

MOVING NATURES: Mobility and the Environment in Canadian History Edited by Ben Bradley, Jay Young, and Colin M. Coates

ISBN 978-1-55238-860-0

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The Windsor-Detroit Borderland: The Making of a Key North American Environment of Mobility

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The Windsor-Detroit borderland is a quintessential twentieth-century environment of mobility, where contemporary technologies, transboundary politics, and globally forged liminal spaces converge. Here, grounded in particular landscape forms and made within local, regional, and international relations, incompatible choices collide. On the Canadian side of the Detroit River, the effects of the collision are most grave for the cultural landscapes in two historic neighbourhoods, Sandwich and Brighton Beach. Until relatively recently, these were places of mixed industrial, residential, and recreational use. Now they are being transformed by a new highway approach for a forthcoming bridge connecting Windsor and Detroit: the Gordie Howe International Bridge. Sandwich, founded in 1797, was the original urban settlement in the area, which later became part of the City of Windsor. Once the regional capital, this now-historic neighbourhood sits immediately to

the north and east of a reclaimed industrial district known as Brighton Beach—the point at which the new bridge will be anchored. Together, the new bridge and the Rt. Hon. Herb Gray Parkway will be the most costly road development project in Canadian history. How this area came to be the site of a significant yet exclusionary environment of mobility in early-twenty-first century North America is the focus of this chapter.

Over the past two centuries, these neighbourhoods experienced the effects of globalization on a local environment as well as changing personal and commercial mobilities. Transportation engineering works imposed transient effects on these spaces and reordered them as a conduit for international trade. Manufacturing, processing, and power-generation enterprises cleaved to the borderlands along the river in order to minimize the transportation costs for their production inputs and finished products—activities with worrisome environmental legacies. Within this landscape the Ambassador Bridge persists not only as an emblem of international cooperation but also as a representation of how mobility and its infrastructure can both link and divide a space. The world's longest suspension bridge when it opened in 1929, its technological legacy still epitomizes the acquisitiveness of private capital. Today, it is a roadblock for contemporary mobility needs. This chapter examines how Brighton Beach and Sandwich became the products of diverse and contending colonial, technological, and entrepreneurial forces.

From Frontier to Borderland: Settling the Banks of the Detroit River

Ever since the first settlement of French merchants and military in 1701, mobility technology and culture have shaped the Detroit frontier. The Detroit River crossing has been a busy conduit, useful in avoiding the longer land route around the Great Lakes, under Erie, or over Superior. Antoine Laumet de La Mothe, Sieur de Cadillac, a French commandant and merchant, recognized this situational advantage when he and his flotilla of twenty-five canoes first arrived at the future site of Detroit.¹ Shortly after the establishment of the fort on the river, French families

from the St. Lawrence Valley began to arrive in the region, establishing farms on the south side, opposite the fort.² The clearing of the black oak savannah—a light forest cover rising on the rich soils of tall-grass prairie—yielded rich nourishment for bison, elk, and white-tailed deer. In the early eighteenth century, it became a welcome habitat for this new cohort of Europeans. The initial settlement of French farms in the familiar "long lot" system gave each farm access to the waterfront for irrigation, navigation, and trade. A reserve of the Huron Nation was located among the farms, at the point where the river turns south towards Lake Erie. In the eyes of Europeans, Aboriginal land was "unsettled," fit to be appropriated for the townsite of Sandwich.³ Sandwich soon became the capital of the Western District of Upper Canada, inaugurating a long history as an entrepôt of important cross-border trade and traffic.⁴

Until the founding of Sandwich, communication between the two shores of the river was relatively infrequent. With the movement of British Loyalists from Detroit to Sandwich, ties of kinship and business increased traffic across the river. The earliest ferry service, established in 1798, was nothing more than a large flat-bottom canoe that operated between the foot of Mill Street in Sandwich and the town of Detroit. Timber, market crops, and furs were among the items traded across the river, between the two border towns and onward. Throughout the nineteenth century, industrial innovation and rapid urbanization spread across the continent, and these changes transformed the border communities of Sandwich and Windsor. International relations between the United States and British North America matured. In January 1854, the rail head of the Great Western Railroad reached Windsor-then a small hamlet directly opposite Detroit—revolutionizing how the region communicated with the rest of the continent. Windsor subsequently became the principal settlement of the region. No longer the seat of government, the nucleus of development, or the economic engine of the region, Sandwich lost its prominent merchants and lawyers to Windsor and became a distant suburb, a part of the periphery.⁵

