

CK Connects

Regional Transit and Community Mobility Strategy

Draft 3 | October 10, 2026 | Chatham-Kent mayoral campaign policy

Revision basis: Draft 2 dated October 9 and its hostile audit dated October 10, 2026. Prepared for final municipal verification before possible campaign publication.

Connecting Chatham-Kent means connecting opportunity.

Council should authorize a bounded feasibility assessment, beginning with approximately 30 days of staff-led reconciliation of existing services, records and Mobility Master Plan work. At 90 days, staff should present a credible feasibility report or explain unresolved dependencies and request any necessary adjustment. CK Connects seeks an integrated regional network connecting residents with employment, healthcare, education, shopping, recreation and one another. Existing-service improvements come first; missing connections advance only when practical additional journeys, accessible operations and sustainable funding are demonstrated.

This is a developed campaign white paper, not an independently audited municipal plan, adopted timetable, legal opinion, contractor quotation or funding approval. All proposed service levels and financial scenarios require municipal verification and a subsequent Council decision. Monetary amounts are Canadian dollars. Scenario Year 1 means the first full operating year; it is not a promise of a 2026 launch.

The reconstructed Draft 1's 19-section sequence, central hub concept, five original corridors, integrated customer experience and phased delivery approach are retained. Draft 3 revises the existing Draft 2 rather than replacing its policy. It incorporates the hostile audit's 23 findings, corrects cycle and journey accounting, adds current contract and capital-planning context, and strengthens spending, accessibility and evaluation conditions. Appendix A records each correction and the evidence still missing. None of the three Critical implementation findings is declared closed merely by improving the wording.

Contents

<u>1 Executive recommendation</u>
<u>2 Origins intent and boundaries</u>
<u>3 Existing network and verified baseline</u>
<u>4 The problem and usable return journeys</u>
<u>5 System architecture and regional hubs</u>
<u>6 Corridor screening and priority comparison</u>
<u>7 Timetables reliability and frequency</u>
<u>8 Fare integration and household affordability</u>
<u>9 Vehicles operating alternatives and technology</u>
<u>10 Cross boundary partnerships</u>
<u>11 Accessibility safety and equity</u>
<u>12 Fiscal baseline and financial scenarios</u>
<u>13 Funding and procurement discipline</u>
<u>14 Governance and legal pathway</u>
<u>15 Delivery timetable and decision gates</u>
<u>16 Performance and public accountability</u>
<u>17 Adversarial pressure test</u>
<u>18 Proposed Council direction</u>
<u>19 Evidence gaps and source references</u>
<u>Appendix A Audit correction register</u>
<u>Appendix B Earlier grant illustration retained for traceability</u>

1 Executive recommendation

CK Connects should make Chatham-Kent function as a connected region. The governing objective is that a resident's ability to work, study, access healthcare or participate in community life should not be unnecessarily limited by which community they call home. The policy's ambition is a useful regional transportation network, with Chatham as its central transfer hub and accessible vehicles sized to actual demand.

The recommended initial decision is a bounded study authorization. Council could consider a maximum of \$75,000 in additional external expenditure after staff identify the funding source, existing capacity and discrete tasks. This is neither a consultant quotation nor a mandatory allocation. The first approximately 30 days should reconcile municipal and operator records, Driving Forward, the 2026 Mobility Master Plan and existing funded fleet studies. External work should address only gaps that existing processes cannot reasonably answer. The 90-day report need not be a fully priced pilot: outstanding data, field tests, prices or partner decisions must be reported with their effect on the next decision. Any material scope, time or spending change requires the appropriate further authorization.

Existing timing, transfer reliability, fare information and destination access should be improved where an actual gap is demonstrated and current delegated authority permits. Feasibility should then compare optimization, partner expansion, booked or demand-responsive transport and limited scheduled pilots for the same passenger cohort. Thamesville–Bothwell and Tilbury–Wheatley–Leamington should be evaluated without a presumed winner. Cross-municipal operations dependent on outside contributions need enforceable terms and a fully funded CK downside before commitments. A separate municipal corporation remains an optional future structure.

The evidence already supports several boundaries. Route A connects Chatham, Wallaceburg and Dresden; Route C connects Chatham, Charing Cross, Blenheim and Ridgetown; Route D connects Chatham and Tilbury through southwest communities. Existing OnRequest, specialized and partner transportation must be included in the baseline. A new brand alone would add no mobility. Parallel service needs to demonstrate a measurable improvement over retiming or expanding existing operations. [1–7]

The two-vehicle calculations in Draft 1 are arithmetically correct but incomplete as total municipal budgets. The original annual operating subsidy scenarios of \$451,360, \$643,760 and \$860,080 are retained as the original vendor-envelope calculation. With explicitly assumed municipal administration, accessibility accommodation and stop/technology operating allowances, the revised examples are \$511,360, \$733,760 and \$990,080 before grants, separately priced startup costs and municipal fleet acquisition. These are planning scenarios, not market estimates. Section 12 explains every calculation and exclusion.

The reference two-vehicle contracted scenario produces approximately \$3.90 million in five-year net operating exposure before grants and startup, with assumed cost escalation. A separately assumed \$125,000 startup package increases that to approximately \$4.03 million, excluding the feasibility assessment. Year-six net operating exposure is approximately \$853,000 if temporary operating grants end and the same service continues. These amounts explain why pilot approval must include a sunset date and an explicit long-term funding decision.

The reference annual operating envelope is \$783,680 gross, less \$49,920 in assumed earned incremental fares, giving \$733,760 net before new grants. The \$145/hour vendor rate, four pilot boardings per paid hour and \$3 incremental fare yield are unvalidated sensitivity inputs. Their arithmetic does not establish demand, a procurement price or maximum liability. Launch is blocked until there is a documented service gap and passenger cohort, an executable outward-and-return timetable, priced accessibility and backup, and a Council-approved schedule of gross, net, capital, startup and binding exposure. This paper recommends feasibility only on the present evidence.

Decision	Recommended position	Required evidence before advancing
Initial authorization	Capped feasibility assessment and existing-service review	Scope, staff capacity, incremental spending limit and MMP coordination
Existing corridors	Optimize A, C and D before parallel operation	Actual trip loads, running times, shift needs and displaced-rider effects
New-link pilot	Select the highest justified unmet need after comparing Models A through D	Non-duplication, usable returns, accessible stops, operator coverage and full cost
Cross-boundary service	Conditional investigation; no outside commitment	Model-specific authority, stop rights and clear agreements; signed cost-sharing if relied upon
Permanent network	Gradual expansion after evaluation	Sustained performance, replacement provision and post-grant operating funding

2 Origins intent and boundaries

The May–June 2026 campaign concept envisaged Chatham as a regional hub, scheduled links between communities, accessible smaller buses or approximately 12–20-passenger shuttles where appropriate, coordinated working and appointment hours, an understandable payment and transfer experience, rural feeders and eventual outside connections. These ideas are preserved as campaign planning history. They are not evidence of municipal approvals or verified demand.

The original corridors remain Chatham–Wallaceburg–Dresden; Chatham–Blenheim–Ridgetown; Chatham–Thamesville–Bothwell; Tilbury–Wheatley–Leamington; and a longer-term Wallaceburg–Sarnia link. The model is a regional layer integrated with local urban circulation and partner transportation. It does not require every journey to pass through Chatham: direct travel between neighbouring communities may be more useful than a hub detour.

Draft 1 recorded early brainstorming of \$600,000–\$800,000 for two shuttles and \$750,000–\$1.5 million for annual operations. Those figures have no verified procurement basis and remain historical context only. The transparent scenarios in Section 12 replace them for policy assessment. They do not validate a full five-corridor network at those prices.

The regional hub and future higher-frequency aspiration remain conditional. Frequency must follow measured route time, the passenger activity window, accessible boarding, driver duties and resources. One or two scheduled vehicles cannot provide frequent service on all five corridors. No new corridor timetable, number of daily returns or advertised headway is approved by this paper. Section 6 provides provisional geometry and cycle screening; Section 7 requires operator-tested duties before publication.

CK Connects should preserve specialized transportation, respect existing partner capacity and avoid diverting vehicles from essential services without an approved replacement. It does not promise free fares, universal doorstep pickup, emergency patient transport, a new terminal, an autonomous fleet or transit financed by speculative energy profits. Maple City Power can be considered only as a separately viable future infrastructure partner.

Five evidence categories apply throughout. “Verified” denotes a published primary-source fact; “derived” denotes arithmetic from identified data; “assumed” denotes an illustrative input; “proposed” denotes campaign policy; and “confirmation required” denotes a record or operational issue that staff must establish. An assumption can be useful for comparison without becoming a fact or a spending authority.

3 Existing network and verified baseline

3.1 Urban and specialized services

The following schedule is the published regular-service baseline reviewed for this paper. Holidays, detours and temporary service changes must be checked separately. A booking window is not a guarantee of pickup at an exact requested time. [2, 18–20]

Service	Published operating pattern	CK Connects implication
Chatham fixed routes 1 to 4	Monday–Saturday 6:15 a.m.–7:15 p.m.; 30-minute frequency	Regional arrivals must connect with local destinations during this span
Chatham fixed route 5	Monday–Saturday 6:15 a.m.–7:15 p.m.; 45-minute frequency	The urban pulse is not uniform across every route
Chatham OnRequest	Weekdays 7:15 p.m.–12:45 a.m.; Sunday 9 a.m.–5 p.m.	Existing late urban service does not create a late regional return
Wallaceburg OnRequest	Monday–Saturday 7 a.m.–7:15 p.m.; Sunday 9 a.m.–5 p.m.	Coordinate regional stops with booked urban trips
Chatham specialized transit	Monday–Saturday 6:15 a.m.–7:15 p.m.; Sunday 9 a.m.–5 p.m.	Approved users receive pre-booked curb-to-curb service within the urban boundary
Wallaceburg specialized transit	Monday–Saturday 8 a.m.–7 p.m.; Sunday 9 a.m.–5 p.m.	Review published hours together with OnRequest accommodations

Ride CK describes OnRequest as shared trips between designated stops, including virtual stops. It accepts app, web and telephone requests up to two days ahead. The published service allows requested departure or arrival times to be adjusted by 15 minutes and describes passenger time generally not exceeding 45 minutes during peaks. Approved specialized users may use curb-to-curb OnRequest accommodations outside specialized hours. These features require an integrated transfer plan rather than assuming a fixed-route-style connection. [2, 18]

Specialized-service eligibility is determined by the municipality for people whose disability prevents use of conventional transit; the published categories include unconditional, temporary and conditional eligibility. The urban service boundaries do not establish that every regional origin and destination is covered. Expansion requires a legal and operational assessment of alternative accessible transportation and specialized-service obligations. [20, 12]

3.2 Interurban corridors and actual schedule utility

All three interurban routes use the downtown terminal at 100 Wellington Street West. The published terminal departures are 6:15 a.m., 8:45 a.m., 12:15 p.m., 4:15 p.m. and 6:45 p.m. on weekdays; the midday trip is absent on Saturday. Regular Sunday and holiday service is not listed. [1]

The detailed maps show 150-minute loops, with the final departure returning at 9:15 p.m. The 6:45 p.m. time is therefore the last Chatham departure, not the end of all interurban vehicle operation. The selected timepoints below are extracted from the published maps and are not a newly proposed timetable. [21–23]

Route	Existing communities	Selected first-run timepoints	Assessment
A	Chatham–Wallaceburg–Dresden	Chatham 6:15; Wallaceburg CKHA 7:00; Dresden Ken Houston Centre 7:20; St. Clair College 8:25; terminal 8:45	Early outbound service exists; inbound Chatham access depends on destination and direction

Route	Existing communities	Selected first-run timepoints	Assessment
C	Chatham–Charing Cross– Blenheim–Ridgetown	Chatham 6:15; W J Baird School 6:50; Ridgetown Arena 7:25; Blenheim Pool 8:05; Chatham hospital 8:40; terminal 8:45	Directional loop makes travel time asymmetric; campus access must be assessed stop by stop
D	Chatham–Charing Cross– Cedar Springs–Dealtown– South Buxton–North Buxton– Merlin–Tilbury	Chatham 6:15; Merlin 7:30; Tilbury Arena 7:55; Thames Campus HealthPlex 8:30; terminal 8:45	Chatham-to-Tilbury is 100 minutes at these timepoints; return segment is 50 minutes

The paper does not infer terminal-to-terminal running times for every local stop from these selected points. Staff must obtain full operational schedules, dwell and recovery allowances, detour history and the actual direction of each rider's trip. Existing terminal arrivals coincide with some departures; that fact does not prove there is enough accessible transfer time between buses. [21–23]

3.3 Fares passes and transfers

The June 9, 2026 fare announcement sets the July 1 baseline. Exact urban cash remains \$2.75; urban Cash Pass is \$2.32, with \$1.91 off-peak on specified Chatham fixed-route periods. Interurban exact cash is \$5.50 and Cash Pass is \$4.36. Adult 30-day urban passes are \$83.98; senior/student urban passes \$65.98; the eligible affordable urban pass is \$41.99; the eligible college semester pass is \$164.90 and includes interurban travel. [7]

The announcement states children five or younger ride free with a paying passenger, while the general fare page uses “under 5.” This paper follows the dated announcement and requires Ride CK to reconcile the wording before republishing customer information. These are existing products, not new CK Connects fares. [7, 24]

Urban-origin transfers last 70 minutes, with an applicable interurban top-up. Interurban-origin transfers last 140 minutes and include onward urban travel without another fare within that window. Paper transfers must be requested for cash payments; smartcard transfers are added electronically. A published transfer entitlement does not ensure that a departing connection can physically be reached. [4]

3.4 Rural and regional partner baseline

The organization identified by CK is South Essex Community Council, not “Southeastern Essex Community Services.” Its accessible door-to-door SECC service covers Wheatley and parts of Romney through the municipal partnership. The published SECC information describes Monday–Friday local service and Windsor trips on Tuesdays and Thursdays, with distance-based pricing and advance booking. Personal eligibility, capacity and exact current rates must be confirmed; a seniors-program page is not sufficient proof of a universal general-public commuter service. [5, 25]

Four Counties Transit is operated by West Elgin and publicly described as available to all residents of West Elgin, Southwest Middlesex, Newbury and CK Ward 3. Its published regular span is weekdays 8 a.m.–5 p.m., with advance booking and special trips subject to availability and extra cost. The current municipal page establishes the service but the reviewed text does not expose a current fare table or independently reproduce Draft 2's claimed March 2, 2026 price notice. Obtain the operator-issued schedule. Old brochures, 2023 schedules and healthcare-specific listings must not be presented as the current general-service fare. [6, 26]

Four Counties Health Services also publishes a community transit option for support programs. That healthcare listing and the West Elgin municipal service use different contact and fare information. Their operational relationship, capacity and booking responsibilities need direct confirmation; this paper does not combine them into one invented schedule. [27]

The CK website also identifies adVANTage Transportation for accessible door-to-door travel to local and outside destinations. Its published information refers eligibility, operating hours and fares to the provider. This is a further overlap and accessibility comparator for a regional pilot. [28]

LT-Go operates within Leamington's published zone and provides trips between preset stops. Its current service-hours table lists weekdays 6 a.m.–9:30 p.m., Saturday 7 a.m.–9:30 p.m. and Sunday 8 a.m.–7 p.m.; a separate FAQ still says Saturday 6 a.m. Use the clearly displayed service table provisionally and confirm the discrepancy. No independently verified September 8 effective date is assigned here. Adult single fares are \$3, senior/student fares \$2.50, with adult 30-day passes \$65 and senior/student passes \$55; children under 12 accompanied by an adult are free. Trips can be booked up to seven days ahead, with at least 45 minutes for same-day booking. Live-agent phone hours are stated for weekdays and Saturday, not Sunday. Confirm accessible Sunday telephone and change/cancellation arrangements before promising an integrated return. [11]

Leamington's LTW route to Windsor ended April 30, 2026. It must not be shown as a current onward connection to Kingsville, Essex or Windsor. Sarnia publishes connections to Middlesex intercommunity transit and Huron Shores Area Transit, separately operated from Sarnia Transit. These can inform a Lambton partnership; their existence does not establish a Wallaceburg–Sarnia route. [13, 29]

The municipal fare page also names Seasonal Route S1, and the Spring 2026 Community Resources Guide lists the Beach Bus between Chatham, Mitchell's Bay and Erieau. An archived September 2019 map is not a verified 2026 operating calendar. Staff should confirm seasonal/event services and their actual days, fares and accessible capacity rather than classify recreational destinations as empty or count S1 as year-round access. The same resources guide identifies NeighbourLink and other community transportation; these can be comparators only after eligibility, volunteer availability, booking and service scope are confirmed. They are not assumed universal commuting substitutes. [24, 73]

3.5 Assets ridership budgets and existing plans

The 2025 transit asset plan inventories 21 buses, one transfer terminal and 41 shelters. Its main operations table plans approximately \$3.75 million for 2026 and its maintenance table \$55,000, in 2025 dollars. Appendix A instead records \$3.752 million and \$56,000 for those categories; Finance should reconcile the small differences. Bus maintenance is described as included in the contractor fee, so the separate maintenance line must not be assumed to be an additional fleet contract cost. These are planning expenditure values, not an approved 2026 municipal tax subsidy. The registry is not a live list of vehicles in service or available for backup. Its fair terminal condition does not establish current bay capacity or an unsafe facility. [8, printed pp. 11, 18–20 and Appendix A]

The April 13, 2026 staff report recommends extending InTouch Connection's R20-294 contract from July 1, 2026 to June 30, 2028 at an estimated \$7,110,554 excluding HST, authorizing the Mayor and Clerk to sign, and covering specified budget gaps. It describes existing conventional and specialized Chatham/Wallaceburg and interurban operations. Table 1 gives calendar-year service estimates of \$3,469,181 pre-HST for 2026 and \$3,641,373 for 2027, with net-of-rebate program costs of \$3,530,239 and \$3,705,462. The proposed funding gaps are \$94,589 from the gas-tax reserve in 2026 and \$198,372 referred to the 2027 area-rated budget. The four-page report and agenda were reviewed; the minutes link could not be retrieved, so subsequent approval and the executed amendment were not verified. Obtain minutes, signatures, actual scope and rates before treating these as commitments. [58, pp. 1, 3–4]

The asset plan also proposes a \$2 million terminal upgrade/construction item for 2027 in its improvement plan. This is a planning item, not verified authorization, procurement or funding. Reconcile it with the terminal review in Section 5 and the MMP work register before specifying pilot works. Newly checked federal announcements identify an existing Wallaceburg-area vehicle/shelter project and a CK fleet-electrification study (Section 13.1). Their completion, asset availability and unspent funding cannot be inferred from an announcement. [8, pp. 58–59; 71, 72]

Driving Forward was received July 20, 2020. It already considered regional service, timed employment access, right-sized vehicles, partner delivery and a Bothwell–Thamesville community bus. Its 2018 conventional ridership benchmark is 304,709, not a current system count; the conventional comparison includes urban and interurban service. Historical ridership and forecasts must not be substituted for route-level 2026 evidence. [9, printed pp. 37, 71 and 106]

The 2026 Mobility Master Plan process is intended to consolidate earlier transportation, trails and transit strategies. Public engagement included April and September 2026 sessions; the reviewed project page was updated October 2. CK Connects should supply a corridor and service-gap question to this process, rather than finance a duplicate master plan. [10]

The approved-budget portal and business-plan index do not yet provide a reconciled transit-only ledger for this review. The April operator report narrows that evidence gap but does not establish total transit expenditure, fare recovery or tax-supported subsidy. A municipal gas-tax report says the \$977,409 allocation is included in the 2026 operating budget. Finance must reconcile that support, the recommended reserve draw, internal staff, assets and current commitments rather than add incompatible figures or treat them as new pilot money. The legacy 2025 divisional PDF did not resolve. Missing public retrieval is not proof that municipal records do not exist. [30–32, 58]

4 The problem and usable return journeys

A transport link is useful only when a resident can reach the actual destination at a required time and return. A corridor may exist yet fail a 6 a.m. shift, a training session, an appointment that runs late or a local last-mile connection. Equally, a rider with an effective partner trip should not be treated as wholly unserved merely because that trip is not branded Ride CK.

