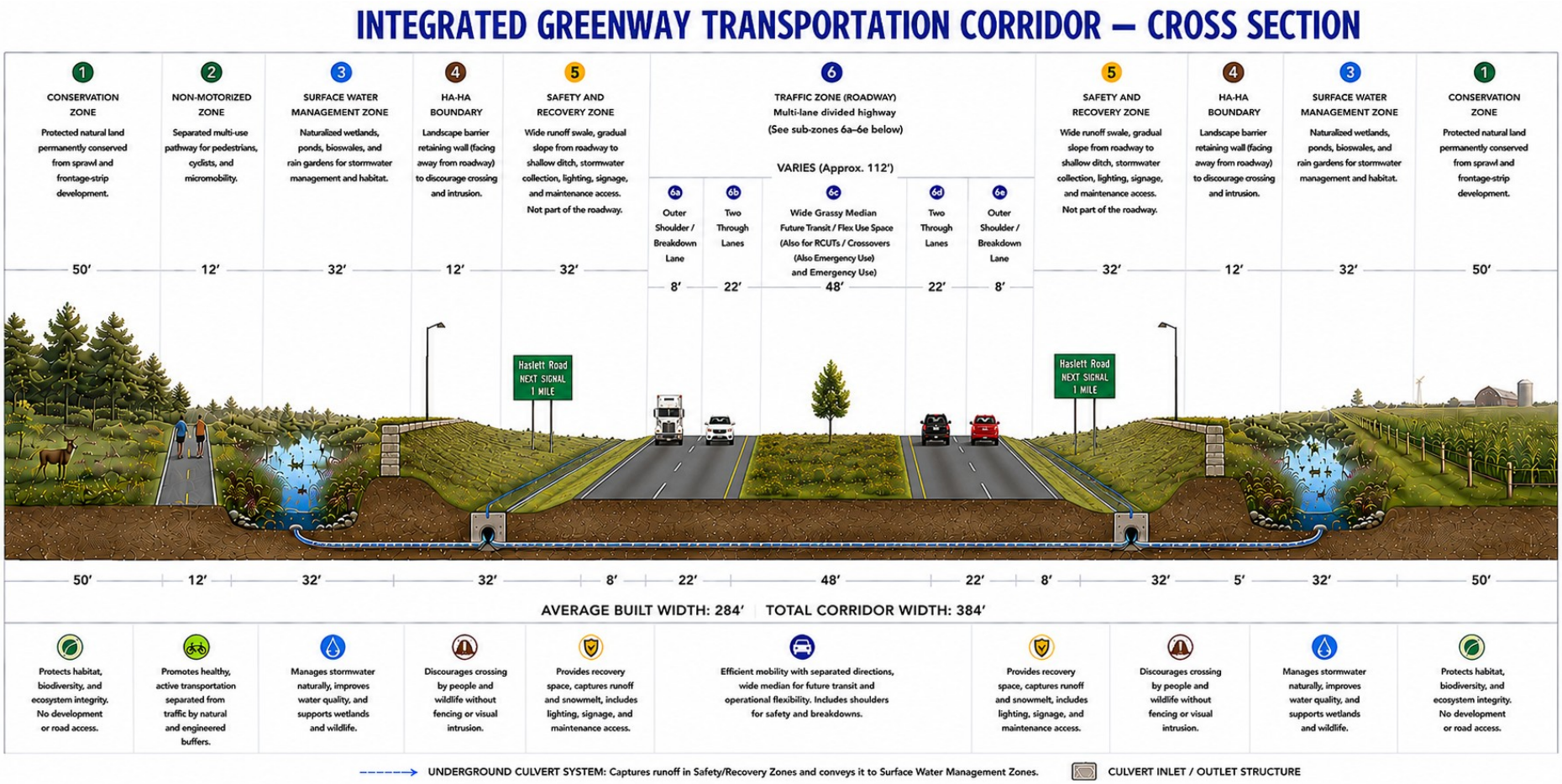


Figure 4. Principal conceptual cross section. *The lateral sequence comprises a one-sided nonmotorized zone, surface-water treatment, landscape boundary, roadside recovery areas, four through lanes, a wide unpaved median reserve, and flanking conservation. Conceptual planning illustration requiring engineering development.*

THE PHYSICAL FRAMEWORK

Open Landscape Without Development Frontage

The aerial illustrates the Greenway's regional bargain: efficient traffic movement within protected open land and natural surface-water systems. Direct access remains unavailable to adjoining parcels: the concept includes neither driveways nor continuous frontage roads, and new intersections occur only at selected public roads. That combination supplies limited access while retaining selected at-grade public-road intersections. Together with the preservation zone, it separates mobility investment from ribbon development and helps prevent sprawl.