Later the same year, the Reciprocity Treaty reduced regulatory barriers to commerce between the United States and British North America. This important ancestor to the 1988 Canada-U.S Free Trade Agreement removed the 21 percent American tariff on natural resource imports.⁶ The treaty consolidated Windsor's newly acquired position as an entrepôt for the transnational railroad network for wheat, market crops and timber, which were now shipped easily across the border to the American Midwest. This critical relationship to the continental market created a boom in Windsor. Sandwich was pushed further to the margins.

Throughout the remainder of the nineteenth century, prosperity in Sandwich rose and fell in response to the differentially conferred advantages of a succession of transportation technologies. In the summer of 1886, North America's first electric streetcar began to serve the border communities of Windsor and Sandwich, marking the start of a long regional history of innovation in transportation provision and manufacturing.⁷ The arrival of the electric streetcar also helped to develop the burgeoning tourist industry centred on the town's famous sulphur springs. New sources of power provided the electricity needed to expand the grid and helped illuminate and develop recently established local salt mines. With reliable electricity, other manufacturers opened shops around the region, including two pharmaceutical companies (Sterns and Parke Davis) and two transport start-ups (the Evans and Dodge Bicycle factory and the Milner-Walker wagon works). A few years later the Dodge family would become famous in the emerging automobile industry.8

In the last decades of the nineteenth century, the shoreline of the Detroit River became a place of transnational economic prosperity. Ferries shuttled thousands of passenger and freight railway cars across the river in the late nineteenth century, but the logistical and technological frictions of this ferry operation began to impede growth. In 1871, Windsor and Detroit authorities approved plans to bore a railway tunnel under the river. Construction began the following year but was soon abandoned. A ventilation failure caused a deadly accident; existing tunnelling technologies were not up to the engineering challenge. With sixteen hundred feet remaining untunnelled, the aborted tunnel became part of a history fraught by technological shortcomings and defeat.

Diverse interests defended the technologies and infrastructure of mobility that competed for space along the river. Ships carrying grains and minerals from Lake Superior needed assurance of clearance under bridges and safe passage past piers. Expansion of marine shipping terminals was thwarted by the pre-existing railway, because trains—carrying people as well as a variety of agricultural and, increasingly, manufactured products—also needed access to the riverbanks. As proponents of contending transportation technologies vied for space, civic and business leaders in Windsor and Detroit competed for shares of population and labour-force growth. Both urban centres focused on building ever-greater infrastructure to accommodate increased transboundary and local traffic.

The Detroit River railroad tunnel, also called the Michigan Central Railway Tunnel, opened for passenger and freight operation in 1910. Completion of the rail tunnel enhanced the region's position as a principal place of cross-border trade. The Lake Carriers Association, which represented the interests of hundreds of seafaring vessels with economic stakes in the Detroit River, had successfully lobbied for a tunnel rather than a bridge. The tunnel was positioned in an undeveloped space between the urban fringes of Sandwich and Windsor, across from an equally advantageous position on the Detroit side, where a rail route could easily reach the river's edge. Still in use as a freight tunnel today, it was a technological feat serving the transportation needs of the region. It also reduced Sandwich and Brighton Beach into marginal border spaces in the broader global trading network. Windsor, with its spatial and economic advantages, augmented by its proximity to the railroad ferries and tunnel, had secured local commercial primacy.