The feasibility assessment should distinguish geographic gaps, timing gaps, excessive travel time, eligibility barriers, booking barriers, unaffordable total fares, inaccessible stops, vehicle capacity constraints and missed connections. Each requires a different response. Extending one trip, protecting one transfer or purchasing a partner journey may solve a problem more cheaply than adding a new daily route.

Demand has three different statuses. Demonstrated use means observed journeys or validated current trip records for the relevant origin, destination and time. Potential demand means a reported unmet need or institution-linked trip that has not yet been observed in the proposed service. Assumed ridership means a scenario input used to test cost. Population, jobs, support letters and four boardings per paid hour belong outside a validated passenger forecast. No corridor in this paper yet has demonstrated additional demand sufficient to select a new daily pilot.

For this paper, a usable return opportunity is a schedule combination that lets a defined person or travel cohort leave an accessible origin, arrive before the required destination time, remain for the activity and make a safe same-day return. It is an opportunity, not a passenger count. The analysis should evaluate weekdays, Saturdays, Sundays, holidays and term breaks separately.

Proposed planning tests should use cohort-specific thresholds, agreed through consultation. For a routine commute, assess arrival 10–30 minutes before shift start, a return departure within 60 minutes of shift end and door-to-door time preferably no longer than 90 minutes each way. These are screening assumptions, not universal rights or adopted limits. A specialist medical visit may justify a longer trip; a rotating shift may need different days. Publish failures instead of quietly loosening thresholds to make a route appear useful.

Travel cohort	Evidence required	Outcome to test
Workers without reliable vehicles	Home zones, workplace entrances, shift calendars and current travel costs	More shifts reachable with both inbound and outbound travel

Travel cohort	Evidence required	Outcome to test
Early late and rotating shifts	Actual duty start/end and overtime variation	Reliable return coverage; no claim that an eight-hour bus day spans every shift
Seniors and healthcare users	Appointment windows, mobility needs and current booked journeys	Reach the correct facility and return after realistic appointment overruns
Postsecondary and trades students	Campus/class dates, placement travel and term calendars	Arrive before class with a practical return, including urban transfers
Residents with disabilities	Consultation, inaccessible-trip reports and accommodation assessment	Equal usable service, including a funded alternative where required
Low-income households	Full trip fare, pass eligibility and household constraints	Lower access barriers without assuming car ownership can be eliminated
Residents beyond Chatham	Origin-specific service gaps and feeder availability	An improvement measured at the home community, not only at the terminal

The CK WORKS relationship is a proposed coordination mechanism. Workforce partners could identify training schedules, workplaces and transport barriers, offer travel training and help evaluate voluntary employment outcomes. CK Connects should remain open to the public; participation in an employment program should not be a condition of boarding. A job posting, employer headcount or expression of interest is not evidence of daily riders.

CK WORKS remains a campaign coordination proposal. The municipality's CK Jobs page establishes existing employment supports, including qualifying transport-cost assistance; it does not establish a CK WORKS operating unit, committed riders or an institutional contribution. Staff should identify the responsible program lead and referral, consent, data-retention and privacy arrangements before any shared demand collection. No employer or institution payment enters the model without enforceable amount, term and exit provisions. [67]

Employment gains, healthcare attendance and reduced isolation are plausible benefits to investigate, not quantified benefits already proven for CK Connects. No new-job total, tax-base increase, hospital saving or avoided welfare cost is monetized in the financial model. Any later benefit-cost assessment must use attributable outcomes and avoid counting the same passenger benefit twice.

Before route selection, collect residence zones, actual destination entrances, required arrival and departure times, days and term calendars, activity duration, current mode and fare, accommodation needs, provider refusals and feasible return travel. With consent, validate a representative sample against shifts, classes and appointment windows. Record nonresponse and uncertainty. Test each person or cohort under the existing timetable and partner services, then under each proposed option. Count existing riders switching, trips improved, and previously impractical trips separately. Retiming that benefits one cohort can remove another cohort's workable journey; disclose both gains and losses. Section 12.5 specifies how observed pilot returns can later be measured.

5 System architecture and regional hubs

5.1 One network with several service layers

Layer	Proposed role	Integration rule
Chatham central hub	Existing downtown terminal organizes regional transfers	Coordinate a few meaningful connection windows; do not force every bus into every pulse

Layer	Proposed role	Integration rule
Established spokes	A, C and D remain the regional foundation	Improve proven time gaps and directness before adding parallel operations
Limited connectors	Test missing or unusable links on a bounded corridor	Publish dependable outward and return windows and full accessibility arrangements
Rural feeders	Accessible booked links from smaller settlements to regional stops	Coordinate existing providers first; cap deadhead, wait time and capacity commitments
Secondary transfer points	Wallaceburg, Blenheim, Ridgetown and Tilbury stops where useful	Use safe existing facilities and stop upgrades before new buildings
Outside connections	Conditional Leamington and later Lambton links	Written agreements on service, fares, risk, funding and exit

This architecture preserves the regional vision without pretending one operating product can solve every trip. A feeder could be a booked accessible vehicle, while a regional connector follows a schedule. Trips need a common information system, reliable transfers and telephone assistance before a new payment platform is considered.

5.2 Existing Chatham terminal

The downtown terminal is the initial hub candidate because current interurban and urban fixed routes already use it. Its address and role are verified; its ability to accommodate additional simultaneous buses is not. Engineering should count bays, measure turning movements and accessible paths, assess dwell and boarding conflicts, and test the proposed departure pulse against local routes and OnRequest pickups. [1, 2]

The field review should examine ramps and level boarding areas, crossings, lighting, sightlines, emergency communication, seating, shelter, snow storage and removal, customer information, washroom access and conditions for waiting late in the evening. Staff should confirm what facilities are actually available at every proposed operating hour. A fair condition rating in an asset plan is a reason to inspect and price necessary work, not proof that the terminal is unsafe or requires replacement. [8]

A pilot should use the existing terminal if safe accessible operations can be achieved with proportionate improvements. The asset plan's proposed \$2 million 2027 terminal item must be included in the work register, with approval, funding, design and disruption status confirmed. The pilot does not authorize or assume that construction. An independent business case would be needed for major terminal spending, comparing refurbishment, phased upgrades and existing sites with land, lifecycle and operating costs. The \$40,000 startup stop/hub allowance in Section 12 is an assumption for modest works and does not fund the planned \$2 million item. [8, pp. 58–59]

5.3 Secondary transfers and direct travel

Wallaceburg could support a protected connection between Route A, local OnRequest and a later Lambton link. Blenheim and Ridgetown could support selected local pickups and Route C connections. Tilbury is particularly relevant to a Wheatley–Leamington service, but the existing directional Route D timetable may not produce useful onward or return travel. Secondary points should reduce travel or transfer risk; they should not create a second staffed terminal without evidence.

A direct connector can avoid a long hub detour, but a transfer point must have legal stopping space, accessible pedestrian access, weather protection, a winter-maintenance owner and enough waiting time. Businesses, libraries, arenas, campuses and hospitals are potential partners, not assumed hosts. Secure consent and access arrangements before selecting them.

6 Corridor screening and priority comparison

6.1 Method and limits

The original five corridors are retained. The following distances are assumed planning bands for limited-stop paths between the named communities, not surveyed route lengths or contractor kilometre estimates. Current Ride CK loops have different paths and directional timings. The distance bands must be replaced with GIS routing and timed accessible-vehicle test runs before costing a specific schedule.

The retained one-way bands use an assumed 50 km/h average moving speed plus roughly 10–20 minutes for limited stops and accessible boarding. They are rounded screening bands, not operator-tested times. The original cycle bands below are twice the one-way band plus 20 minutes of total terminal recovery. They include recovery, so they cannot also be compared directly with an allowance that excludes recovery. Winter, detours, workplace deviations, securement and urban congestion require measured allowances. The definitions and corrected arithmetic in Section 6.2 govern further modelling; no daily frequency is advertised.

Population figures below are published community counts or identified census counts, not a stop catchment or ridership forecast. The common Chatham destination count is 45,171. Counts for Chatham, Wallaceburg, Dresden, Blenheim, Ridgetown, Tilbury and Bothwell come from municipal community pages; their page dates and geographic boundaries are not uniform. Wheatley is the 2021 population centre count of 3,060, and Thamesville is the 2021 designated-place count of 774. Staff must use consistent geographic definitions for final demand analysis. [33–41]

6.2 Corridor comparison

Corridor	Existing service and overlap	Assumed new path and time	Initial priority
Chatham–Wallaceburg–Dresden	Route A already serves all three; urban OnRequest in Wallaceburg	50–60 km through Wallaceburg; 70–95 min one way; 160–210 min cycle	Optimize first; additional express or time windows only if useful demand is measured
Chatham–Blenheim–Ridgetown	Route C already serves all three and Charing Cross	45–55 km; 65–85 min one way; 150–190 min cycle	Optimize first; assess class/shift timing and directness
Chatham–Thamesville–Bothwell	No A/C/D corridor; Ward 3 Four Counties and other booked services overlap	45–55 km; 65–85 min one way; 150–190 min cycle	Equal feasibility consideration with the southwest; compare Four Counties expansion and booked/limited scheduled service
Tilbury–Wheatley–Leamington	Tilbury on D; SECC serves Wheatley area; LT-Go inside Leamington	40–50 km; 60–80 min one way; 140–180 min cycle	Equal feasibility consideration with the eastern corridor; examine employment access, providers and outside terms
Wallaceburg–Sarnia	No direct regular service established by reviewed sources; Sarnia has other regional connections	60–75 km depending on stops; 85–110 min one way; 190–240 min cycle	Longer-term candidate requiring Lambton/Sarnia arrangements

These operating bands are assumptions deliberately distinct from the published 45-minute Chatham–Wallaceburg, 65-minute Chatham–Dresden and 70-minute Chatham–Ridgetown selected timepoints. The proposed bands include different limited-stop designs and recovery logic. A band does not imply an express will improve every rider's current trip; actual savings must be demonstrated. [21, 22]

The eight-paid-hour scenario is 480 paid vehicle minutes. A retained 85% passenger-service share gives 408 passenger-service minutes and 72 non-revenue minutes. Recovery is classified as non-revenue here, while accessible boarding/dwell during a passenger trip belongs in passenger-service time. A cycle for vehicle allocation includes both. Paid driver hours are a separate payroll measure and may exceed paid vehicle hours for relief, handovers or training. Unpaid gaps, if lawful and actually agreed, increase elapsed span but do not create free vehicle operation.

Time category	Counting rule for Draft 3	Required operator evidence
Passenger running and accessible dwell	Count once in passenger-service time; includes scheduled travel, boarding and securement	Measured journeys, stop calls and occupied wheelchair configurations
Terminal recovery and layover	Non-revenue; include once in full vehicle cycle and non-revenue ledger	Terminal dwell, lateness distribution and driver rest compatibility
Deadheading and repositioning	Non-revenue; count depot and rescue movements actually needed	Depot location, measured distance/time and billing basis
Preparation refuelling charging and cleaning	Non-revenue when paid; do not hide in moving speed or boardings/hour	Inspection and servicing blocks with vehicle availability
Driver breaks handovers and training	Separate paid-driver ledger; identify overlap with paid vehicle time	Named duty blocks, relief, premiums, leave and lawful unpaid time
Weather and disruption margin	Specify where included; never deduct the same recovery twice	Repeated runs, winter conditions and cancellation/rescue plan

The table below re-performs the original capacity screen. Passenger portion means the retained one-way travel/boarding bands doubled, excluding the provisional 20-minute terminal recovery. For two cycles, recovery alone consumes 40 of the 72 assumed non-revenue minutes; at most 32 remain for all preparation, depot travel, breaks and other paid non-revenue work. Whether even two cycles fit is unresolved. Three shortest retained full cycles require 420 minutes, exceeding the original 408-minute comparison; moreover, three shortest passenger portions require 360 minutes, leaving only 48 within passenger service. The non-revenue ledger still needs 60 recovery minutes plus all other work. Neither calculation supports a general three-return promise.

Corridor	Passenger portion per return cycle	Full cycle with 20 min recovery	Passenger minutes for two cycles	Screening conclusion
A northern	140–190 min	160–210 min	280–380 min	Two require a tested non-revenue ledger; no advertised frequency
C southeastern	130–170 min	150–190 min	260–340 min	Two require a tested duty and destination returns
Eastern Bothwell	130–170 min	150–190 min	260–340 min	Do not infer two or three daily departures from these bands
Southwest Leamington	120–160 min	140–180 min	240–320 min	Three not generally established; stop/depot/driver time unresolved
Sarnia longer term	170–220 min	190–240 min	340–440 min	Upper band exceeds 408 passenger minutes before non-revenue work

These are derived screens from retained assumptions, not new timetables. A final schedule must instead satisfy paid passenger minutes plus separately identified paid non-revenue minutes within the purchased vehicle hours, with valid driver duties and a safe return for each target activity. Measure the actual stop path and depot legs, test accessible boarding and repeat runs in representative conditions before determining frequency.

6.3 Chatham Wallaceburg and Dresden

Published community counts are Wallaceburg 10,323 and Dresden 2,401, in addition to the shared Chatham destination. The potential market includes existing riders, manufacturing and service workers, healthcare users and students connecting to Chatham. CKHA locations in Chatham and Wallaceburg and St. Clair College's Chatham Campus are identified destinations. Employer shifts, residential origins and boarding access need verification; community population is not a count of workers needing the bus. [34, 35, 42, 43]

The first intervention should assess Route A loads, directionality, terminal transfers and the ability to serve earlier inbound work or later returns. Retiming a trip could strand existing passengers, so the analysis must record losses as well as gains. A selected extra return window or limited-stop supplement may be justified, but a second overlapping full corridor needs a stronger case.

Stop review should cover the downtown terminal, current Wallaceburg hospital and transfer stops, Dresden facilities and any proposed workplace access. One dedicated vehicle could provide limited extra windows within an eight-hour duty allocation; it cannot guarantee a short headway throughout the day. A full additional one-vehicle scenario has a reference net operating requirement of \$381,880 annually before grants and startup, using Section 12 assumptions. A cheaper marginal addition must use the actual incumbent price and avoid charging a full vehicle budget for a short retiming exercise.

Principal obstacles are duplication, asymmetric demand, missed urban transfers, long layovers, existing contract rights and the cost of matching workers' shift spans. The route's larger published population anchors justify optimization attention; they do not prove that new-vehicle expansion should rank first.

6.4 Chatham Blenheim and Ridgetown

Published community counts are Blenheim 4,487 and Ridgetown 2,797. Blenheim's municipal profile identifies agricultural processing and manufacturing; Ridgetown hosts the University of Guelph campus. Chatham hospital and college access are further destination candidates. The current college semester pass already includes regional travel. [36, 37, 7, 42, 43]

Assess whether the current Route C direction, stop locations and departure windows permit attendance at actual classes, placements and work shifts. A town-centre arrival is not necessarily a usable campus or industrial-estate arrival. Staff should verify safe paths or price a short accessible last-mile connection.

The first comparison is retiming or adjusting Route C while preserving existing users. A limited-stop overlay could save time, but removal of circulation may disadvantage people unable to reach a more distant stop. One extra vehicle would support selected windows at the assumed 150–190-minute cycle, not continuous hourly service. Its reference full-duty operating requirement is the same \$381,880 illustrative subsidy, with route kilometres and fare demand replaced during feasibility.

Principal obstacles are low demand outside class/shift peaks, term breaks, long return waits, accessible boarding near the campus and pressure to extend one corridor to additional settlements without adding time or budget. Ridgetown's current Four Counties coverage must also be recorded in the overlap assessment.

6.5 Chatham Thamesville and Bothwell

Published counts are Thamesville 774 and Bothwell 908, a combined 1,682 within those specific geographies. The reachable rural catchment may be larger but requires a defined feeder plan. A/C/D do not establish a scheduled Ride CK connection here, while Four Counties serves Ward 3. The corridor is therefore a candidate for investigating scheduled usefulness, not an absence of all transport and not automatically the first pilot. Compare it neutrally with the southwest corridor and with expansion of existing booked services. [38, 41, 1, 6]

Study Chatham jobs, college, healthcare and shopping destinations alongside the Newbury-oriented transport needs already served by Four Counties. A joint or expanded partner service could address the gap. A scheduled weekly community bus is also a legitimate comparator: Driving Forward already proposed a Bothwell–Thamesville–Moraviantown shopping connection. Four Counties Health Services is at 1824 Concession Drive in Newbury; the hospital destination is not in Bothwell. [68] The implementation status of that earlier community-bus proposal must be confirmed, and any involvement of the Delaware Nation requires engagement and consent. [9, printed pp. 71 and 106; 6]

One dedicated vehicle could test a limited commuter or appointment cohort only if demand, full returns and backup are demonstrated. No daily cycle count is established: Section 6.2 replaces the previous two-to-three-cycle suggestion with consistent time ledgers. A two-vehicle option may allow opposing departures but still needs a complete duty and driver plan. If one assignment is unavailable, dependable service requires a contracted accessible substitute and qualified driver.

Current safe pickup points, accessible paths, turnarounds and any workplace/campus diversions require a field review. The reference one-vehicle subsidy is \$381,880 before grants/startup; this is not a corridor-specific estimate and may be excessive relative to a limited weekly partner option. Principal obstacles are small settlement populations, dispersed origins, employer timing, deadhead, seasonal demand and duplication of booked trips that already work.