Figure 5. Photorealistic visualization of the Greenway's landscape and access strategy. *The divided roadway, protected landscape, separated path, surface-water system, and selected at-grade junction illustrate the project's integrated design. Intersection forms are alternatives selected by context rather than a fixed consecutive sequence.*

The Lateral Sequence

From the protected landscape inward, a trail and linear park occupy one side of the corridor. A naturalized surface-water zone follows, then the landscape-facing "ha-ha" edge. A separate safety and runoff zone provides recovery space, snow storage, information and lighting locations, and a shallow ditch that directs water through controlled culverts to the treatment landscape. Only after that zone ends does the paved shoulder and traffic realm begin.

The wide median remains unpaved. Native plantings occur in clumps, preserving visibility and maintenance access. Unobstructed margins at its edges reserve a future choice: bus rapid transit, high-occupancy or managed operation, emergency use, or another mobility technology supported by evidence at the time.

WATER, WILDLIFE, AND LANDSCAPE ACCESS

An Integrated Water, Wildlife, and Landscape System

Water treatment, roadside recovery, habitat continuity, and human access must work as one system. The recovery ditch must slow or contain an errant vehicle, collect rain and snowmelt, support maintenance, and avoid creating a ramp toward the trail. Culverts must move water without becoming erosion points or wildlife traps. Mapped movement and exposure must determine human and animal crossing locations.

ROADSIDE RECOVERY	Shallow recovery geometry must safely decelerate or redirect errant vehicles while preventing a launch ramp toward the ha-ha or trail.
WATER TRANSFER	Dedicated culverts carry captured runoff beneath the ha-ha into naturalized treatment cells. Outlets must avoid erosion, standing-water hazards, and wildlife traps.
WILDLIFE GUIDANCE	Edge treatments guide rather than guarantee movement toward mapped passages. Species and site conditions govern passage dimensions, spacing, and any supplemental fencing.
HUMAN CROSSINGS	Trail users cross only at accessible, conspicuous, protected locations integrated with signals, underpasses, or overpasses as context requires.

Wildlife continuity should be mapped before a centerline is selected. Michigan DNR guidance emphasizes avoiding severed natural-cover corridors and aligning passages with wetlands, streams, hedgerows, and existing movement patterns.[14] A frequent-crossing premise may be tested in sensitive segments, but spacing and dimensions must be species- and site-specific; fencing or other measures may still be necessary. The adjoining water landscape is equally functional: EGLE requires avoidance, minimization, and mitigation of regulated impacts, while MDOT already treats stormwater pollutant reduction as an operating responsibility.[15][18]

Design Detail: The “Ha-Ha” Boundary

Figure 6. The landscape-facing “Ha-Ha” boundary. *The abrupt face belongs on the landscape and trail side; the road side rises as a gradual landform toward the Greenway roadway.*

A traditional ha-ha is a concealed ditch and retaining wall developed to keep livestock out of a designed landscape while preserving an uninterrupted view across it.[26] Here the same principle is adapted as one possible boundary treatment that may guide people or animals toward designated crossings while preserving long sightlines.

DEMAND, ACCESS, AND LAND USE

Design Against Induced Demand—Before Opening Day

FHWA defines induced demand as traffic drawn to new or expanded capacity through route shifts, discretionary trips, and changed access to jobs and other activities.[6] Duranton and Turner found that vehicle travel in U.S. metropolitan areas rose roughly in proportion to interstate lane supply over time, with additional driving associated with current residents, transportation-intensive activity, and population change.[7]

The Greenway addresses that response through a binding anti-sprawl package: access rights secured with the corridor; permanent preservation agreements in the buffer; node-based zoning and infrastructure boundaries adopted before construction; no continuous frontage; no speculative interchange districts; and public reporting on development, traffic, mode share, conserved acreage, and infrastructure obligations.