With the railway overland link to Detroit complete, the topography and geology of Windsor and its hinterland continued to encourage complementary manufacturing, agricultural, and transportation pursuits. In the early days of roofless vehicles, the flat topography and mild climate as well as the ready supplies of gravel for the road system enticed residents to take up motoring. Well suited to many contending uses for space, these boundary lands were historically, and remain today, good places for growing food. A Jesuit travelling with the explorer René Robert Cavelier, Sieur de La Salle, wrote in 1679 of the abundant fruit along the Detroit River, and in the twentieth century the region still produced prodigious supplies of vegetables, fruit, and grain for



FIGURE 7.1. Map showing the border cities, including the proposed development of Ojibway. *Federal Map of Detroit and Environs* (c. 1920).

market.¹² The County of Essex encompassed the border towns, and its elected officials were still promoting farming and gardening as land uses in "the Sun Parlour of Canada" in 1912. Market gardening and soft-fruit production were sufficiently remunerative in the climate and soils of Essex to support such contemporary Canadian countryside rarities as municipal telephones and free rural mail-delivery service. The townships of Sandwich East, West, and South—where "peaches grow to perfection," "among garden lands, which grow radishes, potatoes, sweet corn, tomatoes, and all kinds of vegetables"—surrounded the towns of Sandwich, Windsor, and Walkerville. The central part of Sandwich West, stretching from the town of Sandwich southward, was "noted for the quantities of melons marketed every year, and the balance of the township for its fine corn land and other field grains." In what

was elsewhere considered a conduit for some people, these pursuits of cultivation provided an anchor in place for generations of others.

A New Geopolitical Era Takes Form

While the ease of shipping and proximity to markets had made agriculture a significant force of economic development in Essex County throughout the nineteenth century, new and profitable industries were also beginning to recognize the area's locational advantage. Among these industries were automobile manufacturing and steel production. Building on connections to nearby Detroit and the desire to circumvent restrictive Canadian trade tariffs, automobile production soon became a leading industry in the border municipalities of Sandwich, Windsor, Walkerville, Ojibway, and Ford City (fig. 7.1). Recognizing an emerging binational market, the United States Steel Corporation, or US Steel, planned a large-scale foundry on 6.6 square kilometres of land along the fertile banks of Detroit River in Brighton Beach, immediately south of Sandwich. US Steel expected this operation to grow prodigiously, for this location—with the river for shipping and production—could access a huge distribution area. 14 Both Gary, Indiana, at the southern tip of Lake Michigan, and Hamilton, Ontario, at the western reaches of Lake Ontario, had exploited similar advantages. The Town of Ojibway, a creature of US Steel, was incorporated in 1913 by a special act of Parliament (fig. 7.2). Advertisements in local newspapers called on "the man with a little money" to buy lots in "the Gary of Canada." 15 The lots, on fertile soils and priced from two hundred to five hundred dollars, were to house the steel giant's 16,000 workers and their families. The town had grown to only 160 residents before the worldwide Depression of the 1930s slowed trade and stalled the domestic automobile and steel industries. The town never actually materialized, its only remnant being an old blast furnace and a couple of lengths of sewer piping that lay beneath an underdeveloped roadbed. A fortuitous but unintended consequence was that the area's significant oak savannah remained in its natural state, exempted from the influence of the rising contemporary global network that privileged environmentally noxious heavy industry.

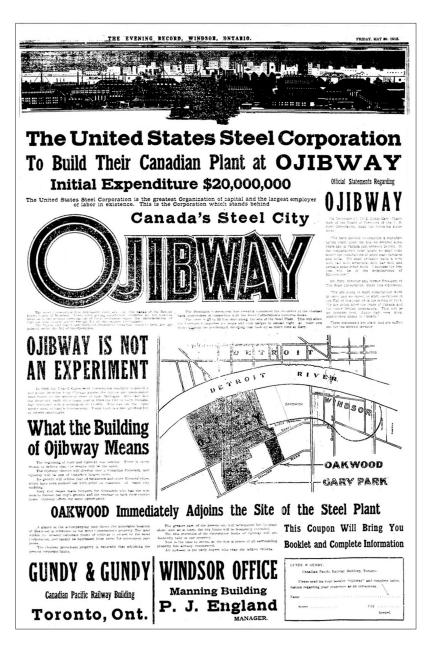


FIGURE 7.2. US Steel advertisement for the proposed town of Ojibway. *Windsor Evening Record* (1913).