6.6 Tilbury Wheatley and Leamington

Tilbury's published count is 4,687 and Wheatley's 2021 population-centre count is 3,060. Leamington is an external destination and travel market whose relevant stop catchment must be measured. Tilbury manufacturing, Wheatley-area employment, Leamington-area employers, Erie Shores HealthCare and shopping are destinations to test, not assumed transit contracts or ridership guarantees. [39, 40, 44]

SECC currently provides accessible booked journeys in this area; LT-Go provides local Leamington mobility. An open-to-public scheduled service could add commute windows, predictable returns or a simpler through journey, but those differences must be evidenced. The CK portion can be reviewed first; a full Leamington operation must satisfy legal, insurance, stop-use and partner arrangements.

The retained 140–180-minute full-cycle band is only a screen. A possible one-vehicle service needs selected outward and return windows supported by operator-tested duties. Two vehicles assigned here might permit opposing departures; splitting one onto an unrelated corridor would reduce that capacity. Route D to Tilbury takes 100 minutes from the Chatham terminal at the selected published outward timepoints, so adding a Leamington transfer may be unattractive for Chatham-origin passengers. Assess the full journey, including final local access and return, rather than only the new segment. [23]

Tilbury, Wheatley and Leamington stops need accessible waiting and transfer arrangements. Agreements are needed for the proposed integrated partnership's stop use, fares, accessibility, responsibilities and any relied-upon contributions. Statutory authority to cross the boundary is a separate question under Section 14; cost-sharing is not universally the legal prerequisite for every bus link. The one-vehicle reference subsidy is \$381,880 before contributions, grants and startup. CK's share remains unknown until a binding agreement exists; assume 100% exposure for the municipal downside test. Principal obstacles include cross-boundary governance, rural last-mile access, driver spans, fare-media compatibility and uncertain partner participation.

6.7 Longer term Wallaceburg and Sarnia

Wallaceburg is the CK anchor; Sarnia destinations could include hospital services, postsecondary training, employment and regional transfers. Their location-specific catchment and access schedules need joint research. Sarnia's published intercommunity connections point toward London/Middlesex and Huron Shores communities;

they are relevant transfer possibilities but must be checked against actual timetables and continuation funding. [29]

The assumed 190–240-minute full cycle indicates substantial resource requirements, and its upper passenger portion exceeds the eight-hour/85% allocation for two returns. No number of daily cycles is promised. Continuous hourly departures at a 240-minute cycle would need at least four active vehicles before backup, with driver hours and service span priced separately. The standardized one-vehicle subsidy is only a comparison input; long-distance mileage, duties and accessible rescue may increase it substantially. Initial pilot figures do not include a Sarnia service or outside contribution.

The analysis needs Sarnia/Lambton and intermediate municipality participation, stop rights, accessible local transfers, operator coverage and a clearly defined CK resident benefit. Do not assume all intermediate communities should receive identical frequencies. This corridor is retained as a longer-term option rather than included in the launch pilot budget.

6.8 Comparative priority matrix

The following is a qualitative comparison, not a validated route ranking. Existing route presence is known; additional demand and journey cost have low evidence confidence. Retain the original possible weighting framework only for later consultation: unmet demand 30%, cost per added usable journey 25%, employment/health/education access 20%, accessibility 10%, implementation/partners 10% and geographic equity 5%. No numerical score is assigned without comparable data. Legal authority, accessible delivery and funding are mandatory conditions rather than benefits that a high score can offset.

Corridor	Duplication exposure	Demand evidence now	Delivery complexity	Provisional study sequence
A corridor	High for parallel service	Existing use must be obtained	Lower for optimization; higher for new hours	Immediate existing-service optimization
C corridor	High for parallel service	Campus and shifts require verification	Lower for optimization; stop access may constrain	Immediate existing-service optimization
Thamesville/Bothwell	Moderate because partner trips exist	Small published anchors; unmet scheduled demand unmeasured	Medium within CK; partner integration required	Feasibility alongside southwest and provider expansion; no presumed winner
Tilbury/Wheatley/Leamington	Moderate to high by trip type	Cross-boundary origin/destination data absent	High; external partner, fares and insurance	Feasibility alongside eastern alternatives; pilot needs useful demand and viable terms
Wallaceburg/Sarnia	Direct-link duplication not established	Unmeasured corridor demand	High; long cycle and multiple partners	Longer-term screen after initial pilot evidence

No corridor receives pilot approval from this matrix. First screen accessibility, authority and budget feasibility as pass/fail requirements. Then score options with documented rider evidence, displacement from existing services and full costs. The top score does not override a failed legal or funding gate. Additional original-network links, such as a faster Chatham–Tilbury trip, should be assessed through Route D optimization rather than automatically creating a sixth standalone corridor.

Priority can change if measured shifts or appointments show stronger southwest demand, Four Counties can provide the same eastern returns at lower incremental cost, or retimed A/C services solve most barriers. Compare options using the same activity windows, geographic definitions, accessible trip promise and cost boundary. The comparison must show confidence, denied or lost existing trips, financial dependence on partners and uncertainty; a corridor may warrant partial-week or booked service rather than daily fixed operation. No corridor is rejected merely for small population, but no population establishes a passenger target.

7 Timetables reliability and frequency

7.1 Timetable design from duty feasibility

Design the timetable from rider arrival and return needs, then build vehicle blocks and driver duties. Account for non-revenue travel to and from the depot, inspection, refuelling/charging, meal and rest arrangements, driver handover, accessible boarding, recovery and weather. Split morning/evening duties can create premium or minimum-pay costs even when vehicle service hours appear modest.

A useful eight-paid-hour allocation could be split between morning, midday and evening windows. It cannot be assumed to operate continuously across a 16-hour span for the same cost. Staff must obtain executable rosters and confirm the applicable employment and commercial-driver requirements, including any exemptions, before procurement.

An illustrative 08:00–16:00 activity on a 75-minute corridor requires departure around 06:45 and return arrival around 17:15 before local access and recovery, an elapsed span of about 10.5 hours. This is an explicit test case, not an employer roster. It may fit eight paid hours only with a real lawful split-duty arrangement, guaranteed availability and priced minimums/relief. Twelve-hour or rotating shifts, early classes and variable appointments need different windows. No institution-specific roster has been obtained; collect it before claiming commuter, class or healthcare utility.

For a single simple corridor, required active vehicles are at least the round-trip cycle divided by the target headway, rounded up. A 180-minute cycle needs three active vehicles for hourly service, or six for a 30-minute headway, before spare coverage. Two buses evenly spaced on that corridor can at best provide a 90-minute headway while both operate. Splitting the two between corridors restores each to roughly its full cycle headway. This arithmetic illustrates why an all-corridor frequent grid cannot be sold as a two-vehicle pilot.

7.2 Transfer protection and backup

Propose a 10–15-minute connection allowance for initial testing, extended where an accessible transfer path or booked OnRequest journey needs it. These are assumptions; actual terminal dwell, boarding and on-time data must set the final allowance. A short controlled hold may protect a connection, but repeated holds can break downstream shifts. Define hold limits, dispatch authority and the funded recovery option in the contract.

The operator must have access to a compatible accessible substitute vehicle and a trained replacement driver. “Two vehicles” refers to two scheduled assignments, not a complete fleet with no spare. If one fails, simply withdrawing the other from its route transfers the failure to another rider. A shared spare can be efficient, but staff must verify response time, existing obligations and simultaneous-failure coverage.

Reserve capacity should specify who supplies the vehicle, lift/securement capability, how long replacement takes, who pays, and how passengers receive an accessible trip or cancellation information. A one-vehicle pilot without a credible substitute should not launch. The proposed delivery and punctuality goals in Section 16 require operational validation and contract drafting. Monthly management must act on recurring failures rather than wait for a quarterly public report or a low cancellation threshold.

For severe weather or road closures, safe cancellation is preferable to unsafe operation. The scorecard should distinguish uncontrollable cancellations from operator failures while reporting both. Provide phone support, notices at stops and communication to booked riders. Riders needing essential returns should receive a clear, funded contingency protocol; do not imply unlimited taxi rescue in an unpriced promise.

8 Fare integration and household affordability

Build on Ride CK's current smartcard, cash and transfer rules. The near-term improvement is a readable common timetable and fare guide, explaining urban top-ups, regional transfers, affordable-pass boundaries and college-pass eligibility. A new software procurement is not needed merely to restate current rules.

Test a regional pass, employer-supported passes, a day cap or concession extension against revenue, affordability and administrative costs. A concession needs a named beneficiary group and an approved subsidy. The existing affordable urban pass does not automatically cover interurban journeys; do not advertise it as a regional product. [7]

For illustration, two \$4.36 interurban Cash Pass fares on each of 20 workdays cost \$174.40 per month before any additional required fares; exact cash at \$5.50 would cost \$220. These are derived examples, not a promise that every return journey has exactly two fares or that a rider qualifies for a pass. An urban connection within the applicable interurban transfer window may be included, while a longer gap can change the total. [4, 7]

Fare revenue must be modelled as earned incremental system revenue attributable to the service. Cash collected through a smartcard purchase is not necessarily earned when a trip occurs; distinguish unredeemed stored value, pass allocation, refunds and transfers. Boardings do not necessarily create a new payment, and riders switching from an existing service may create no additional system revenue. Retain \$3 per pilot boarding only as a sensitivity input, with lower yield tested in Section 12.10. A future integration agreement must prevent allocating the same pass or transfer revenue to both services.

Leamington or Sarnia fare integration requires negotiated ticket recognition, revenue allocation, customer support and treatment of cancellations. CK cannot unilaterally set another service's fares or transfer policy. Telephone access, cash payment where operationally available and accessible fare options should be core requirements. A smartphone or credit card should not be necessary to understand the network.

9 Vehicles operating alternatives and technology

9.1 Four operating alternatives

Model A is a substantive comparator, not a substitute for the long-term vision. It can produce useful regional access if the main barrier is existing timing or information. Model D remains the conditional destination if pilots establish a sustainable case.

Model	Vehicle and hour assumptions	Workforce and reliability	Illustrative municipal cost
A Optimize Ride CK	No additional dedicated vehicle; retime and integrate existing service	Existing operator duties must remain executable; no free spare assumption	\$25,000–\$75,000 incremental annual coordination/information allowance; actual added hours separately priced
B One vehicle pilot	One scheduled accessible vehicle; 2,080 paid hours/year; weekday example	About 1.3 FTE equivalent including assumed uplift; roster and any additional relief unverified; accessible substitute required	Reference gross \$406,840; fares \$24,960; net \$381,880 before grants/startup

Model	Vehicle and hour assumptions	Workforce and reliability	Illustrative municipal cost
C Two vehicle pilot	Two scheduled vehicles; 4,160 paid hours/year	About 2.6 FTE equivalent including assumed uplift; real roster and simultaneous backup unverified	Reference gross \$783,680; fares \$49,920; net \$733,760 before grants/startup
D Gradual network	Each expansion has its own vehicle blocks, service hours and capital plan	Additional qualified drivers, dispatch and spare capacity; no two-bus full-network assumption	Five-vehicle illustration: gross \$1,914,200; fares \$124,800; net \$1,789,400 before grants/startup

All cost figures are explicit assumptions from Section 12, including Model A's allowance. Model D assumes five assignments, each eight paid hours for 260 days, at \$145 per paid hour plus 15% uncertainty and \$180,000 municipal annual costs. It illustrates scale, not a costed five-corridor timetable. It would still provide limited service windows rather than a universal hourly grid. A five-vehicle quantity is not a recommendation to procure five vehicles.

Model B is appropriate where one route and a limited set of windows can answer the pilot question. Fixed overhead prevents it from costing exactly half of Model C. Model C can allocate both vehicles to one corridor for more useful opposing departures, or one per corridor for lower frequency. Either choice needs explicit publication; it cannot promise both benefits at once.

9.2 Acquisition and delivery options

Option	Potential advantage	Cost and risk to compare
Competitively contracted vehicle and operator	Existing dispatch, maintenance and relief capacity may reduce mobilization	All-in scope, minimum hours, kilometres, indexation, spare response and data rights
Expanded incumbent agreement	Existing fare integration and municipal fleet familiarity	Valid variation authority, competitive obligations, contract expiry and transparent value-for-money test
Municipal purchased minibuses with contracted drivers	Asset control and residual ownership	Capital, allocation of maintenance/insurance, warranty, reserve funding and idle-asset risk
Municipal leased shuttles	Avoids full purchase cash at launch	Lease term, usage limits, fit-out, return condition, insurance and early termination
Incremental existing fleet use	May avoid immediate purchase	Actual spare availability, displacement of current service, lifecycle wear and operator duty cost
Municipal in-house operation	Direct scheduling and service control	Recruitment, supervision, labour arrangements, facilities, dispatch, safety systems and full overhead

A 12–20-passenger shuttle is a candidate vehicle class, not a universal specification. Tenderers must declare seating with wheelchair positions occupied, lift/ramp ratings, mobility-aid dimensions, securement, entry clearance, baggage space and winter comfort. Nominal capacity can shrink substantially when accessible spaces are used. Procurement must accommodate real riders rather than select a small vehicle solely for its headline price.

The owned model's 15% additional driver hours already allows for some relief, training and scheduling. It is not a second 15% on vehicle hours and does not prove all leave, split duties and rescue driving are covered. Use a paid-person ledger showing the item covered by each allowance, available duty hours and simultaneous assignments. Contractor rates must declare the same responsibilities. An FTE equivalent cannot establish how many qualified people are actually available on a given day.

9.3 Conventional hybrid and electric fleet comparison

The pilot should be propulsion-neutral pending whole-life bids and route testing. Conventional vehicles have familiar refuelling and recovery arrangements but fuel-price and maintenance exposure. Hybrid vehicles may save fuel on some duty cycles, but stop patterns and vendor support matter; no savings percentage is assumed. Battery-electric vehicles require demonstrated cold-weather energy, battery reserve, charging time and compatible accessible backup.

A November 26, 2024 federal backgrounder identifies CK's fleet-electrification planning project, with \$100,372 federal and \$25,093 municipal funding. Obtain that study, agreement and completion status before commissioning further propulsion analysis. The announcement establishes a funded planning project, not an electric fleet purchase, lower operating cost or a new CK Connects award. [72]

Use the same mileage, service duty, seating/accessibility capacity, discount rate and asset life for comparison. Include purchase or lease, charging and power connection, demand charges, electricity losses, heating, scheduled and unscheduled maintenance, battery warranty/replacement, downtime, residual value and disposal. Compare vehicles at equal delivered service reliability; extra electric spares or midday charging are costs, not free adjustments.

An illustrative energy comparison, not a local measured result, uses 0.18 litres/km at \$1.65/litre for a conventional shuttle: \$0.297/km. An electric assumption of 0.70 kWh/km at \$0.20/kWh yields \$0.14/km, or \$19,594 less energy cost at 124,800 annual kilometres. A winter assumption of 1.10 kWh/km at \$0.25/kWh yields \$0.275/km, only \$2,746 less. Neither calculation includes charger capital, demand charges, battery costs or extra downtime, and neither is used as a booked saving.

Maple City Power could later compete or partner for infrastructure where permitted and independently justified. Its existence, grants, energy profits and charging prices are not assumed. Transit should not depend on another unapproved venture's business case. Keep transport contracts, energy supply, charging assets and any grant stacking transparent and separately authorized.

10 Cross boundary partnerships

The original Tilbury–Wheatley–Leamington concept should start with a joint origin/destination study, involving existing operators, Leamington, the relevant Essex municipal authorities and institutions. A later Wallaceburg–Sarnia concept should engage Sarnia, Lambton and any affected intermediate authorities. Indigenous communities should be engaged where the service area or partnership involves them; no route through a community or contribution from it is presumed.

For each partnership, a written agreement should define service territory, permitted pickup/drop-off, stops, accessible transfers, hours, customer support, fare-media recognition, revenue distribution, contract management, safety standards, data handling and responsibility for vehicle incidents. Legal authority to cross a boundary is distinct from authority to impose a partner's budget or operate local-only services under its rules.

Cost-sharing should distinguish vehicle hours, kilometres, deadhead, stop capital and fixed administration. Possible approaches include a negotiated fixed annual amount, a service-kilometre share with common overhead, or a combination of local coverage and trip-purpose benefits. No allocation is inherently fair; publish the assumptions, reporting and revision rules. CK's budget should show the full exposure if the partner withdraws.

Employer arrangements could include pass purchases, a minimum revenue commitment, a contribution for an additional shift trip or stop access. Contributions require written amounts, duration and exit terms. A letter of support is not revenue. Open public access and fair allocation of service should be maintained; an employer cannot obtain a public procurement preference by sponsoring the route.

Healthcare and educational institutions can supply schedules, safe stops and travel information. They should not be portrayed as committed financial partners without agreement. Regional transit cannot guarantee discharge transport, patient supervision or emergency response that requires a separate medical service.

The official Leamington notice links LTW's April 30, 2026 closure to expired provincial support and Essex County declining ongoing funding. It establishes a sustainability and passenger-transition risk, not identical demand or costs for CK corridors. Define recurring contributions and orderly withdrawal before relying on temporary funding. A partner exit must not silently transfer its subsidy or stranded-passenger obligations to CK. [13]

11 Accessibility safety and equity

Accessibility is a launch requirement and recurring cost. A lift-equipped vehicle alone does not deliver an accessible trip if the stop is unreachable, the transfer is rushed, booking is inaccessible or no substitute vehicle can carry a mobility aid. The proposed scope must be reviewed with users and the Accessibility Advisory Committee before final procurement.

Ontario's integrated accessibility regulation addresses equipment, training, emergencies and support persons in ss. 34–38; boarding assistance and time in s. 44; alternative accessible methods in s. 45 where applicable; stops/disruptions in ss. 47 and 50; and announcements and vehicle features in ss. 51–62. Specialized provisions include eligibility, fares, origin-to-destination service, connections, hours and booking in ss. 63–71. Section 70 is the hours-of-service provision. Adding a regional corridor requires a model-specific interpretation: an accessible bus does not alone satisfy needs of residents unable to reach or use its stops, and expansion does not automatically establish that every current urban specialized boundary must expand. Legal advice must address actual providers, service jurisdiction and Human Rights Code accommodation. [12, s. 45 and ss. 63–71; 65, ss. 1, 11, 17]

Requirement	Pilot specification	Evidence for launch approval
Vehicle access	Appropriate ramp/lift, securement, mobility space and announcements	Inspection, configuration review and boarding test with users
Stop access	Firm boarding area, safe crossings, approach path and winter upkeep	Site assessment, road-owner consent and maintenance responsibility
Booking and information	Phone/web access, accessible formats and clear transfer instructions	Tested service channels and accessible customer guide
Accessible alternative	Defined method for a person unable to use the conventional service	Legal assessment, contracted capacity and separately funded allowance
Disruption response	Accessible rescue/substitute arrangements and clear communication	Operator drill, dispatch protocol and response-time commitment
Safety	Qualified drivers, inspections, emergency response and incident reporting	CVOR/vehicle review, insurance evidence and training records

Safety specifications should include fatigue management, driver screening appropriate to the role, vehicle inspection, securement training, emergency evacuation, collision response, weather decisions and harassment reporting. No driver should be assigned a vehicle outside the appropriate licence class. A proposed 12–20-passenger bus normally falls within Class F requirements; air brakes require the relevant endorsement. [45]

Require accessible boarding pads and paths with a named winter-maintenance owner; vehicle-specific securement and occupied mobility-space capacity; telephone booking, changes and accessible confirmations during the necessary hours; stop and passenger interruption notices; and a safe return-home protocol for a failed

last connection or breakdown. Contracts must name dispatch authority, response limits, assistance and who pays. Test a substitute operation with the actual passenger accommodation configuration. A spare without a qualified available driver is not backup. Emergency services should be used for emergencies, not as an unpriced substitute for routine transit rescue.