Access management is essential to that package. FHWA describes it as the proactive management of parcel access to preserve roadway safety, capacity, and speed; its techniques include wider signal and driveway spacing, indirect left turns, U-turns, and roundabouts.[8] The Greenway uses these tools to control conflict, development response, and vehicle movement.

A Moderately Permeable Edge

The corridor functions as a moderately permeable regional edge. Urban and suburban development would be favored primarily to the west; agriculture, habitat, and open space would dominate to the east. Planned nodes at major crossings could accommodate housing, employment, services, park access, and mobility hubs at an intensity capable of supporting infrastructure. Between nodes, the landscape remains continuous.

This is smart growth in the fiscally literal sense. EPA's review of scenario-planning evidence concludes that compact development generally requires less road, water, and sewer infrastructure than dispersed growth.[9] The objective is to locate growth where its long-run service obligations are supportable while preserving development and tax-base opportunities at planned nodes.

FARMLAND, GREENBELT, AND DEVELOPMENT RIGHTS

Keep Working Land Working—and on the Tax Roll

Michigan already recognizes farmland and open-space preservation as public policy. The Farmland and Open Space Preservation Program—commonly called PA 116 and now codified in Part 361 of the Natural Resources and Environmental Protection Act—uses development restrictions and tax incentives to keep qualifying land in agricultural use.[12] It serves as one tool within a larger corridor program; other easements may also be required.

Ann Arbor's Greenbelt demonstrates a complementary model. Its conservation easements pay landowners for permanent restrictions while land remains privately owned; the easement value reflects the difference between development potential and restricted agricultural or conservation value.[1011] The program has preserved thousands of acres through local funding, grants, donations, and intergovernmental partnerships.

A Capital Region program could combine voluntary PA 116 participation, locally purchased agricultural conservation easements, conservation easements held by qualified entities, fee-simple acquisition for public trail or habitat assets, targeted access-right acquisition, and transfer-of-development-rights mechanisms where local law and market conditions support them.

Control Frontage Without Taking the Farm

Where the new alignment runs along farm-property lines, the responsible highway authority would acquire the limited-access rights needed to prohibit direct frontage connections while leaving the adjoining farm in private ownership. The owner would retain the frontage property, subject to the compensated access restriction and any separately acquired conservation or development-rights interest. Paired with the Greenway's preservation zone, that structure prevents the new road from converting working fields into developable highway frontage: the land is protected, and the road supplies no driveway access to it.

LEGAL AND GOVERNANCE CAVEAT

This paper leaves unresolved whether MDOT can condemn broad development rights for general growth control. A Michigan-specific authority analysis must define which entity may acquire which interest, for what public purpose, under what process, with what compensation and long-term stewardship obligation.

Preserve Contiguous Working Lands and Habitat

The preservation strategy should prioritize contiguous agricultural and ecological systems. Wider acquisitions or easements may be justified around wetlands, woodlots, tributaries, wildlife crossings, scenic views, trailheads, and productive farm blocks. Narrower controls may be sufficient where parcel access is already constrained. The corridor width is therefore a programmatic envelope whose width varies by place.

MOBILITY BEYOND THE AUTOMOBILE

Connect the Missing Eastern Link to the Existing Trail Network

Greater Lansing already has a substantial foundation on which to build additional non-motorized pathways. Tri-County Regional Planning Commission's 2023 Regional Trails Feasibility Plan identified more than 75 miles of potential connections between the Lansing River Trail system and the Clinton-Ionia-Shiawassee, Mike Levine Lakelands, and Paul Henry-Thornapple trails.[13] Ingham County, Meridian Township, and regional partners have already treated trail connectivity as transportation and quality-of-life infrastructure.

The Greenway trail should therefore be planned as a regional transportation and recreation facility. It would connect parks, rural communities, future mobility hubs, the Red Cedar corridor, and existing or planned pathways. Its alignment may curve independently around wetlands and landscape features. Safe crossings should be grade separated where exposure warrants it and integrated with signalized node crossings where that produces a better network.