Protect existing specialized capacity and partner services. A pilot must not achieve a low reported cost by moving accessibility obligations off-budget or displacing current trips. Track requested, completed and denied accessible journeys by reason and corrective action. Publish aggregated data without exposing individual disability, employment or medical details.

The \$25,000 reference annual alternative-service allowance in Section 12 is unsupported by trip volumes or a verified legal scope. It is neither an established cost nor a ceiling on accommodation. Build the price from required origins, eligibility, hours, booked and emergency trips, kilometres, assistance, waiting and available accessible vehicles, with separately defined overflow responsibility. Accessibility must not be removed or underfunded to meet a boarding-cost target. No launch occurs until the applicable service duty and enforceable substitute arrangements are funded.

Geographic equity requires a transparent balance between high-use corridors and smaller communities. Council may choose a higher subsidy for a necessary rural connection, but it should state the service purpose, cost ceiling and alternatives. It should not suppress low ridership data or pretend every community can receive equal frequency at equal cost.

12 Fiscal baseline and financial scenarios

12.1 Baseline reconciliation and accounting boundaries

The municipality's existing transit budget is not the CK Connects expansion budget. The \$3.75 million asset-plan operations figure is a planning value, and the \$977,409 provincial gas-tax allocation is existing system support. The municipal gas-tax report says that allocation is already included in the 2026 transit operating budget. Reusing it for a pilot can create a hole in base service; it is not new money. [8, 14, 32]

Before approval, Finance should provide actual and budgeted operations, maintenance, fare receipts, provincial/federal revenue, reserve transfers, debt service, municipal tax subsidy, partner payments, contract minimums and capital commitments. Separate current transit, incremental CK Connects and any displaced service. Reconcile municipal accounting categories and use net non-recoverable taxes consistently.

The asset-plan \$3.75 million and the operator-extension estimates describe different sources, price years and scopes. Compare each with the same calendar-year service definition, identify municipal internal costs and assets outside the operator price, and bridge gross spending to earned fares, confirmed grants and tax-supported subsidy. The extension term crosses municipal years; its \$7.11 million recommendation is not a second amount to add to the calendar-year program costs. Neither source alone establishes the current net subsidy, cost per passenger or spare capacity. The earlier operator-award report also identifies separate fleet reserve treatment, reinforcing the need to check who owns and renews each asset. [8, 58, 59]

All scenarios below use \$0 in new operating-grant and partner revenue. They do not deny existing capital/planning announcements, which remain restricted to their own projects. Prices are illustrative inputs, not bids or approved budgets. The retained totals exclude recoverable taxes and do not demonstrate a complete non-recoverable-tax reconciliation; Finance must apply the actual tax treatment to each invoice. The vendor rate and municipal add-ons must not silently change between tax-inclusive and tax-exclusive bases. Contingency is a spending provision, not a prediction that every reserve dollar is spent or a reimbursable grant cost.

12.2 Original Draft 1 arithmetic audit

Two scheduled vehicles $\times$ eight paid hours/day $\times$ 260 days/year = 4,160 paid vehicle hours. Original gross cost = hours $\times$ assumed vendor hourly rate $\times$ 1.15. Original fare revenue = hours $\times$ assumed boardings/hour $\times$ \$3. Net operating requirement = gross cost less fares.

Original case	Hourly rate	Boardings per paid hour	Gross with 15%	Fares	Original net
Low cost high use	\$110	6	\$526,240	\$74,880	\$451,360
Reference	\$145	4	\$693,680	\$49,920	\$643,760
High cost low use	\$185	2	\$885,040	\$24,960	\$860,080

The arithmetic passes. The weakness is scope: Draft 1 did not demonstrate which costs were included in the hourly rate and excluded municipal administration, accessible alternative trips, stops/technology operations and capital unless explicitly covered. Pairing low cost with high use and high cost with low use is a stress envelope, not a probability distribution or ridership forecast. The reference is not “most likely.”

12.3 Revised contracted pilot assumptions

For the revised comparison, the hourly rate is assumed to include the assigned accessible vehicles' acquisition/lease and renewal costs, qualified driver wages/benefits/relief, fuel, insurance/licensing, routine maintenance/cleaning, vendor dispatch/technology and contractual accessible spare coverage. Require line-item confirmation in bids. If any item is excluded, add it separately and recalculate. No municipal fleet replacement reserve is added for vendor-owned assets already priced into the contract.

Assumption	Reference input	Status and consequence
Scheduled vehicles	2	Assumed pilot assignments, not total available fleet
Paid vehicle hours	4,160 annually	Includes assumed non-revenue activity; operator billing definition must be verified
Passenger-service share	85%	Assumed 3,536 hours; excludes recovery/deadhead counted once in the non-revenue ledger
Annual kilometres	124,800	Assumed 30 km/paid hour, not derived from a corridor duty; replace with measured service and depot mileage
Vendor hourly rate	\$145	Illustrative fully scoped rate, not a quotation
Uncertainty provision	15% of vendor envelope	Retained from Draft 1; not a substitute for pricing excluded services
Boardings	16,640	Assumed four per paid hour, equivalent to 4.71 per passenger service hour
Earned incremental fare yield	\$3 per pilot boarding	Sensitivity only; transfers, pass allocation, refunds, stored value and displaced receipts unverified
Municipal contract oversight	\$45,000 annually	Assumed staff/administration budget outside vendor fee
Accessible alternative trips	\$25,000 annually	Assumed allowance; legal/service requirements can exceed it
Stops and municipal technology upkeep	\$20,000 annually	Assumed incremental annual allowance; initial construction priced separately
Grant and partner revenue	\$0	No incremental CK Connects award or signed contribution verified

Municipal overhead allowances for low/reference/high cases are respectively \$30,000/\$45,000/\$60,000 administration; \$15,000/\$25,000/\$40,000 accessible alternatives; and \$15,000/\$20,000/\$30,000 stops/technology. Total add-ons are \$60,000/\$90,000/\$130,000. These amounts are assumptions, not derived from Ride CK accounts. Backup vehicle/driver coverage is assumed inside the vendor fee, whereas disability-related alternative trips outside the conventional service are separate.

A common-scope market schedule must show vehicle ownership and renewal, paid/billable vehicle and driver hours, kilometres, split-duty and minimum-pay terms, fuel indexation, dispatch/customer service, insurance, maintenance, accessible spares and drivers, startup and termination. Separate conventional breakdown rescue from disability-related alternative transportation. If any assumed inclusion is excluded, add it once and recalculate all models. No currently obtained CK contractor quote confirms \$145/hour or the spare, administration or accessibility allowances.

12.4 Revised annual contracted scenarios

Annual item	Low cost high use	Reference	High cost low use
Vendor base cost	\$457,600	\$603,200	\$769,600
15% uncertainty	\$68,640	\$90,480	\$115,440
Municipal annual add-ons	\$60,000	\$90,000	\$130,000
Gross operating envelope	\$586,240	\$783,680	\$1,015,040
Assumed boardings	24,960	16,640	8,320
Fare revenue	\$74,880	\$49,920	\$24,960
Net operating requirement before new grants	\$511,360	\$733,760	\$990,080
Gross allocated per scheduled vehicle	\$293,120	\$391,840	\$507,520
Net allocated per scheduled vehicle	\$255,680	\$366,880	\$495,040

The per-vehicle values allocate total overhead equally for presentation; a new third vehicle need not have the same marginal cost. With no assumed incremental funding, the net requirement is also the illustrative CK municipal operating subsidy. If approved grants or binding contributions are later added, show both the pre-grant requirement and actual local share. Do not label grant support as a reduction in the underlying operating cost.

For a conditional tax sensitivity only, the operator report's treatment implies 1.76% non-recoverable HST on its pre-tax base: 13% charged less an 11.24-percentage-point rebate. If the retained \$693,680 vendor envelope is tax-exclusive and taxable, the added net tax is \$12,208.77. Reference gross would then be \$795,888.77 and net \$745,968.77, before any net tax on municipal external add-ons. These are assumptions, not corrected universal totals; if \$145 already includes net tax, adding it again double-counts. Unspent contingency is not an invoice, and municipal wages are not assumed taxable. Finance must reconcile actual taxable expenditure, rebate entitlement, reserve use and cash timing. [58]

12.5 Unit costs and usable return journeys

The cost-per-pilot-boarding calculations remain valid arithmetic under assumed use. Paid-hour costs divide by 4,160; passenger-service-hour costs divide by 3,536. Pilot boardings are not people or complete journeys. These reference values do not price actual corridor demand, additional journeys or unpriced liabilities.

Metric	Low	Reference	High
Gross per paid vehicle hour	\$140.92	\$188.38	\$244.00
Gross per passenger-service hour	\$165.79	\$221.63	\$287.06
Gross per pilot boarding	\$23.49	\$47.10	\$122.00
Net before new grants per pilot boarding	\$20.49	\$44.10	\$119.00
Cost per additional usable completed return	Not established	Not established	Not established

Draft 2's conversion of pilot boardings into returns by dividing by four is removed. Its four-leg example included regional and urban vehicles in each direction, while 16,640 modelled boardings counted pilot vehicles alone. A whole-network calculation needs the whole-network numerator and consistent cost/fare boundary. No simple divisor can establish actual completed or additional journeys.

Measure	Definition	Evidence and reporting boundary
Pilot vehicle boardings	Each entry onto a pilot vehicle	Counts by assignment, trip, stop and time; transfers identified
Entire-network boardings	Entries onto all relevant regional, urban and partner vehicles	Common definition and linked providers; never substitute pilot counts
Unique passengers	Distinct people using the service in a defined period	Privacy-preserving deduplication or representative sample; disclose limits
Completed one-way journeys	Origin to final destination reached	Linked legs or journey survey; failed transfers are retained
Completed return journeys	Outward and homeward journeys completed for the activity	Paired observations, actual activity window and safe return
Additional journeys made possible	Completed trips impractical under the comparable baseline	Before/after cohort test including time, access, eligibility and affordability
Usable return opportunities	Timetable combinations that could satisfy defined activity needs	Schedule simulation; availability is not actual use

A practical pilot method should collect a stable trip identifier and route/stop/time record, using consent-based journey linkage or a representative passenger diary/intercept survey where electronic linking is unavailable. Record origin zone, final destination, activity window, all legs, transfers, actual arrival and return, cost, mobility accommodation, cancellations and rescue. Avoid collecting identifiable medical or employment details beyond need. Agree privacy, retention, sampling and access with Legal and the evaluator before launch.

Establish the same cohort's baseline using existing Ride CK, Four Counties, SECC and other eligible services over comparable weekdays, school terms and seasons. Separate existing users switching, improved trips, new users and additional completed returns. Record failed, denied and unpaired journeys, response rates and uncertainty. Validate counts against dispatch and boarding records. An app-based sample alone may exclude people who book by telephone.

Publish available return opportunities and observed completed returns separately. Report a gross and pre-grant net unit cost per pilot boarding. Calculate cost per additional usable completed return only once a defensible additional-return denominator and incremental system-cost boundary exist. Include displaced revenue, necessary feeder/urban increments and accessibility alternatives in that boundary, while avoiding allocation of the same full

urban budget to every pilot. Grant support changes local financing, not underlying resource cost. Until then the additional-journey metric is “not established.”

For mathematical context only, if every one of the 16,640 pilot boardings could be paired into an outward and return use of one connector, there would be 8,320 returns and $\$733,760 \div 8,320 = \$88.19$ net per return. If only half were additional to the baseline, the corresponding result would be \$176.38; at 10% additional it would be \$881.92. These are denominator sensitivities, not forecasts, observed benefits or adopted journey-cost thresholds. Transfers between pilot vehicles, one-way use and failed returns alter them.

12.6 One vehicle and scale alternatives

Model B assumes 2,080 paid hours at \$145, 15% uncertainty, \$60,000 municipal annual overhead and four boardings/hour at \$3: \$346,840 vendor envelope + \$60,000 = \$406,840 gross; \$24,960 fares; \$381,880 net. Its municipal add-ons are assumed \$30,000 administration, \$15,000 accessible alternatives and \$15,000 stops/technology. Contractual spare coverage remains mandatory. Startup is separately illustrated at \$90,000, not half of the two-vehicle figure.

The two-vehicle reference adds a second assignment for \$351,880 more net annually than Model B under these assumptions. This difference includes the added vendor work and \$30,000 additional municipal overhead, less fares. It is not a transferable marginal price from a tender.

Model D's five-vehicle illustration uses 10,400 paid hours, \$145/hour, 15% uncertainty, \$180,000 municipal annual overhead and four boardings/hour at \$3. Gross is \$1,914,200 and net \$1,789,400. It excludes expansion capital/startup and any special cost of the longer Sarnia corridor. Council must approve each expansion block separately; the model does not validate all proposed service frequencies.

12.7 Purchased vehicle and municipal operating comparator

This bottom-up model tests whether a fully scoped contracted rate is competitive. It is not an in-house staffing plan. Assumptions are two purchased accessible conventional minibuses at \$250,000 each; eight-year life; zero residual value; 124,800 annual kilometres; 4,160 paid vehicle hours; paid driver hours 15% higher for relief/training and scheduling; \$32/hour wage plus 30% benefits/payroll loading. At 1,850 available paid duty hours per FTE, 4,784 driver hours represent approximately 2.6 FTE equivalents, not a two-person roster.

Owned comparator annual component	Assumption	Annual amount
Driver wages benefits and relief hours	$4,784 \times \$32 \times 1.30$	\$199,014
Fuel	$124,800 \text{ km} \times 0.18 \text{ L/km} \times \$1.65/\text{L}$	\$37,066
Maintenance and cleaning	\$0.28/km	\$34,944
Insurance	\$16,000 per vehicle	\$32,000
Licensing inspections and training	\$4,000 per vehicle	\$8,000
Accessible spare/rescue retainer	\$12,000 per scheduled vehicle	\$24,000
Administration dispatch and supervision	Assumed	\$45,000
Depot and utilities allocation	Assumed	\$20,000
Accessible alternative transportation	Assumed	\$25,000
Stops and technology operations	Assumed	\$20,000
Cash operations subtotal	Unrounded components	\$445,024

Owned comparator annual component	Assumption	Annual amount
15% contingency on subtotal	Assumed	\$66,754
Gross cash operating envelope	Subtotal plus contingency	\$511,778
Fare revenue	Same reference demand/yield	\$49,920
Net cash operating requirement	Before grant support	\$461,858
Annual vehicle renewal contribution	\$500,000 divided by 8 years	\$62,500
Net annual budget including renewal	Cash requirement plus reserve	\$524,358

Purchase cash is separately \$500,000, plus startup. The \$62,500 renewal contribution transfers funds to a municipal reserve: it is a budget allocation and retained financial asset, not another external resource expense or the same year's second vehicle purchase. Municipal cash flow, tax-supported budget allocations and whole-life economic cost must be shown separately. Economic comparisons should use identical delivered service, initial assets, future renewal, residual value, financing and an explicit common discount rate; no net-present-value ranking is asserted without those inputs.

The assumed spare retainer may be insufficient to secure a suitable local vehicle. Driver pay, benefits, split-duty premiums, supervision, facilities, insurance and maintenance are unverified. Existing municipal capacity may carry an opportunity cost; it should not be valued at zero. The apparent saving compared with the \$145 vendor case is a reason to request market and in-house evidence, not a conclusion that municipal ownership is cheaper. A hybrid owned-fleet/contracted-operation option needs its own bid.

The 4,784 driver-hour assumption already includes 624 hours above 4,160 paid vehicle hours for an assumed 15% uplift. At 1,850 available duty hours per FTE, it gives 2.586 FTE equivalents. Do not add an unexplained second relief allowance or imply three employees can cover every simultaneous service, split duty, leave and rescue. Price a real roster, classify training and benefits consistently, and identify which availability assumptions remain outside the model.

For leasing, replace purchase cash and the owner's renewal reserve with actual annual lease payments, residual obligations and end-of-term costs. Keep maintenance, insurance, accessibility fit-out and spare obligations where the lease does not include them. No lease price is fabricated. The earlier brainstorming acquisition range is not used to infer a monthly lease payment.

Using the retained 3% cost escalation, 2% fare-yield escalation and fixed hours for five years, the owned comparator's unrounded \$511,777.60 gross cash operations and \$49,920 fares yield \$2,457,311 net cash operations in total. Initial acquisition of \$500,000 and \$125,000 startup bring external cash requirements to \$3,082,311 before financing, tax adjustments and excluded assets. Five flat \$62,500 renewal-reserve allocations add \$312,500 to the municipal budget view, giving \$3,394,811. That reserve balance is not additional resource consumption. These assumed totals do not establish a cheaper ownership option.

Comparable item	Fully contracted	Purchased fleet	Leased fleet
Service output	Same tested hours, journeys, accessibility and rescue	Same specification; price staffing and backup	Same specification; price availability and usage terms
Vehicle costs	Identify assets, renewal and residual in vendor price	Initial purchase and future replacement/residual	Actual lease, fit-out, mileage, residual and return costs
Operating cash	Inclusive quote plus only excluded municipal costs	Wages, fuel, maintenance, insurance, dispatch and facilities	Add operating components outside lease once

Comparable item	Fully contracted	Purchased fleet	Leased fleet
Annual budget	Gross/net with applicable taxes and commitments	Cash operations plus disclosed reserve allocation	Cash operations/lease plus any separate liability provision
Economic comparison	Resource cash flows with common asset scope	Include assets/residual; exclude reserve transfers as expense	Include actual payments and residual obligations
Current decision	No verified quote	No verified purchase or roster	No verified lease price

The contracted 15% provision is applied to vendor charges; the owned 15% is applied to all cash operating components. Municipal dispatch/administration and facilities also differ. Normalize those scopes before comparing annual totals. Do not count vendor-owned capital again as municipal acquisition, or remove a municipal replacement obligation because a vendor rate looks inclusive.