Reserve the Transit Option

The center reserve protects a future transit option without building an underused transitway on day one. Initial service could be regional express bus operating in the general lanes, with mobility hubs at I-69, M-43, and I-96. Stops belong at designed pullouts or station areas within the vehicular zone, safely separated from the recovery ditch and outer shoulder.

Conversion of median margins to managed or transit use should require a published threshold: demonstrated demand, an operating and maintenance commitment, safe station access, and evidence that the change advances regional goals rather than simply becoming a third general-purpose lane.

Freight and Commerce

Freight remains a legitimate purpose. A reliable I-69/I-96 connection may improve network resilience and divert some regional trips away from Marsh Road, central US-127, and built-up Meridian corridors. But that effect must be modeled rather than promised. The feasibility study should distinguish diverted through trips, new trips, node-generated trips, and changes in local travel behavior, and it should test transit and demand-management alternatives alongside the roadway concept.

GOVERNANCE AND DELIVERY

Governance Across Institutional Boundaries

The corridor crosses institutional boundaries by design. A credible sponsor must be able to hold transportation, land use, conservation, water, parks, transit, and property rights in the same decision structure. Tri-County Regional Planning Commission is a logical convener for an initial study because it already coordinates metropolitan transportation and regional trail planning; another entity may assume eventual ownership.

PARTNER GROUP	CORE ROLE	EARLY DECISION
MDOT + FHWA	System planning, access control, interstate connections, safety and federal process	Whether a state trunkline concept warrants alternatives analysis
Townships, counties, City of Williamston	Land use, infrastructure boundaries, nodes, local roads, public legitimacy	Whether binding growth and frontage rules can precede construction
MDARD + land-preservation partners	PA 116, purchased easements, farm viability, stewardship	Which preservation tools fit each parcel and funding source
EGLE + drain/water authorities	Wetlands, streams, floodplain, stormwater, drainage and permits	Where the corridor must avoid, span, restore, or treat water systems
DNR + Ingham County Parks	Habitat connectivity, recreation, trail and park integration	Where public landscape and wildlife crossings create regional value
CATA + trail planners	Express transit, mobility hubs, trail connectivity and accessibility	What should be reserved now and operated later
Landowners, residents, businesses	Route knowledge, property interests, farm operations, community objectives	What can be preserved, compensated, avoided, or redesigned

A Staged Public Decision

Stage zero is institutional: define the study area, public purposes, alternatives, decision criteria, and authority for interim corridor preservation. Stage one inventories traffic, parcels, farms, wetlands, hydrology, habitat, cultural resources, existing trails, infrastructure capacity, and community priorities. Stage two tests a no-build alternative, demand management, targeted improvements to existing roads, transit investment, and Greenway corridor variants. Only a preferred planning alternative would advance to environmental review, preliminary engineering, funding, acquisition, and permitting.

A NEW MIDDLE CATEGORY

Rethinking Michigan's Road Strategy

Michigan's historic planning culture often treated the freeway as the complete solution and the existing road as the fallback. The 1961 Lansing plan repeatedly proposed conversion to freeway standards and described outer controlled-access routes as the framework for regional growth. When public decisions are habitually presented as freeway versus no-build, the vocabulary narrows with them. Many residents understandably use freeway, expressway, and highway as synonyms because intermediate forms are rarely made legible as durable choices.

Northeast Lower Michigan's US-23 corridor is a revealing example. After decades of planning a new freeway from Standish toward Tawas and Oscoda, MDOT submitted a final environmental document for the Standish–M-55 segment. In March 2000, FHWA rejected a freeway-or-no-build alternatives structure and requested examination of less elaborate choices, including a boulevard, improvements to existing routes, passing lanes, signals, intersection work, and staged construction.[1617] In 2002 MDOT accepted the no-build alternative and removed the freeway from its program rather than advancing a coherent intermediate regional corridor.

The mobility and safety questions persisted. US-23 remains predominantly a two-lane corridor carrying local, commercial, and seasonal travel through communities along Lake Huron, while MDOT continues to address conflicts through project-by-project reconstruction and lane changes.[31] The policy failure was the absence of a coherent intermediate regional strategy carried through design, environmental review, and funding.