12.8 Startup capital and first year cash

Two vehicle contracted startup item	Illustrative amount	Confirmation required
Detailed service design and procurement support	\$25,000	Avoid duplicating the initial feasibility scope
Fare and information integration	\$20,000	Actual validator/software compatibility and data requirements
Accessible stop and modest hub works	\$40,000	Site designs, permissions, crossings and winter access
Launch communications and travel information	\$10,000	Accessible formats and operator/customer training materials
Mobilization and operational training	\$10,000	Distinguish operator-included training from municipal startup
Independent pilot evaluation	\$20,000	Defined scope, data access and independence
Total startup assumption	\$125,000	Separate Council appropriation; no new terminal or charger included

Use \$75,000 and \$200,000 startup stress alternatives as assumed scope ranges, not priced estimates. Add actual vehicle acquisition, depot work, charging, major terminal reconstruction, road/crossing works or other omitted capital separately. A contractor's annual vehicle charge is not a municipal purchase; a mobilization fee is not automatically included in its hourly rate.

The contracted reference first full year is \$733,760 net operations + \$125,000 startup = \$858,760 before new grants and the separate feasibility assessment. At the proposed maximum \$75,000 external study, the combined net illustration is \$933,760; gross with zero fare receipts is \$983,680. The owned budget illustration is \$524,357.60 including renewal + \$500,000 acquisition + \$125,000 startup = \$1,149,357.60, rounded to \$1,149,358. Each remains incomplete as a liability ceiling: net tax, exit payments, minimum guarantees, capital outside startup and accommodation overflow require explicit pricing.

12.9 Inflation five year exposure and year six

The reference continuation scenario holds hours and ridership constant, escalates the gross operating envelope by 3% annually and realized fare yield by 2% annually. These are assumptions, not negotiated indexation or fare policy. Startup is paid once in Year 1. Round figures are for presentation; calculations use unrounded amounts.

Operating year	Gross envelope	Fare revenue	Net before operating grants
1	\$783,680	\$49,920	\$733,760
2	\$807,190	\$50,918	\$756,272
3	\$831,406	\$51,937	\$779,469
4	\$856,348	\$52,976	\$803,373
5	\$882,039	\$54,035	\$828,004
Five year total	\$4,160,664	\$259,786	\$3,900,878
6 continuation test	\$908,500	\$55,116	\$853,384

The unrounded five-year net operating total is \$3,900,877.8668, rounded to \$3,900,878. Adding the retained \$125,000 startup gives \$4,025,878; adding a maximum \$75,000 external study produces \$4,100,878. These are continuation scenarios, not commitments already made or maximum contractual liabilities. A separately approved pilot should have a finite term and optional renewals with no automatic permanence. Annual budget appropriations do not erase signed multi-year guarantees or grant obligations.

A year-six decision must identify the recurring municipal source for approximately \$853,384 under the reference continuation assumptions, plus any excluded asset or debt commitments. If temporary operating support ends, use zero replacement grant in the test. Identify tax-supported funding, durable signed partner revenue or a redesigned scope. If Council cannot sustain the demonstrated service, do not approve a grant-led expansion that depends on an unverified rescue.

The same constant-scope continuation convention can compare the alternatives. The Model A central illustration uses \$50,000 annually for coordination, no extra vehicle hours and no assumed new fare receipts; its actual \$25,000–\$75,000 annual planning band does not price added service. Models B and D use Section 12.6. None of these figures authorizes a five-year commitment.

Alternative	Year 1 net operating	Five year net operating	Year 6 net operating
A coordination example	\$50,000	\$265,457	\$57,964
B one vehicle reference	\$381,880	\$2,030,076	\$444,081
C two vehicle reference	\$733,760	\$3,900,878	\$853,384
D five vehicle illustration	\$1,789,400	\$9,513,284	\$2,081,293

These alternative continuation amounts are before new grants, startup, feasibility and municipal capital. They hold assigned hours and boardings per paid hour constant and escalate gross and fare yield separately. D is a scale illustration with no full-network timetable. The owned cash/budget calculations above must be compared on the same delivered-service and asset boundary, and any actual lease/contract must replace the assumed indexation.

12.10 Sensitivity and failed funding

Hold the reference annual gross envelope at \$783,680 to isolate use and fare yield. This is distinct from the original paired low/high cost-and-use stress cases. The figures below are assumptions, not demand predictions; unchanged fixed costs mean low use worsens unit value more quickly than it changes the total subsidy.

Pilot boardings per paid hour	Annual pilot boardings	Assumed yield	Net before new grants	Net per pilot boarding
1	4,160	\$1.50	\$777,440	\$186.88
1	4,160	\$3.00	\$771,200	\$185.38
2	8,320	\$1.50	\$771,200	\$92.69
2	8,320	\$3.00	\$758,720	\$91.19
4	16,640	\$1.50	\$758,720	\$45.60
4	16,640	\$3.00	\$733,760	\$44.10
6	24,960	\$1.50	\$746,240	\$29.90
6	24,960	\$3.00	\$708,800	\$28.40

Reference assumed fares recover 6.37% of the gross envelope. A 20% rise in the vendor rate alone, keeping municipal add-ons fixed, makes gross \$922,416. At two boardings per paid hour and \$1.50 yield, net is \$909,936, or \$109.37 per boarding. If all gross costs instead rise 20%, gross is \$940,416 and the same use/yield produces \$927,936 net. Name the cost being stressed; those are different calculations.

Reference change	Derived annual consequence	Interpretation
Boardings fall 50% to 8,320	Fares \$24,960; net \$758,720	Cost largely persists while revenue falls
Realized fare yield falls to \$1.50	Fares \$24,960; net \$758,720	Transfers/concessions materially affect recovery
50% boardings and \$1.50 yield together	Fares \$12,480; net \$771,200	Combined downside is worse than either alone
No fare receipts	Net \$783,680	Full operating envelope becomes local exposure without support
Vendor hourly rate rises 20%	Gross \$922,416; net \$872,496	Much greater effect than moderate ridership changes
Paid hours rise 20% with boardings/hour unchanged	Gross \$922,416; fares \$59,904; net \$862,512	More hours are not free; overhead held constant for illustration
Passenger service share falls from 85% to 70%	2,912 service hours; gross \$269.12/service hour	Same paid budget buys less usable service
Cost inflation 5% and fare yield growth 2%	Year-six net about \$945,081	Inflation creates a larger post-grant obligation
Grant application unsuccessful	No reduction from pre-grant subsidy	Council must fund the approved local scope or defer/redesign

At the reference \$3 yield, gross farebox break-even would require approximately 261,227 annual boardings, or 62.8 boardings per paid vehicle hour. That is far above the model's assumed demand and is not a target or an operationally validated capacity. The policy does not promise fare self-sufficiency. Economic and community benefits may justify a subsidy, but they do not pay the operator's invoices.

Finance should present tax impacts using the actual eligible assessment base and approved funding-area method. Dividing the subsidy by population or an invented household count is not a valid residential tax estimate. Any special-area charge requires legal and equity review under the relevant municipal authority.

12.11 Benchmarks and less intensive alternatives

Huron Shores Area Transit's 2025 annual report provides an Ontario regional comparator: \$930,234 total operating cost, \$136,768 ledger fare revenue, 21,028 recorded boardings and 7,201 reported service hours. Derived values are \$129.18 gross per service hour, \$44.24 gross per boarding and \$37.73 after ledger fares, with 2.92 boardings/service hour. CK's four-per-paid-hour reference equates to 4.71 per passenger-service hour at 85%. HSAT reports missing express counts and differences between fare-system and ledger revenue, including unredeemed stored value. Its service mix, scope, hours and accounting differ, so it contextualizes rather than validates CK demand or a \$145 inclusive rate. [60, pp. 9–11, 18–20]

Kingston's rural preliminary investigation uses a \$100–\$150 hourly planning range. It is an estimate, not a CK bid. The displayed annual estimate does not transparently reconcile its stated two-vehicle 17.5-hour service span, so only the preliminary hourly range is used here. Neither comparator establishes an independently priced CK pilot. [61]

For the same passenger activity windows, request incremental prices for incumbent retiming/additional runs, Four Counties or SECC expansion, booked transport, demand-responsive feeders and partial-week scheduled service. Demand-responsive operation still needs dispatch, telephone access, paid deadhead and accessible rescue; it is not automatically cheaper. An illustrative two-vehicle three-day-per-week option uses 2,496 paid hours, the same \$145 rate, 15% provision, \$90,000 fixed add-ons, four boardings/hour and \$3 yield: gross \$506,208, fares \$29,952 and net \$476,256. This is a sensitivity, not a quote, and cannot provide five-day commuting.

12.12 Council spending and binding exposure

Council should approve separate annual gross operating authority, expected earned fares, maximum local subsidy, startup/capital appropriations, term and maximum enforceable exposure. The last measure includes every noncancelable amount authorized by operating, lease, purchase, grant and partner agreements: minimum hours, price escalation, notice-period service, mobilization/demobilization, lease return, net tax, asset commitments, grant clawbacks and passenger transition or accommodation responsibilities. Show optional renewals separately from current commitments.

No defensible dollar maximum can be set from the present scenarios without scoped prices and agreements. A \$733,760 net illustration assumes fares and excludes liabilities. A spending cap cannot excuse a statutory duty or erase a signed payment obligation. Legal and Treasury must certify how contract provisions implement the proposed limits, when staff must report an approaching ceiling, and which service/funding changes need Council approval. Reserve the required contingency against specified risks rather than assume a universal 15% can absorb every omission.

The zero-new-grant and zero-partner base remains the full pre-grant net requirement plus separately priced commitments. If a partner withdraws, the additional CK exposure equals the lost enforceable contribution plus redesign, notice and exit costs; no amount can be invented before agreement. Grant expiry, lower use, inflation and termination must be assessed before an operating contract, with an approved funded redesign or orderly cessation where continuation is unaffordable.

13 Funding and procurement discipline

13.1 Funding register

Maintain separate ledgers for existing system support, proposed incremental operating support, and eligible capital/planning funding. "Confirmed allocation" does not mean an uncommitted amount available to CK

Connects. Each grant must have a verified agreement, eligible expenses, start/end dates, matching contribution, reimbursement timetable and restrictions on stacking.

Source	Verified public status	Use and limitation for CK Connects
Ontario dedicated transit gas tax	CK 2025–26 allocation \$977,409; municipal report says included in 2026 transit operating budget	Existing base funding; any reserve/reallocation needs confirmation and must not leave base operations unfunded [14, 32]
Ontario Transit Investment Fund	Applications ongoing; time-limited up to five years; provincial annual fund increased to \$10 million for three years	Competitive gap/integration project; no CK Connects award verified [15, 16, 46]
Canada Public Transit Fund Baseline	Federal list identifies CK ten-year allocation of \$5,861,180	Capital and eligible planning; obtain CK agreement/capital plan and uncommitted balance, not operating-fare support [47, 48]
Rural Transit Solutions Fund	Planning/capital intakes closed; an existing Wallaceburg-area project is announced	No new pilot award; reconcile \$320,000 federal vehicle/shelter announcement and \$81,445 municipal amount with its own agreement [49, 50, 71]
Zero Emission Transit Fund	Planning/capital intakes closed; existing CK planning project announced in 2024	Obtain funded electrification study; \$100,372 federal/\$25,093 municipal for that project, not new pilot cash [51, 72]
CPTF Targeted stream	Current federal page describes call-specific rural/zero-emission/active-transport opportunities	Monitor actual intakes and eligibility; not a general operating grant [52]
Employer institutional or municipal partner	No signed CK Connects revenue verified	Count only enforceable amounts after agreement; disclose withdrawal exposure

The federal Baseline allocation is a material addition to Draft 1's funding review. The straight-line average of \$5,861,180 over ten years is \$586,118, but this arithmetic is not an annual entitlement schedule and must not be inserted into operating revenue. Existing fleet renewal and other approved transit/active-transportation projects may already claim it. [47, 48]

Baseline's current Ontario capital share is up to 40% of eligible cost and its eligible non-capital planning share up to 80%. Capital-plan, reporting, housing and other program conditions apply, and stacking with most other HICC programs is prohibited subject to specified exceptions. It does not provide ordinary annual operating subsidy. A capital grant can reduce an asset purchase while creating municipal matching and lifecycle obligations; obtain CK's agreement and committed project ledger. [48]

The published RTSF planning ceiling is \$50,000. The capital program can provide up to \$10 million for experienced applicants or those with a recent qualifying feasibility study, while applicants with neither face a \$250,000 ceiling. Provincial municipal projects can receive up to 80% eligible costs, subject to actual terms; mid-sized communities must show the rural project purpose. Ongoing operations, maintenance, insurance, fuel/electricity and refundable tax are excluded from the capital guide. The relevant intakes remain closed. ZETF's published guide allows up to 80% eligible planning and 50% eligible capital, but closure notices control current availability. No new grant is booked. [49, 50, 64, 69, 70]

Two existing announcements require reconciliation with feasibility. The May 27, 2026 federal backgrounder lists a Wallaceburg and surrounding-area on-demand vehicle/shelter project with \$320,000 federal and \$81,445 municipal funding. Its listed location does not by itself identify every recipient, agreement term, deployment or unspent balance. The November 26, 2024 backgrounder lists CK's electrification planning project with \$100,372

federal and \$25,093 municipal funding. Obtain both agreements, funded scope and completion status to avoid duplicate studies, assets or matching commitments. Neither amount is new unrestricted CK Connects revenue, and closed intakes do not negate previously announced projects. [71, 72]

13.2 OTIF constraints and staged contribution

OTIF remains an application-based opportunity, not a CK Connects funding commitment. The downloaded guide has repository edition 2024-09 and metadata updated October 7, 2024; MTO should confirm the governing edition and award terms before application. It requires a demonstrated gap, coordination, documented project-team roles and sustainable service, and excludes duplication. Relevant municipalities and First Nations should participate in the service-area framework or omissions be justified. The general published limits are 50% of total multi-year eligible project costs and 30% of final-year eligible cost. A uniform 50% limit is not necessarily imposed on each earlier year. [16, 46, pp. 4–9]

Retain the original possible 70/60/50/40/30 contribution pattern as a hypothetical taper for stress testing. Reimbursement can be calculated only against a verified eligible-expenditure schedule and the executed agreement. For year t , let $E(t)$ be actual properly eligible expenditure after all required adjustments, $a(t)$ the contracted contribution share, and $P(t)$ the payable amount subject to caps. $P(t)$ is not $a(t)$ multiplied automatically by the gross budget envelope. Fares, partner contributions, other grants and tax must receive the treatment required in the agreement. Unspent contingency, pre-agreement costs, existing deficits and expenses already funded elsewhere cannot simply be claimed.

Year	Hypothetical taper share	Reimbursement method after approval	Current revenue recognized
1	70%	Apply agreed share to verified $E(1)$, subject to all award limits	\$0
2	60%	Apply agreed share to verified $E(2)$, subject to cumulative limits	\$0
3	50%	Apply agreed share to verified $E(3)$	\$0
4	40%	Apply agreed share to verified $E(4)$	\$0
5	30%	Apply agreed share to verified $E(5)$, within final-year cap	\$0
6	0% in expiry test	No renewal or replacement grant assumed	\$0

Draft 2's \$2,055,744 five-year grant illustration was arithmetically 49.4% of its \$4,160,664 gross budget and its final assumed share was 30%. Those percentage checks survive; the eligibility base does not. Appendix B retains the earlier calculation for traceability as a withdrawn gross-envelope funding illustration. It is not a reimbursement forecast or Council funding source. No eligible CK Connects cost ledger or award has been obtained, so this paper gives no dollar estimate of a payable OTIF contribution.

Before reducing local exposure, Finance must identify eligible invoice classes, allocation of shared costs, actual project dates, net tax, municipal match, partner/fare treatment, stacking, claim timing, grant repayment and cash-flow obligations. The same \$90,480 reference vendor uncertainty provision cannot be treated as an actual reimbursable annual cost merely because it is authorized in a budget. An application should include measured unmet journeys, a non-duplicative design, priced accessibility and a funded continuation or redesign plan.

With no new award, five-year net operating exposure stays \$3,900,878 before startup, study and other liabilities, and year-six continuation is \$853,384 under the retained assumptions. Funding ending, an unsuccessful

application or a partner exit must have a pre-approved funded response. A grant is not sustainable funding if its expiry requires an unidentified replacement contribution or unpriced passenger transition.

13.3 Procurement pathway

Chatham-Kent's published Purchasing By-law 19-2026 was passed February 23, 2026 and repeals 205-2023, with transition provisions for prior purchases. Some municipal policy pages still link to the old by-law. Use the Clerk-confirmed governing version and the procurement rules applicable when the purchase starts. Do not rely on a stale webpage to justify a direct award. [53]

Before market solicitation, Procurement and Legal should determine aggregate contract value including renewals, vehicle/lease elements and relevant options; check trade-agreement coverage; establish the competitive method; and define the permitted scope of any incumbent variation. Calling a contract a pilot does not exempt it from purchasing obligations or justify splitting it below thresholds.

By-law 19-2026 ss. 34–35 require aggregate valuation and prohibit splitting; s. 36 sets approved-budget award delegations and purchasing methods. Professional services up to \$100,000 can have a direct-appointment path with the specified approval and qualifications; a \$75,000 study is not automatically a full tender. Purchases above \$1 million require Council award approval under the stated delegation, while unfunded purchases engage s. 37. Budget exceptions, leases and single/sole-source cases have separate rules. Procurement must determine the applicable method and aggregate renewals, options and related work rather than infer authority from the word pilot. [53, ss. 34–39, 101–104, 111, 127–131]

The direct Municipal Buy Ontario Procurement Directive specifies April 13, 2026 for municipal light-duty fleet requirements and May 15 for capital infrastructure, with its own dates for local boards and corporations. New light-duty passenger fleet at or below 4,500 kg GVWR has stated exclusions; the capital category expressly includes transit fleet vehicles. Staff must classify each shuttle, stop or terminal investment under the applicable provisions and trade/grant obligations. Incorporation is not a procurement exemption. [63, ss. 3–4.2; 66]

Use a functional specification with disclosed scoring for accessible capacity, delivered service, backup, safety, whole-life cost and data reporting. Price vehicle hours, non-revenue hours, kilometres, fuel/energy indexation, minimum guarantees, waiting, training, technology, accessible alternatives, spare retainers and termination separately or explicitly include them. Require transparent insurance, subcontracting and incident responsibilities.

Obtain legal advice on liability, contractual indemnities, employment/collective-agreement implications and any transfer of operating work. Procurement must not promise a named operator, prefer a campaign supporter, or use employer partnership money to evade competition. No contract is recommended to a specific supplier in this paper.

Consultant selection also needs documented qualifications, conflicts and evaluator independence. Do not give a prospective operating bidder an undisclosed advantage through study authorship or data access. Use the by-law's lawful market-information route where helpful, then an appropriately authorized solicitation. Procurement and Legal should approve a timetable for Council appropriations, award delegations, contract signature and launch; a campaign paper authorizes none of them. [53, ss. 45–48, 111]

14 Governance and legal pathway

14.1 Governance comparison

Structure	Practical role	Recommendation and conditions
A Existing municipal administration and contracted provider	Council sets levels and budget; staff manage delivery and accountability	Preferred launch governance comparator; consolidate oversight and reporting [3]
B Expanded Ride CK service agreement	Add/adjust service within an existing agreement where lawful	Conditional on contract variation rights, procurement review and transparent value for money
C Municipal services corporation or separate entity	Potential later shared asset/operating structure	Not required to launch; independent business case and governance/overhead assessment
D Intermunicipal operating agreements	Share outside service, fares, costs and operating responsibilities	Clear agreements for proposed shared delivery; formal cost-sharing where relied on, distinct from statutory authority

Separate CK Connects identity can help riders understand a regional product while operations remain integrated with Ride CK. It must reflect measurable service changes rather than an expensive rebranding exercise. Keep one accountable municipal owner for rider complaints, budget and performance at launch.

14.2 Municipal authority and cross boundary operation

The Municipal Act, 2001 supports single-tier service powers under s. 10, territorial arrangements under ss. 19–20 and passenger transportation under s. 69. Section 69(7) expressly permits municipal-purpose bus links between an inside and outside point. Formal cost-sharing is therefore a prudent requirement of the financially dependent partnership proposed here, not a universal statutory condition for every cross-boundary bus. Section 69(4) does not give a separate corporation independent taxing authority. Sections 270 and 290 also engage procurement policy and municipal budgets. Apply the current consolidation, not older Public Vehicles Act route-licence wording. [17]

This authority does not compel a neighbouring municipality to fund a service, grant stop rights, accept a fare or surrender local regulatory responsibilities. Counsel must assess local-only pickups, partner agreements and any municipal vehicle-for-hire rules relevant to the exact delivery model. Section 69's special-rate provisions are not a new transit corporation's independent taxing power.

For a corporation, Municipal Act section 203 and O. Reg. 599/06 govern the municipality's use of corporate powers. The regulation provides for a business case, asset-transfer policy and public consultation before establishment as applicable. Evaluate directors, shareholder control, reporting, audits, procurement, tax treatment, insurance, labour, guarantees and winding-up costs. Incorporation does not confer additional taxing, borrowing or regulatory powers; municipal borrowing and guarantees remain subject to applicable restrictions. [17, 55, ss. 3 and 6–8]

14.3 Vehicles licensing insurance and accessibility

Ontario's official intercommunity guidance states that a route-specific public vehicle operating licence is no longer required under the 2021 changes. That does not remove Highway Traffic Act safety obligations, appropriate driver licences or CVOR requirements for the relevant buses. It distinguishes cross-municipal compensated transportation from services within one municipality and identifies exemptions and additional requirements. Legal/MTO confirmation should match the actual vehicle and operator arrangement. [56]

Class F normally covers non-school-purpose buses seating 10–24 passengers; Class C covers larger buses, with air-brake endorsement where applicable. Vehicle design capacity and operation, not a marketing label such as shuttle, determine the requirements. [45]

For vehicles to which O. Reg. 418/21 applies, section 14 specifies passenger injury/death liability minimums of \$5 million for 8–12 passenger seating capacity and \$8 million for 13 or more, plus passenger-property coverage. Counsel and the insurer must confirm applicability/exemptions and the exact seating configuration. Municipal contractual general liability, property, cyber/privacy and employer coverage may also be needed; statutory minima are not the full municipal risk specification. [57]

The legal review must also address inspections, driver hours and applicable exemptions, accessible vehicle requirements under Regulation 629, integrated accessibility duties under O. Reg. 191/11, privacy under applicable municipal legislation, incident reporting and contractual responsibility for subcontractors. The pilot may need accessible alternative capacity beyond a conventional bus; the associated cost is not optional. [12, 46, 56]

MTO's hours guidance identifies an exemption for municipal buses operated as public transit. If that exemption does not apply to the selected arrangement, ordinary limits include 13 driving hours, 14 on-duty hours and a 16-hour elapsed period, with off-duty and cycle rules. A 160-km logging exception is not blanket relief from fatigue controls. Legal/MTO must classify the actual contractor/municipal model; use practical safe duties and priced breaks, not a statutory maximum as a planned duty. [62]

14.4 Conditions before binding commitments

Before binding commitments, require written municipal Legal, Finance, Procurement and accessibility clearance for the selected scope, plus the required Council budget/award decisions. Confirm stop and road-owner permissions, land terms, associated capital/environmental requirements, applicable operator classification, insurance and grant/partner obligations. There is no automatic construction exemption for small buses. If CK operates beyond its boundary without partner subsidy, Council must knowingly approve the full local exposure and obtain the necessary rights; if outside money or delivery is essential, signed dependable terms are a precondition.

15 Delivery timetable and decision gates

The 90-day review begins with Council direction, a staff lead, funding and bounded scope. Months are relative to that direction, not promises tied to election day. Begin with approximately 30 days of staff-led reconciliation. Inventory MMP consultant deliverables, Driving Forward implementation, operator data, partner agreements, the terminal improvement plan and previously funded fleet studies. Identify which questions are already answered and who can supply each missing record. Staff time and opportunity costs must be reported separately from incremental external invoices.

The proposed \$75,000 maximum is for Council consideration, not a demonstrated consultant fee, mandatory allocation or authority to commission another general master plan. After the baseline, price only specialist duty/timetable work, unmet-journey research unavailable through existing processes, model-specific accessibility scope and independent financial/contract analysis. The narrowest useful external package should compare the best evidenced candidate with a less costly alternative using the same cohort and output. Staff should supply existing records; do not pay twice for known budgets, studies or service design.

Period	Required work and deliverable	Decision condition
Days 1–30	Staff reconcile records, MMP/fleet studies, current contracts, terminal plan and provider coverage; identify data owners and missing tasks	Confirmed baseline and priced external scope only; no vehicle commitment

Period	Required work and deliverable	Decision condition
Days 31–60	Validate origins, destinations and actual activity/return windows; compare eastern and southwest candidates with A/C/D and partner changes	Demand confidence, gains/losses and accessible alternatives disclosed; no presumed route winner
Days 61–90	Deliver ranked feasible options and documented assumptions, or dependency report with bounded revised scope/time	A report can recommend more evidence or deferral; no guarantee of fully priced pilot or launch approval
Months 4–6 if ready	Separately authorized procurement, agreements, stop preparations and training	Actual prices, funding, exposure and lawful accessible operations approved; preparation may take longer
Months 7–18 if ready	Potential pilot for up to 12 operating months on fixed dates, with monthly management and quarterly public reporting	Contract expiry, fiscal limits and early corrections; no automatic renewal
Before pilot expiry	Independent evaluation and Council decision before notice or renewal deadline	Defined continuation, redesign, expansion or orderly termination with funding

The critical dependencies are access to trip records, operator tests, representative seasons and institutional calendars, procurement and partner response. Ninety days can deliver a credible feasibility report but may not establish all prices or an executable pilot. A delay report must specify what remains missing, the blocked decision and a bounded adjustment before additional spending. A lawful current-service change can proceed under existing authority only if staff document its effects and budget; it is not permission to pre-empt Council's pilot choice.

A one-vehicle pilot can test a defined cohort and limited window if a suitable accessible substitute and driver are secured. A two-vehicle pilot can test paired departures or two assignments, not the entire region. A full 12-month operating window is useful for terms, winter and seasonality; a short selected-week test can examine operations but cannot establish annual commuter demand. Fix actual contract and evaluation dates after procurement, reserve time for independent reporting, and prevent grant or procurement delays from silently extending the term.

The business case must state the passenger purpose, existing-service gap, measured activity windows, maximum term, annual gross limit, local subsidy limit, startup/capital appropriations and total binding exposure including exits. Publish the baseline, outcome definitions, data rights and evaluation method before launch. Renewal requires explicit Council authority and funding. Notice, refunds, accommodation, transition trips, grant repayment, asset disposal and lease returns belong in the priced termination plan.

16 Performance and public accountability

16.1 Monthly management and quarterly public scorecard

Publish separate results for existing Ride CK, each pilot corridor and total system changes. Transfers create multiple boardings, so boardings, people and complete journeys must be defined separately. Publish actual spending alongside contingency authorization and committed future costs.

The operator and municipal manager should review every month's delivery, punctuality, connections, accessibility, use, earned fares, invoices and commitments. Serious safety or accessibility problems receive immediate response. Quarterly public reporting adds explanation, confidence and reconciliation; it does not

postpone management action. The independent evaluator must have data access and sufficient time to report before Council's renewal decision.

Measure	Definition and data	Decision use
Ridership and boardings	Boarding count by route/trip/time; unique riders only where lawful and reliable	Match hours/capacity to demonstrated use; identify transfers and existing-service displacement
Usable return opportunities	Schedule combinations meeting published cohort criteria	Verify that work, healthcare and education access actually improves
Additional completed returns	Observed/sampled paired returns newly practical against the same baseline cohort	Establish incremental benefit; journey cost only when denominator and cost boundary reliable
Cost per passenger	Gross and net cost per boarding; completed journey metric separately	Avoid presenting transfer-inflated ridership as many separate beneficiaries
Net municipal subsidy	Actual gross expense less earned incremental fares and recognized confirmed contributions; authorized contingency/commitments separate	Monitor local cap and the post-grant requirement
Delivered trips	Trips completed divided by scheduled trips; cancellations by cause	Reliability gate; do not hide failures in annual ridership
On-time performance	Timepoint arrivals/departures within published tolerance; early departures separately	Protect appointments and transfers; diagnose unrealistic schedules
Missed connections	Connections promised but missed, by cause and recovery	Redesign hold policy, dwell and departure coordination
Accessibility	Requested/completed/denied trips; vehicle and stop barriers; resolution time	Mandatory corrective action; equal access before expansion
Employment health and education connectivity	Voluntary trip purposes and verified schedule reachability	Assess stated service purpose without claiming unsupported economic savings
Satisfaction	Accessible rider surveys, response count and complaint trends	Contextualize ratings and fix recurrent barriers
Geographic equity	Service hours, usable returns, access barriers and subsidy by community	Make coverage trade-offs visible alongside ridership efficiency

Staff should publish paid and passenger service hours, kilometres, load by segment, peak occupied accessible capacity and denied boarding. A boarding-per-hour metric alone does not reveal whether vehicles are empty on one leg or overcrowded on another. Data should be available in an accessible downloadable form with quarterly commentary and annual reconciliation.

16.2 Proposed thresholds before launch

The following distinguish proposed contractual targets from management action and Council policy. They are not statutory minima or validated demand predictions. Operational targets need operator testing, defined scheduled trips/timepoints, tolerances, exclusions and priced remedies before contract drafting. Report all cancellations, including safe weather cancellations, without removing them from public visibility. Punctuality means arrivals within five minutes of the schedule; early departures from protected stops are separately prohibited under the proposed contract.

Level or decision	Proposed test	Required action and authority
Launch	Funded approved scope, observed cohort evidence, executable duties, accessible stops/substitutes, permissions and baseline	Defer if any mandatory element is missing; separate Council decision
Contract delivery	98% scheduled trip delivery; 90% measured arrivals within five minutes; no early protected-stop departure	Validate in operations and draft contract; review actual monthly performance
Protected connections	Provisional 95% advertised protected connections achieved	Simulate before adoption; rescue affected riders and diagnose failures
Immediate safety and accessibility	Systemic or serious unsafe/unlawful access, stranding or accommodation failure	Respond immediately, provide required assistance and pause affected unsafe operation as necessary
Monthly management	Any monthly target miss, recurring failed return or approaching financial limit	Record each failure, require corrective plan and report material scope/funding decisions promptly
Demand and affordability	Observed additional useful returns, bid-derived cost and Council's predeclared subsidy purpose/ceiling	Review months 3 and 6 after an agreed ramp-up; do not equate an illustrative four/hour with demand
Redesign	Consecutive reporting-period underperformance with a credible funded correction	Submit priced changes promptly within approved authority; protect existing and disabled riders
Continuation	Demonstrated useful journeys, lawful access, contract performance and recurring funding	Independent evaluation before expiry; Council approves a defined funded term
Expansion	Additional unmet demand plus spare/driver capacity, route-specific cost and sustainable source	Separate route business case, appropriation and procurement decision
Termination or reduction	Unresolved safety/legal duty, unfunded binding exposure, failed redesign or essential partner exit without fallback	Apply lawful contract exit and rider transition; Council decides service disposition

The earlier formulation of two consecutive quarters after three months of grace could delay demand correction until month nine or later. It is replaced by monthly review and stated month-3/month-6 assessments. The lower 95% delivery/85% punctuality redesign screens are removed: they should not permit recurring breaches of the higher contractual goals without action. A brief failure does not automatically cancel a pilot; repeated failures require a documented remedy, severity review and appropriate Council decision.

An affordability screen is not a passenger prediction. For gross G , incremental yield y and a chosen pre-grant net ceiling K per boarding, required boardings are $G \div (K + y)$, rounded up. At \$783,680, \$3 and \$45, this is 16,327 annually, or 3.92 per paid hour. With \$1.50 yield it becomes 16,854, or 4.05/hour. Four remains a sensitivity reference, not a final launch or cancellation threshold. No arbitrary minimum additional-return count is adopted without prices, baseline demand, useful activity outcomes and equity priorities.

Council may choose a different subsidy ceiling for essential rural access with reasons, alternatives and a fixed local limit published before launch. Evaluate actual additional completed work, study, healthcare and community returns and their reliability, alongside boarding efficiency. Do not retrospectively change the ceiling to declare success or use high ridership to excuse unsafe access. A pilot that cannot continue after temporary funding must have an approved funded redesign, durable replacement source or orderly termination plan.

17 Adversarial pressure test

The proposal survives scrutiny as a staged regional mobility assessment; it does not yet establish that any new daily corridor is affordable or demanded. The table identifies arguments that should be narrowed, corrected or rejected rather than defended because they appeared in an earlier concept.

Challenge and reviewer	Vulnerability	Draft 3 response and residual evidence
Ride CK already serves these towns Operators and media	Parallel A/C service could duplicate public expenditure	Keep A/C/D baseline; require measured timing/directness benefit and compare optimization first
Two buses connect all CK Engineering and opponents	Long cycles, deadhead and simultaneous peaks defeat the promise	Publish assigned corridors/duties; Model D requires more resources; frequent full network not costed
Thamesville/Bothwell have no transport Partner providers	Four Counties/adVANTage and earlier community-bus proposals contradict the claim	Describe missing scheduled Ride CK link; confirm partner capacity and implementation before pilot
Transit ends at 6:45 Media and riders	Last departure confused with final return	Detailed maps show final return 9:15; analyze direction-specific utility
Small vehicles are cheap Finance and labour	Wages, relief, insurance and accessible capacity dominate	Full cost model and qualified staffing; no price inferred from vehicle size
Grant approval means permanent affordability Treasury	Temporary operating funding hides later local exposure	Zero-grant case, staged contribution and explicit year-six test
Federal allocation pays the operator Finance	Capital/planning allocation misclassified as operating money	Keep allocation and commitments separate; no annual operating credit
Incumbent can just add service Procurement and rivals	Variation may evade tender/trade obligations	Check governing by-law, aggregate value, lawful variation and actual market comparison
Municipal corporation unlocks powers Legal	Corporate form portrayed as new taxing/borrowing authority	Conditional future business case; no new powers assumed
Accessible bus satisfies everyone Advocates and Legal	Stop, booking, transfer and alternative-service gaps remain	Fund accessible alternatives and obtain scope-specific legal review
Employer interest proves riders Workforce and taxpayers	Headcounts and support letters do not equal fares or passengers	Survey actual journeys; count only signed revenue; no guaranteed ridership
Bus creates jobs Economic development and auditor	Attribution, displacement and duplicated benefits	Measure access and voluntary outcomes; no monetized job/tax claims
Electric buses pay for themselves Fleet staff and Treasury	Winter energy, power works, batteries and spare needs omitted	Equal-duty lifecycle comparison; no assumed grant/energy savings
Leamington will participate Regional officials	No authority to force partner budget or fare acceptance	Written agreement; downside assumes CK exposure; defer if essential partner absent
Rural service judged only by ridership Equity advocates	Essential coverage may legitimately cost more	Publish access purpose and differentiated ceiling before launch
Pilot will never end Taxpayers	Contracts, riders and grants create political/financial lock-in	Defined expiry, transition costs, independent review and explicit renewal vote

Challenge and reviewer	Vulnerability	Draft 3 response and residual evidence
Study duplicates current MMP Staff and taxpayers	Paying twice for the same demand/route research	Integrate scope, inventory existing deliverables and cap incremental study cost
Current baseline finances remain incomplete Auditor	Planning and operator estimates mistaken for actual subsidy	Include extension report; obtain Council decision, execution and certified gross-to-net reconciliation

Residual risk remains substantial. Population anchors, institutional destinations and a missing scheduled corridor justify investigation, but are insufficient to support a launch decision. Every new obligation competes with current transit maintenance and other municipal needs. Grant loss, vendor failure, fuel/contract inflation, low demand and partner withdrawal must be priced and assigned rather than described as remote possibilities.

The long-term case is strongest if CK Connects can demonstrate trips that are currently unusable, preserve effective existing transportation and deliver those trips at a transparently chosen public subsidy. That is a testable proposition. Broad claims of prosperity, self-funding or universal service are not supported by the evidence available for this draft.

18 Proposed Council direction

The following retains the proposed resolution structure for a future Council decision, subject to municipal legal, procedural and budget review. It is not an adopted resolution or a present procurement authority.