Intermediate Roads as Durable Choices

A super-2, for example, is a two-lane rural highway with periodic passing lanes that allow traffic platoons to disperse. FHWA includes the form in its Safe System design hierarchy, and 2+1 variants alternate the passing direction within a three-lane envelope.[32] Other middle forms include access-managed two-lane highways, limited-access boulevards, divided expressways with selected at-grade junctions, and staged corridors with right-of-way protected for later needs. Each can be a complete solution when matched to demand and context.

MDOT now works with access management, multimodal studies, flex routes, context-sensitive design, roundabouts, indirect left turns, and stormwater requirements. The Greenway is but one example of innovative thinking outside a freeway-or-nothing binary: an intermediate typology defined at the beginning so inherited categories no longer force a false choice between a conventional freeway and unmanaged local-road sprawl.

THE GREENWAY'S MIDDLE CATEGORY

A four-lane divided Greenway roadway with legally controlled frontage, selected at-grade civic nodes, grade separation only where justified, multimodal reservation, and conservation commitments adopted as part of the transportation program.

ADAPTABILITY AND FUTURE PUBLIC DECISIONS

A Design Adaptable to the Needs of the Community Now and in the Future

The Greenway is designed to meet present needs while preserving room for future transit, managed operations, revised intersection treatments, and other mobility technologies when evidence and funding support them. Its present design uses at-grade nodes suited to the Greenway's intended operation. Future communities could modify the corridor to address new needs or choices. Conversion of all or part of the Greenway to a freeway would, in theory, be possible—but it would require additional right of way, overpasses, ramps, reconstructed crossings, closure or relocation of at-grade intersections, renewed treatment of trails, water systems, habitat, farms, and adjoining roads, and new environmental review, funding, design, acquisition, and political authorization.

Michigan history demonstrates that conversion can occur when warranted by traffic volumes and supported by the public. The US-31 corridor between Niles and Berrien Springs opened in 1992 as a limited-access expressway with no private access but selected at-grade crossroads. Between 1996 and 1998, overpasses and interchanges replaced those crossings and completed its conversion to freeway standards.[34] That history establishes the physical possibility of later conversion while leaving the future decision open.

The policy value of convertibility is option rather than trajectory. A functional intermediate roadway can meet present needs while later grade separation remains available only if measured demand, safety, and public benefit justify it. Had Michigan used that approach more consistently, some corridors might have operated adequately for decades and never required expensive freeway conversion. That counterfactual cannot be proved, and major Interstate, freight, and metropolitan routes would still have required full control. But it is reasonable to conclude that greater use of intermediate designs could have avoided or deferred some unnecessary freeway construction.

Physical convertibility is common among divided and access-managed corridors. With sufficient public support and investment, East Beltline, Old 27, Telegraph Road, M-37, and other Michigan corridors could be reconstructed with grade separations and interchanges. A staged freeway is identified by adopted future-freeway plans, protected interchange envelopes, programmed grade separations, or structures deliberately built for a later phase. The Greenway includes no such commitments.

Public Choice Governs Future Modification

What permits or prevents conversion is ultimately public will, expressed through plans, budgets, environmental commitments, conservation easements, right-of-way authorizations, agency decisions, legislation, and elections. Future communities retain authority to modify the corridor to address new needs or choices. The present plan can make the current public compact clear, require any proposed conversion to stand on its own merits, and prevent gradual administrative changes from silently transforming the corridor into something the public never approved.

THE PRESENT COMMITMENT

The Greenway is designed to meet present needs through selected permeability, protected land, and multimodal use as adopted public purposes. Its design leaves eventual freeway conversion to a separate future public decision. Any conversion would require its own public approval, environmental review, design, acquisition, and funding.

THE GREENWAY PROOF STANDARD

Proof Standard for an Intermediate Design

Calling the Greenway an intermediate solution still requires rigorous comparison. The study must disclose its assumptions, compare the full system against credible lower-cost alternatives, and evaluate the transportation facility and preservation framework together. If its land, water, transit, or stewardship commitments disappear, the remaining road becomes a different project.