THAT Council direct administration to prepare a CK Connects Regional Mobility Feasibility Report, coordinated with Driving Forward, the current Ride CK network and contracts, partner transportation, the 2026 Mobility Master Plan, the terminal improvement plan and existing funded fleet studies;

AND THAT the first approximately 30 days reconcile existing records, staff/consultant work and service constraints, with a named lead, available staff capacity and a work register, before incremental external tasks are released;

AND THAT Council consider a maximum of \$75,000 in additional external expenditure, with the funding source and priced discrete scope identified before commitments, expenditure reduced where existing processes can answer the questions, and material additional cost or scope returned for appropriate approval;

AND THAT administration report at approximately 90 days with a credible feasibility assessment or a transparent dependency report specifying unresolved evidence, the decisions it blocks and any bounded revised timetable or scope, without implying a fully priced pilot must be ready in that period;

AND THAT the report distinguish geographic coverage from timing, travel-time, affordability, eligibility, booking and accessibility gaps, preserving the five original corridors of Chatham–Wallaceburg–Dresden, Chatham–Blenheim–Ridgetown, Chatham–Thamesville–Bothwell, Tilbury–Wheatley–Leamington and longer-term Wallaceburg–Sarnia without a predetermined new-route priority;

AND THAT the report compare Model A existing-service optimization, Model B a one-vehicle limited pilot, Model C a two-vehicle limited pilot and Model D conditional gradual expansion, alongside existing-provider, booked, demand-responsive and partial-week options for the same measured passenger cohort and journey purpose;

AND THAT administration consult riders and rural residents, the Accessibility Advisory Committee, affected municipalities and Indigenous communities where applicable, operators, SECC, Four Counties, adVANTage, employers, educational and healthcare institutions, and the responsible employment-service leads, with consent-based demand and privacy arrangements;

AND THAT Finance reconcile current transit-only operating/capital accounts and commitments, the operator-extension recommendation and its approval/execution status, fare revenue, grants, reserves and existing funded projects, and present incremental gross expense, earned fare assumptions, local subsidy, startup/capital, net tax, contingency and maximum binding municipal exposure, including contract minimums, termination, grant repayment and partner withdrawal;

AND THAT any recommended operating pilot return for a separate Council decision before procurement commitments or launch, supported by a documented service gap, chosen cohort, measured demand confidence, operator-tested timetable and driver duties, verified accessible stops/substitutes and safe returns, competitively supportable cost, identified funding, exposure limits, procurement/approval plan, performance standards, finite term, exit provisions and post-grant sustainability or termination plan;

AND THAT financially dependent cross-municipal delivery have enforceable terms for contributions, stops, fares, accessibility, insurance, incident handling and withdrawal, with operating authority assessed separately and the full CK downside expressly funded where outside participation is absent;

AND THAT this initial feasibility resolution authorize no additional bus service, purchase or lease, corporation, terminal/construction commitment, selected route or operator, cross-boundary obligation or open-ended operating liability;

AND THAT every approved pilot have monthly management review, a quarterly accessible public scorecard, independent evaluation before the renewal/notice deadline and a sunset date, with continuation or expansion requiring explicit further Council authority and a sustainable source;

AND THAT existing effective and specialized transportation be protected, and the full lawful accessibility and passenger-transition costs be included rather than limited to an unsupported annual allowance.

19 Evidence gaps and source references

19.1 Outstanding municipal confirmation

The correction register in Appendix A records completed editorial/calculation changes separately from open implementation evidence. C1 demand, C2 operations/accessibility and C3 priced exposure remain unresolved launch conditions. No survey, operator quote, field journey test, legal clearance or CK Connects partner/operating-grant commitment is invented by this revision.

The following gaps are material decision conditions. Public source review provides a defensible campaign starting point but cannot replace operator records, municipal accounts, legal advice or field testing. Lack of a recovered record is not proof the municipality lacks it.

Required record or confirmation	Responsible review	Decision blocked until resolved
Approved 2026 transit ledger and latest forecast; capital and renewal commitments	Finance/Treasury	A reliable existing subsidy and incremental affordability comparison
24 months of trip-level A/C/D loads, fare taps, transfers, cancellations and delays	Transit and operator	Final corridor scores, retiming and incremental demand
Current partner agreements, eligible areas, fares, capacities and accessible alternatives	Transit with SECC/Four Counties/adVANTage	Non-duplication and affordable feeder comparison
Current operator-issued Four Counties fare schedule and healthcare-program relationship	West Elgin/provider confirmation	Accurate pricing and service integration

Required record or confirmation	Responsible review	Decision blocked until resolved
Fare-page child-age wording, S1 current calendar and LT-Go Saturday/Sunday phone-booking arrangements	Ride CK and Leamington	Accurate customer guide and transfer booking
Driving Forward community-bus and regional proposals implementation status	Transit/MMP team	Avoid a second pilot or repeating completed work
GIS route kilometres, timed runs, winter buffers and duty rosters	Engineering/operator	Defensible corridor operating costs and frequency
Live municipal fleet roster, asset condition, spare availability and depot capacity	Fleet and transit	Any claim that existing vehicles reduce capital or rescue cost
Hub bay capacity, accessible paths, waiting facilities, stop permissions and proposed \$2 million terminal status	Engineering/accessibility	Safe launch and capital pricing
Actual wage, insurance, fleet/lease and fully scoped operator bids	Procurement/Finance	Selection of contracted, leased or purchased delivery
April 13 extension minutes/executed amendment, current rights, labour obligations and procurement coverage	Legal/Procurement/HR	Lawful variation or new award
Cross-boundary authority, insurance and operator classification	Legal/MTO/insurer	Any external corridor or local-only pickup arrangement
Baseline funding agreement/capital plan and remaining allocation	Finance/federal agreement review	Eligible uncommitted capital support for CK Connects
Any OTIF award, eligible expenses and signed contribution timetable	Finance/MTO	Booking grant revenue or reducing the local appropriation
Verified shifts/classes, origin surveys and signed partner contributions	Transit/workforce/institutions	Demand-based pilot choice and revenue assumptions
Accessibility duties for expanded regional territory	Legal/accessibility/users	Final accommodation scope and operating allowance
Independent evaluation method, data/privacy rights, fixed dates and termination/transition costs	Council/staff/evaluator	A credible finite pilot and renewal decision
Existing RTSF Wallaceburg vehicle/shelter and ZETF fleet-study agreements, assets and deliverables	Finance/transit/fleet/MMP lead	Avoid duplicate funding, procurement or consultancy

19.2 Research convention and source register

References 1–57 retain Draft 2's numbering, with corrected URLs and metadata; references 58–70 retain the audit's additions. References 71–73 add publicly announced funded projects and the current community resources guide. Facts were reviewed through October 10, 2026, using direct documents where available and official indexed extracts where access failed. An undated page is not proof of operation on every historical day. PDF locators mean printed pages unless stated otherwise. Exact dates are used only when supplied by the publication or official page, not search-engine age estimates.

The April 13 operator report was downloaded and checked against the Council agenda, but the posted-minutes link returned an access restriction and neither an approval minute nor the signed amendment was verified. The historical 2020 operator-award PDF link returned 404; only its official indexed recommendation was checked, and

the current Council records portal is supplied for obtaining the archival copy. Some eScribe attachments and Ontario e-Laws pages restricted retrieval; their available official indexed extracts support only the specified facts. Several federal pages timed out on direct retrieval but their current official indexed records confirmed the referenced notices and corrected Baseline URLs. A working public citation may still require an ordinary browser or municipal copy. No failed retrieval is treated as evidence of service closure. Governing legislation, program editions, agreements and price schedules must be rechecked before commitment.

[1] **Ride CK. Inter Urban Routes.** Undated; reviewed October 10, 2026. Departure Times and Route Maps and Information.

<https://www.chatham-kent.ca/transit/routes/Pages/Inter-Urban-Routes.aspx>

[2] **Ride CK. OnRequest Transit.** Undated; reviewed October 10, 2026. Service Areas and Times; Requesting a Ride; specialized users.

<https://www.chatham-kent.ca/transit/routes/urban/Pages/OnRequest-Evenings.aspx>

[3] **Ride CK. How We Operate.** Undated; reviewed October 10, 2026. Service Planning.

<https://www.chatham-kent.ca/transit/travellingwithus/Pages/How-we-Operate.aspx>

[4] **Ride CK. Transfer Policy.** Undated; reviewed October 10, 2026. Urban Route Boarding and Inter Urban Route Boarding.

<https://www.chatham-kent.ca/transit/travellingwithus/policies/Pages/Transfer-Policy.aspx>

[5] **Ride CK. SECC Transportation.** Undated; reviewed October 10, 2026. Service Areas and Booking Information.

<https://www.chatham-kent.ca/transit/rural/Pages/Erie-Shores-Community-Transit.aspx>

[6] **Ride CK. Four Counties Transit.** Undated; reviewed October 10, 2026. Ward 3 partnership; Service Areas and Booking Information.

<https://www.chatham-kent.ca/transit/rural/Pages/Four-Counties-Transit.aspx>

[7] **Municipality of Chatham-Kent. Changes to Public Transit Fares Coming July 1, 2026.** Last updated June 9, 2026. Fare changes effective July 1, 2026.

<https://www.chatham-kent.ca/localgovernment/News/pages/Changes%20to%20Public%20Transit%20Fares%20Coming%20July%201%2C%202026.aspx>

[8] **Municipality of Chatham-Kent. Detailed Asset Management Plan Chatham Public Transit 2025.** 2025. Printed pp. 11, 16–20, 58–59 and Appendix A; planning operations, fleet registry and improvement plan.

<https://www.chatham-kent.ca/localgovernment/budget/Documents/DAMP%20Reports/2025/2025%20AMP%20-%20Chatham%20Public%20Transit%20Final%20Copy.pdf>

[9] **Municipality of Chatham-Kent. Driving Forward Transit Strategy 2020.** 2020; received by Council July 20, 2020. Printed pp. 37, 71, 106; sections 3.3.1.2, 4.2.4.12 and recommendation 15.

<https://www.chatham-kent.ca/transit/Documents/Driving%20Forward%20Transit%20Strategy%202020.pdf>

[10] **Municipality of Chatham-Kent. Mobility Master Plan.** Project page updated October 2, 2026. Plan scope and engagement; page last updated October 2, 2026 11:39 a.m.; reviewed October 10, 2026.

<https://www.letstalkchatham-kent.ca/mmp>

[11] **Municipality of Leamington. LTGO On Demand Transit.** Undated live page reviewed October 10, 2026. Current service hours, booking and fare table; historic schedule date not independently reproduced.

<https://www.leamington.ca/our-community/transit/ltgo-on-demand-transit/>

[12] **Ontario. O. Reg. 191/11 Integrated Accessibility Standards.** Current official indexed provisions checked October 10, 2026; direct retrieval restricted. Part IV, ss. 34–38, 44–62 and 63–71; hours s. 70, alternative accessible method s. 45.

<https://www.ontario.ca/laws/regulation/110191>

[13] **Municipality of Leamington. LTW Transit.** Undated current notice; service ended April 30, 2026. Service Ended April 30, 2026; also see original October 30, 2025 discontinuation announcement.

<https://www.leamington.ca/our-community/transit/ltw-transit/>

<https://www.leamington.ca/news/posts/municipality-of-leamington-announces-discontinuation-of-leamington-to-windsor-transit-service/>

[14] **Ontario Newsroom. 2025–26 Gas Tax Funding by Municipality.** April 24, 2026. Chatham-Kent allocation row.

<https://news.ontario.ca/en/backgrounder/1007343/ontario-supporting-public-transit-in-communities-across-the-province>

[15] **Ontario Newsroom. Ontario Doubling Funding to Help Smaller Communities Build Safe and Reliable Transit.** April 1, 2026. OTIF annual increase and time-limited funding.

<https://news.ontario.ca/en/release/1007240/ontario-doubling-funding-to-help-smaller-communities-build-safe-and-reliable-transit>

[16] **Ontario. Available funding opportunities from the Ontario Government.** Live page reviewed October 10, 2026. Ontario Transit Investment Fund; status and applicant eligibility.

<https://www.ontario.ca/page/available-funding-opportunities-ontario-government>

[17] **Ontario. Municipal Act, 2001 S.O. 2001 c. 25.** Consolidation from June 2, 2026 to currency date; official indexed text checked October 10, 2026. ss. 10, 19–20, 69, 203, 270 and 290; direct access restricted during audit.

<https://www.ontario.ca/laws/statute/01m25>

[18] **Ride CK. Urban Service Information.** Undated; reviewed October 10, 2026. Chatham and Wallaceburg schedules.

<https://www.chatham-kent.ca/transit/routes/urban/Pages/Daytime.aspx>

[19] **Ride CK. Chatham Specialized Transit and Wallaceburg Specialized Transit.** Undated; reviewed October 10, 2026. Hours of Service and urban service boundaries.

<https://www.chatham-kent.ca/transit/specialized/Pages/Chatham-Accessible.aspx>

<https://www.chatham-kent.ca/transit/specialized/Pages/Wallaceburg-Accessible.aspx>

[20] **Ride CK. Specialized Transit Service Information.** Undated; reviewed October 10, 2026. Eligibility, Service Areas and OnRequest accommodations.

<https://www.chatham-kent.ca/transit/specialized/Pages/Specialized-Service-FAQ.aspx>

[21] **Ride CK. Route A.** Undated map and timetable; reviewed October 10, 2026. PDF p. 2 timetable; selected first and final run timepoints.

<https://www.chatham-kent.ca/transit/Documents/Route%20A.pdf>

[22] **Ride CK. Route C.** Undated map and timetable; reviewed October 10, 2026. PDF p. 2 timetable; selected first and final run timepoints.

<https://www.chatham-kent.ca/transit/Documents/Route%20C.pdf>

[23] **Ride CK. Route D.** Undated map and timetable; reviewed October 10, 2026. PDF p. 2 timetable; selected first and final run timepoints.

<https://www.chatham-kent.ca/transit/Documents/Route%20D.pdf>

[24] **Ride CK. Fares and Passes.** Undated; reviewed October 10, 2026. Urban and Inter Urban services; child-age wording discrepancy.

<https://www.chatham-kent.ca/transit/fares/Pages/Cash-Fares.aspx>

[25] **South Essex Community Council. Seniors.** Undated; reviewed October 10, 2026. Transportation; destinations, service and pricing basis.

<https://secc.on.ca/get-help/seniors/>

[26] **Municipality of West Elgin. Transit.** Undated current page reviewed October 10, 2026. Service area, hours, booking and special trips; current prices not reproduced.

<https://www.westelgin.net/living-here/transit>

[27] **Middlesex Hospital Alliance. Outreach Programs.** Undated official indexed text reviewed October 10, 2026. Need a Ride to these Support Programs; different dispatch and fee listing; direct retrieval unavailable.

<https://mhalliance.on.ca/service/outreach-programs/>

[28] **Ride CK. adVANTage Transportation.** Undated; reviewed October 10, 2026. Service Areas and Booking Information.

<https://www.chatham-kent.ca/transit/rural/Pages/adVANTage-Transportation.aspx>

[29] City of Sarnia. Inter Community Bus. Undated; reviewed October 10, 2026. Middlesex/Voyago and Huron Shores Area Transit connections.

<https://www.sarnia.ca/community-bus/>

[30] Municipality of Chatham-Kent. Our Municipal Budgets. Live portal reviewed October 10, 2026. 2026 annual update and budget categories; current transit-only attachments require municipal confirmation.

<https://www.chatham-kent.ca/localgovernment/budget/Pages/Our-Municipal-Budgets.aspx>

[31] Municipality of Chatham-Kent. Our Business Plans. Live index reviewed October 10, 2026. Division business-plan scope; legacy 2025 Transportation PDF link no longer resolved in this review.

<https://www.chatham-kent.ca/localgovernment/budget/Pages/Business-Plans.aspx>

[32] Municipality of Chatham-Kent. Dedicated Gas Tax Funds for Public Transportation 2025–2026. 2026 Council report; exact report date requires complete document. Financial Implications, printed p. 3; official indexed text checked, direct download blocked.

<https://pub-chatham-kent.escribemeetings.com/filestream.ashx?DocumentId=22631>

[33] Municipality of Chatham-Kent. Chatham and Area. Undated; reviewed October 10, 2026. Published community population 45,171.

<https://www.chatham-kent.ca/livingck/communities/Pages/Chatham.aspx>

[34] Municipality of Chatham-Kent. Wallaceburg and Area. Undated; reviewed October 10, 2026. Published community population 10,323 and healthcare destination.

<https://www.chatham-kent.ca/livingck/communities/Pages/Wallaceburg.aspx>

[35] Municipality of Chatham-Kent. Dresden and Area. Undated; reviewed October 10, 2026. Published community population 2,401.

<https://www.chatham-kent.ca/livingck/communities/Pages/Dresden.aspx>

[36] Municipality of Chatham-Kent. Blenheim and Area. Undated; reviewed October 10, 2026. Published community population 4,487 and employment sectors.

<https://www.chatham-kent.ca/livingck/communities/Pages/Blenheim-and-Area.aspx>

[37] Municipality of Chatham-Kent. Ridgetown and Area. Undated; reviewed October 10, 2026. Published community population 2,797 and University of Guelph campus.

<https://www.chatham-kent.ca/livingck/communities/Pages/Ridgetown-and-Area.aspx>

[38] Municipality of Chatham-Kent. Bothwell and Area. Undated; reviewed October 10, 2026. Published community population 908.

<https://www.chatham-kent.ca/livingck/communities/Pages/Bothwell.aspx>

[39] Municipality of Chatham-Kent. Tilbury and Area. Undated; reviewed October 10, 2026. Published community population 4,687 and employment sectors.

<https://www.chatham-kent.ca/livingck/communities/Pages/Tilbury.aspx>

[40] Statistics Canada. Population and dwelling counts Canada and population centres. February 9, 2022. Table 98-10-0011-01; 2021 Wheatley population-centre count 3,060.

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?geocode=S05100075&pid=9810001101>

[41] Statistics Canada. Population and dwelling counts Canada provinces and territories census divisions census subdivisions municipalities and designated places. February 9, 2022. Table 98-10-0004-01; 2021 Thamesville designated-place count 774.

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?geocode=A00033524&pid=9810000401>

[42] Municipality of Chatham-Kent. Hospitals and Emergencies. Undated; reviewed October 10, 2026. Hospital Locations; Chatham and Wallaceburg.

<https://www.chatham-kent.ca/livingck/livinginck/healthandwellness/Pages/Hospitals-and-Emergencies.aspx>

[43] **St. Clair College. Campus Profiles.** Undated; reviewed October 10, 2026. Chatham Campus and location; potential destination, not partner commitment.

<https://www.stclaircollege.ca/campus-profiles>

[44] **Erie Shores HealthCare. How To Find Us.** Undated; reviewed October 10, 2026. 194 Talbot West Leamington.

<https://www.erieshoreshealthcare.ca/findus>

[45] **Ontario Ministry of Transportation. Bus licence classes C and F.** Published September 7, 2022; updated June 9, 2026; official indexed text checked October 10, 2026. Driver classes, seating capacity and air-brake endorsement.

<https://www.ontario.ca/document/official-ministry-transportation-mto-bus-handbook/bus-licence-classes-c-and-f>

[46] **Ontario Ministry of Transportation. Ontario Transit Investment Fund OTIF Program Guidelines.** Repository edition 2024-09; metadata updated October 7, 2024; downloaded October 10, 2026. Printed pp. 4–9; project team, eligibility, costs, funding and sustainability.

<https://forms.mgcs.gov.on.ca/dataset/on00758>

<https://forms.mgcs.gov.on.ca/dataset/5766c59f-81fe-401a-a484-3a153f4b9377/resource/188b3b10-b971-4e46-87bb-70dea590a3cd/download/otif-guidelines-eng-ver..pdf>

[47] **Housing Infrastructure and Communities Canada. List of Baseline Funding allocations to date.** Modified September 8, 2026; allocation row rechecked October 10, 2026. Ontario row for Chatham-Kent; ten-year allocation \$5,861,180.

<https://housing-infrastructure.canada.ca/cptf-ftcc/bf-fb/allocations-eng.html>

[48] **Housing Infrastructure and Communities Canada. Baseline Funding stream.** Modified June 2, 2026; current official indexed text rechecked October 10, 2026. Capital/non-capital planning investments and current intake status.

<https://housing-infrastructure.canada.ca/cptf-ftcc/bf-fb/index-eng.html>

[49] **Housing Infrastructure and Communities Canada. Rural Transit Solutions Fund Overview.** Live program page reviewed October 10, 2026. Closed capital intake; program stream descriptions and ceilings.

<https://housing-infrastructure.canada.ca/rural-trans-rural/index-eng.html>

[50] **Housing Infrastructure and Communities Canada. Rural Transit Solutions Fund Planning and Design Projects Stream.** Live program page reviewed October 10, 2026. Closed planning intake and maximum \$50,000 planning grant.

<https://housing-infrastructure.canada.ca/rural-trans-rural/planning-design-proj-planification-conception-eng.html>

[51] **Housing Infrastructure and Communities Canada. Zero Emission Transit Fund.** Modified July 24, 2025; live closure notice reviewed October 10, 2026. Planning and capital intakes closed; vehicle and infrastructure purposes.

<https://housing-infrastructure.canada.ca/zero-emissions-trans-zero-emissions/index-eng.html>

[52] **Housing Infrastructure and Communities Canada. Targeted Funding stream.** Live program page reviewed October 10, 2026. Call-specific opportunities under Canada Public Transit Fund.

<https://housing-infrastructure.canada.ca/cptf-ftcc/tf-fc/index-eng.html>

[53] **Municipality of Chatham-Kent. By-law No 19-2026 governing purchasing and procurement of goods and services.** Passed February 23, 2026. Enacting page; Schedule A Parts VI–VIII and transition provisions ss. 173–175.

<https://www.chatham-kent.ca/localgovernment/bylaws/Documents/19-2026%20Purchasing%20By-law.pdf>

[54] **Ontario. Buy Ontario.** Published March 30, 2026; updated April 10, 2026. Overview; see direct Municipal Buy Ontario Procurement Directive in reference 63.

<https://www.ontario.ca/page/buy-ontario>

[55] **Ontario. O. Reg. 599/06 Municipal Services Corporations.** Current official indexed provisions checked October 10, 2026; direct retrieval restricted. ss. 3 and 6–8; purpose, business case, asset transfers and public participation.

<https://www.ontario.ca/laws/regulation/060599>

[56] **Ontario Ministry of Transportation. Intercommunity passenger transportation.** Published June 30, 2021; updated November 2, 2023. Route licence repeal; classification, bus safety and exemptions; current page reviewed October 9–10, 2026.

<https://www.ontario.ca/page/intercommunity-passenger-transportation>

[57] **Ontario. O. Reg. 418/21 Passenger Transportation Vehicles.** Current official indexed provisions checked October 10, 2026; direct retrieval restricted. s. 14 insurance; applicability/exemptions require model-specific confirmation.

<https://www.ontario.ca/laws/regulation/r21418>

[58] **Municipality of Chatham-Kent. Contract Extension R20-294 Public Transit Service Operator.** April 13, 2026. Printed pp. 1–4; complete report downloaded October 10, 2026; recommendations, scope, escalation and calendar-year funding table verified; subsequent approval/execution not verified.

<https://pub-chatham-kent.escribemeetings.com/filestream.ashx?DocumentId=22634>

[59] **Municipality of Chatham-Kent. RFP R20-294 Award Public Transit Service Operator and impacts of Driving Forward implementation.** November 25, 2020. Recommendation 5 checked through official indexed text only; original archive/Council/Meetings/2020/Documents/December/Dec-7-11b.pdf returned 404; current Council records portal supplied to obtain full archival report. Historic fleet reserve context, not current pricing..

<https://www.chatham-kent.ca/localgovernment/council/meetings/Pages/Council-Meetings.aspx>

[60] **Huron Shores Area Transit. Annual Report 2025.** Reporting year 2025; exact publication date not stated in reviewed report. Printed pp. 9–11 and Appendices B–C pp. 18–20; service hours, ledger fares, recorded boardings and data limitations.

<https://huronshoresareatransit.ca/wp-content/uploads/2023/01/2025-HSAT-Annual-Report-FINAL.pdf>

[61] **City of Kingston. Rural Transit Preliminary Investigation.** Undated project memo page reviewed October 10, 2026. High-Level Cost Estimate and Ridership Estimates and Vehicles; preliminary hourly estimate, not CK quotation.

https://getinvolved.cityofkingston.ca/kingston-transit-service-standards/news_feed/rural-transit-preliminary-investigation

[62] **Ontario Ministry of Transportation. Hours of service The Official MTO Bus Handbook.** Published July 6, 2021; updated August 12, 2022. Exemptions and daily/cycle requirements; underlying O. Reg. 555/06 must be applied to selected model.

<https://www.ontario.ca/document/official-ministry-transportation-mto-bus-handbook/hours-service>

[63] **Ontario. Municipal Buy Ontario Procurement Directive.** Published March 30, 2026; updated April 10, 2026. ss. 3–4.2; effective dates, light-duty fleet and capital infrastructure including transit fleet.

<https://www.ontario.ca/page/municipal-buy-ontario-procurement-directive>

[64] **Housing Infrastructure and Communities Canada. Rural Transit Solutions Fund Capital Projects.** Live official program page reviewed October 10, 2026. Closed intake; eligible applicants/projects and federal cost share.

<https://housing-infrastructure.canada.ca/rural-trans-rural/capital-proj-dimmobilisations-eng.html>

[65] **Ontario. Human Rights Code RSO 1990 chapter H19.** Current official indexed provisions checked October 10, 2026. ss. 1, 11 and 17; service equality and disability accommodation.

<https://www.ontario.ca/laws/statute/90h19>

[66] **Ontario. Buy Ontario Act Public Sector Procurement 2025 SO 2025 chapter 27 Schedule 1.** 2025; current official indexed provisions checked October 10, 2026. ss. 2–3; statutory framework for directives; supports reference 63.

<https://www.ontario.ca/laws/statute/25b27>

[67] **Municipality of Chatham-Kent. CK Jobs.** Undated public page reviewed October 10, 2026. Employment supports, qualifying transportation-cost assistance and community locations; does not establish CK WORKS operating commitment.

<https://www.chatham-kent.ca/community/employmentsupport/Pages/CK-Jobs.aspx>

[68] **Middlesex Hospital Alliance. Locations and Directions.** Undated official indexed page reviewed October 10, 2026. Four Counties Health Services 1824 Concession Drive Newbury; destination location, not transit pricing.

<https://mhalliance.on.ca/patients-visitors/locations-directions/>

[69] **Housing Infrastructure and Communities Canada. Zero Emission Transit Fund Applicant Guide.** Published guide and live indexed text reviewed October 10, 2026. Section 2 and application provisions; planning maximum 80%, capital maximum 50%; closure status controlled by reference 51.

<https://housing-infrastructure.canada.ca/zero-emissions-trans-zero-emissions/zetf-applicant-guide-demandeur-ftcze-eng.html>

[70] Housing Infrastructure and Communities Canada. Application Guide for the Capital Stream of the Rural Transit Solutions Fund. Live official guide reviewed October 10, 2026. Maximum Federal Contribution and Ineligible Costs; experience/study qualifications, cost-share and excluded operations.

<https://housing-infrastructure.canada.ca/rural-trans-rural/capital-immo-guide-eng.html>

[71] Housing Infrastructure and Communities Canada. Strengthening Rural Transit Across Ontario Communities. May 27, 2026. Project Information table, Wallaceburg/Chatham-Kent/First Nations fringe-area row; \$320,000 federal and \$81,445 municipal vehicle/shelter project announcement; execution/deployment not verified.

<https://www.canada.ca/en/housing-infrastructure-communities/news/2026/05/backgrounder--strengthening-rural-transit-across-ontario-communities.html>

[72] Housing Infrastructure and Communities Canada. Backgrounder Federal government invests in zero emission transit planning projects. November 26, 2024. Project Information table, Municipality of Chatham-Kent row; fleet planning \$100,372 federal/\$25,093 municipal; deliverable and completion status require confirmation.

<https://www.canada.ca/en/housing-infrastructure-communities/news/2024/11/backgrounder-federal-government-invests-in-zero-emission-transit-planning-projects.html>

[73] Municipality of Chatham-Kent. Community Resources Guide Spring 2026. Spring 2026 edition; exact release day not stated. Transportation Services and Community Service Transportation; seasonal Beach Bus, Four Counties, adVANTage and community-provider listings; not a current operator timetable.

<https://www.chatham-kent.ca/community/employmentsupport/Documents/CK%20Community%20Resources.pdf>

19.3 Revision traceability and final verification

Draft 2 established the existing A/C/D baseline, current customer products, partner overlap, conditional governance and transparent operating scenarios. Draft 3 preserves that research and the 19-section regional architecture. It repairs the cycle and journey denominators, changes the priority comparison, adds operator and terminal-planning records, clarifies tax/ownership/reserve accounting, removes a gross-envelope reimbursement forecast and separates monthly intervention from Council renewal. Appendix A addresses every audit finding; editorial completion is not implementation clearance.

The original vendor arithmetic, revised municipal add-ons, owned comparator and five-year/year-six scenarios have been independently recalculated for this revision. Assumed hourly prices, passenger uptake and accessible-alternative allowances remain unverified. A final verification review should reconcile every remaining record request, signed term, service definition and source version before any campaign publication or municipal launch claim. Draft 3 is a policy and feasibility proposal, not an adopted municipal plan, external assurance opinion or fully priced operating business case.

The policy remains ambitious: an integrated regional network should be developed where it can connect residents to real opportunities. Each stage must also be useful, accessible, legally operable and sustainably funded. The proposed first step is a bounded feasibility assessment capable of supporting a clear Council decision.

Appendix A Audit correction register

This register responds individually to all 23 findings in the October 10 hostile audit. D2 locations refer to the original Draft 2 section identifiers; the audit supplies its original page locators. Final-section references point to Draft 3. “Completed” means the required wording, calculation or policy framework has been corrected. It does not mean a missing municipal record, actual demand, legal interpretation, quote or operational test has been obtained. C1–C3 remain open implementation conditions and block pilot launch. All 11 High, seven Medium and two Low findings have textual or calculation responses, with remaining evidence identified below.

The inputs are the supplied Draft 2 and hostile-audit Word documents. Appendix A preserves their finding identifiers. Public evidence uses the numbered references in Section 19; assumptions and proposed policy are labelled separately. No information request has been sent on the municipality's behalf.

Critical findings

Finding and original location	Required correction	Completion and final sections	Unresolved evidence and blocked decision	Basis
C1 Critical; D2 §§4,6,16	Separate demonstrated, potential and assumed demand; require baseline-cohort returns and provider comparison.	Text corrected §§4,6,12.5,15–18; implementation open	Observed origins, actual activity windows and additional use absent; pilot route selection blocked.	Audit C1; §§4,6; [1,5,6,26,67]
C2 Critical; D2 §§7,9,11,15	Require executable outward/return timetable, duties, accessible stops, substitute vehicle and driver.	Policy corrected §§6–7,9,11,15–18; implementation open	No tested roster, accessible plan or priced rescue; service-frequency and launch claims blocked.	Audit C2; [12,45,57,62,65]
C3 Critical; D2 §§12–15,18	Separate expense, earned fares, subsidy, startup/capital and binding liability; approve limits separately.	Framework corrected §§12.12,13–15,18; implementation open	Prices, minimum guarantees, tax and exits unverified; contract/launch authorization blocked.	Audit C3; [17,53,58]

High findings

Finding and original location	Required correction	Completion and final sections	Unresolved evidence and blocked decision	Basis
H1 High; D2 §§6.1–6.2	Remove general three-cycle claim; allocate passenger time, recovery and non-revenue once.	Arithmetic/text completed §§6.1–6.2,7	Route tests and time ledger absent; final daily frequency blocked.	Audit H1; $480 \times 85\% = 408$; $3 \times 140 = 420$
H2 High; D2 §12.5	Remove pilot-boardings ÷ four-network-legs conversion; define observed journeys and additional returns.	Completed §§12.5,16.1	Journey linkage/baseline not collected; additional-return unit cost not established.	Audit H2; corrected denominator sensitivity

Finding and original location	Required correction	Completion and final sections	Unresolved evidence and blocked decision	Basis
H3 High; D2 §§12.3,16.2	Label four/hour and \$3 yield as inputs; add use/yield sensitivities and earned-revenue method.	Completed §§4,8,12.3,12.10,16.2	Fare mix, diverted users and cohort demand absent; no passenger/revenue forecast.	Audit H3; [4,7,60,61]
H4 High; D2 §§3.5,12.1	Add April 13 extension recommendation and reconcile planning/program/subsidy boundaries.	Text completed §§3.5,12.1; records open	Council decision, signatures and actual scope/ledger unverified; current commitments and subsidy unresolved.	Audit H4; [8,32,58,59]
H5 High; D2 §§9,12.3–12.8	Specify equivalent all-in vendor scope and exclusions; do not validate \$145 from arithmetic.	Completed §§9,12.3,12.7,12.11	No scoped bid, lease or split-duty/spare quote; delivery-model selection blocked.	Audit H5; [53,60,61]
H6 High; D2 §§11,12.3	Make \$25,000 a sensitivity allowance, not legal ceiling; require model-specific accessible-service price.	Completed §§11,12.3,15,18	Trip volumes, applicable geographic duty and overflow price unverified; launch blocked.	Audit H6; [12,65]
H7 High; D2 §§12.4–12.9	Reconcile net HST and contingency scope; distinguish owned cash, budget reserve and resource cost.	Completed §§12.1,12.4,12.7–12.9	Actual invoice tax/asset responsibilities unavailable; whole-life ranking unresolved.	Audit H7; [58,59]; 1.76% conditional
H8 High; D2 §§13.2,15	Replace gross-envelope grant forecast with eligible-cost/award ledger and zero-new-grant base.	Completed §13.2; historic arithmetic Appendix B	No verified eligible expenditure or award; grant receipt and local subsidy reduction blocked.	Audit H8; [16,46]
H9 High; D2 §§6.5–6.8	Remove Bothwell preference; compare southwest and provider/partial-week alternatives neutrally.	Completed §§6.5–6.8,12.11,15,18	Comparable demand, prices and outside terms absent; neither new corridor selected.	Audit H9; [5,6,11,26,44,68]
H10 High; D2 §§5,15,18	Reconcile MMP, planned \$2m terminal and funded fleet work; narrow additional consultant tasks.	Completed §§3.5,5,9,13.1,15,18	Approvals, funded deliverables and available staff data unresolved; capital/study scope requires confirmation.	Audit H10; [8,10,71,72]
H11 High; D2 §16.2	Replace delayed low-performance triggers with immediate safety response and monthly contract review.	Completed §§7.2,15–16,18	Operational target validation and contract remedies still needed before award.	Audit H11; proposed policy, not statutory target

Medium findings

Finding and original location	Required correction	Completion and final sections	Unresolved evidence and blocked decision	Basis
M1 Medium; D2 §§6.1–6.2,12.3	Keep route/km bands provisional; require actual stop paths, timed runs and winter evidence.	Completed §§6.1–6.2,7.1,12.3	No measured route/depot geometry; mileage, running costs and timetables unverified.	Audit M1; [21–23] versus assumptions
M2 Medium; D2 §3.5	Distinguish registry from active/spare fleet; record AMP main/appendix differences.	Text completed §§3.5,19.1	Live VIN duties, new assets and Finance reconciliation absent; spare/capital savings unproved.	Audit M2; [8,58,71]
M3 Medium; D2 §§8,12.3	Separate pass/transfer settlement, earned revenue and stored value; price integration.	Completed §§8,10,12.3,12.5	Product allocation and partner fare agreement absent; integrated revenue forecast blocked.	Audit M3; [4,7,11,60]
M4 Medium; D2 §§7,9.1	State FTE uplift already includes assumed relief/training; require actual person and vehicle ledgers.	Completed §§7.1,9.1–9.2,12.7	Named roster, leave, premiums and simultaneous rescue availability absent; staffing unverified.	Audit M4; ≈2.6 FTE; §12.7
M5 Medium; D2 §§14,18	Specify procurement/approval path; distinguish s.69(7) authority from cost-sharing and stop rights.	Completed §§10,13.3,14,18	Selected model, award delegation, legal classification and partner terms unresolved.	Audit M5; [17,53,63,66]
M6 Medium; D2 §§15–16	Fix pilot/evaluation/notice dates after procurement; define cohort denominators and report monthly.	Completed §§12.5,15–16,18	No selected dates or reliable baseline; renewal evidence and continuation decision not ready.	Audit M6; proposed pilot conditions
M7 Medium; D2 §§4,10	Preserve CK WORKS concept while naming actual program lead and consent/privacy requirements.	Completed §§4,10,15,18	CK WORKS remit, institutional cohort or signed contributions unverified; no revenue/demand credit.	Audit M7; [67] existing CK Jobs

Low findings

Finding and original location	Required correction	Completion and final sections	Unresolved evidence and blocked decision	Basis
L1 Low; D2 refs26,46,54	Refresh West Elgin, OTIF edition/direct directive; correct federal Baseline links and metadata.	Completed §§13,19; reference register	Restricted retrieval and governing future editions remain disclosed; no false closure inference.	Audit L1; [26,46,47,48,63]
L2 Low; D2 §§6.8,19	Use neutral qualitative matrix with evidence confidence and conditions that change priority.	Completed §§6.8,19; Appendix A	Trip/cost evidence needed for any scored ranking; 19-section structure preserved.	Audit L2; proposed criteria, no scores

Appendix B Earlier grant illustration retained for traceability

The table below preserves Draft 2's arithmetic as a historical model record. Its gross budget envelope is not verified eligible OTIF expenditure, so the dollar contributions are withdrawn from the proposed financing plan. They must not be used as expected reimbursements, appropriated revenue or evidence of an award. Section 13.2 requires a separately verified eligible-cost ledger and executed terms; present recognized new operating-grant revenue remains \$0.

Historical year	Earlier assumed share of gross budget	Earlier arithmetic grant	Earlier local net after assumed grant
1	70%	\$548,576	\$185,184
2	60%	\$484,314	\$271,958
3	50%	\$415,703	\$363,766
4	40%	\$342,539	\$460,833
5	30%	\$264,612	\$563,392
6 expiry test	0%	\$0	\$853,384

Unrounded five-year arithmetic totals were \$2,055,744 assumed grant and \$1,845,134 remaining net, plus startup and other commitments. The assumed grant was 49.4% of the gross envelope and the final-year share was 30%; these aggregate tests explain why an earlier-year 70% share was not alone a violation of the published multi-year limits. They do not validate eligible expenses or permissible revenue treatment. The corresponding hypothetical year-five-to-six local increase was about \$289,992. Actual award amounts, claims and post-grant exposure must be recalculated on the signed eligible-cost base. With no award, the retained operating exposure is \$3,900,878 for five years and \$853,384 in year six before excluded liabilities.