MOBILITY	Does the concept materially improve reliability, safety, freight movement, and network resilience compared with lower-cost alternatives?
DEMAND	Does total vehicle travel and development response remain within adopted performance bounds, rather than merely shifting congestion?
LAND	Are conservation, access, and node rules binding before construction and durable after leadership changes?
ENVIRONMENT	Does the preferred alternative avoid and minimize impacts, improve water treatment, and preserve or restore habitat connectivity?
EQUITY	Are burdens, benefits, acquisition, access, and participation distributed through a legitimate process informed by the I-496 history?
FISCAL	Do lifecycle costs—including local service obligations and landscape stewardship—remain supportable without relying on endless outward growth?

Use the Standard as a Decision Gate

ADVANCE	Benefits remain material after uncertainty testing, and the access, preservation, funding, and governance commitments are enforceable.
REVISE	The public purposes remain plausible, and the route, section, crossing pattern, land program, or operating concept requires further development before meeting the standard.
PAUSE	Parcel fragmentation or infrastructure extension is accelerating while the legal, financial, or institutional preservation framework remains unresolved.
STOP	The roadway depends on speculative growth, fails a credible alternative comparison, or proceeds after the integrated conservation and multimodal program has been stripped away.

The proof standard should remain visible after any opening day. Baseline and post-opening reports should track travel time, crashes, vehicle miles traveled, mode share, conserved acreage, parcel fragmentation, node development, water performance, habitat connectivity, and local service costs. If results diverge from adopted bounds, the initial response should use access, operations, land use, transit, and demand management before considering widening.

RECOMMENDATION

Preserve the Option; Study the System

RECOMMENDED PUBLIC ACTION

Commission a regional Eastern Growth Edge and Mobility Study with authority to evaluate corridor preservation, land-use commitments, conservation finance, multimodal alternatives, and a limited-access Greenway concept.

Parcel fragmentation, uncoordinated subdivision, and infrastructure extension could eliminate the region's ability to choose an integrated solution. A study should therefore begin with preservation options and temporary policy safeguards while remaining genuinely open to a no-build outcome.

Required Study Products

The study should produce a verified constraints and ownership atlas; a travel-market and induced-demand analysis; alternatives that include no-build, existing-road, transit, and Greenway variants; a conservation and agricultural-economy plan; a node and infrastructure-boundary framework; a trail and transit integration plan; a water and habitat connectivity plan; an authority and governance memorandum; lifecycle cost ranges; and a transparent evaluation matrix.

Conditions Before a Preferred Corridor

An alternative may advance only after participating governments commit to enforceable access and land-use rules, identify a credible conservation steward, fund long-term landscape maintenance, and establish post-opening measurement. The Greenway's public purpose is the integrated result. If the preservation and governance components are stripped away, the remaining road must proceed, if at all, under a different name and public purpose.

Why This Belongs in the Capital Region

Greater Lansing still has an unusual opportunity: a substantial regional trail culture, strong public institutions, an intact eastern agricultural landscape, and a transportation network whose unfinished geometry remains legible. The region can use that inheritance to repeat a freeway-era pattern—or to create a corridor that protects the very landscape and communities it is meant to serve.

SEPARATION WITHOUT RUPTURE.

MOBILITY WITHOUT SPRAWL.

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Scope and Authorship

This white paper is an independent conceptual work product prepared by David Towne for Cognisint LLC. It consolidates a developing regional-planning concept and identifies questions for professional study. Responsibility and authorship belong solely to David Towne and Cognisint LLC; MDOT, FHWA, counties, townships, cities, agencies, landowners, railroads, and conservation organizations have neither sponsored nor endorsed it. References to route forms, intersection treatments, dimensions, speeds, crossings, or public powers are illustrative and require validation by qualified professionals and public bodies.

The detailed route map was supplied by the proposal’s author and is reproduced as a conceptual planning illustration. The compact regional context map uses U.S. Census Bureau TIGER/Line road geometry for existing major roads; its Greenway line is deliberately schematic. Historic plan figures are drawn from a public MDOT research report. The pre-I-496 Main Street photograph is reproduced from City Pulse for historical commentary; its page caption leaves the original photographer and rights holder unidentified, and permission should be confirmed before broad republication. Photorealistic Greenway images are conceptual visualizations generated from the author’s specified geometry and require engineering development.