Twentieth-century industrialization and urban development in the Canadian border cities resulted from political forces as much as locational advantages. The Conservatives defeated Sir Wilfrid Laurier's Liberals in 1911 on a platform of resistance to a new Canada-U.S. Reciprocity Agreement, already ratified in the United States. The protectionist sentiments of the new Conservative government, led by Sir Robert Borden, echoed the Canadian Manufacturers' Association in its resistance to free trade in favour of local branch-plant industry. The push and pull of advancing technologies and the burgeoning global marketplace drew labour and capital east and north of Sandwich and Brighton Beach to the growing city of Windsor.

The southern reach of Windsor was further marginalized when the Ford Motor Company of Canada, established in 1904, set up its operation to the east of the city's central business district, in what came to be known as Ford City. By 1922, Ford employed 40 percent of the population of the Windsor area.¹⁸ Rates of population growth in Windsor during the 1910s and 1920s surpassed those of Detroit and (even more so) nearby London, Ontario.¹⁹ This growth depended on a permeable border for labour. In 1912, Canadian commuters constituted 16 percent of the Detroit labour force. In 1913, cross-border pay rates in the auto sector were harmonized. Soon, 25 percent of the workforce at Ford's Detroit plant was Canadian-born, and by the late 1920s, fifteen thousand Windsor-area residents crossed the border daily to work.²⁰ The Ford Motor Company of Canada employed eight thousand workers in 1928, and other carmakers—including General Motors of Canada, the Chrysler Corporation of Canada, and the Studebaker Corporation of Canada—had operations in Windsor.²¹ By the late 1920s, Windsor-Detroit was the busiest border crossing in North America, serviced primarily by a fleet of steam-powered ferries. Workers and freight operators experienced significant delays, often of many hours, as they attempted to make their daily commutes, threatening the economic prosperity of the region.²² Both public officials and private interests responded to the need for a more efficient crossing, and a bridge became the central plan.

Through the early twentieth century the growing automotive industry was the key driver of Windsor's economy, and the need for a new

crossing preoccupied civic leaders on both sides of the river. Pressures from the owners of the growing fleet of personal and commercial automobiles, automobile manufacturers, and a new mode of freighting-transport trucks-initiated plans for a second permanent river crossing. When the original suspension bridge design was developed in 1920, it called for two decks: one for automobiles and trams, the other for railcars and utilities. The railway companies' unwillingness to endorse the project, combined with a tainted fundraising campaign, caused its eventual failure.²³ It took another five years of political and financial manoeuvring to secure the future of the Ambassador Bridge. By this time, the design was based solely on use by automobiles and trucks. Although mayors on both sides of the Detroit River opposed private ownership, the premier of Ontario, G. Howard Ferguson, announced in early 1927 that the British North America Act prevented the province from guaranteeing bonds for the bridge.²⁴ Efforts to secure funding from the federal level of government were thwarted by a 1926 election and general opposition to funding a privately owned bridge. Seeking support for his adamant opposition to private ownership, Mayor John W. Smith of Detroit agreed to hold a referendum to let his constituents vote on the issue. They overwhelmingly supported the existing private arrangement because further delays to promised jobs were intolerable, and the need for the crossing had become unquestionable. Prominent public figures, such as Henry Ford, also strongly supported the bridge. Thus, the Ambassador Bridge was privately financed and owned—a precedent with formidable implications for both future residents and commercial users seeking a less congested crossing.

The placement of the Ambassador Bridge and its regulatory foundation, built upon the transnational policy mechanisms of the 1920s, had profound effects on the natural, urban, and cultural landscapes of the Windsor area. The first site planned for the new bridge promised to consolidate the position of Windsor as the vital centre of the growing conurbation on the Canadian side. However, when the approach in Detroit proved too costly and cumbersome to construct, the plan shifted to a more southerly location, nearer the narrowest point on the river, from 19th Street in Detroit to Huron Church Road in Sandwich, where fewer high-value uses of land contended for the space. Although

these sites were some distance away from the centres of Detroit and Windsor, they offered lower construction costs and proximity to the planned industrial areas in Ojibway, Brighton Beach, and Sandwich.

Within Sandwich, support for this location of the bridge was decisive. A January 1926 referendum resulted in 1,556 votes in favour of the location along Huron Church Line to a mere 104 opposed. What many Sandwich residents did not realize was that the bridge, although good for the growing automobile industry and a sign of progress and friendship between the two nations, would divide their town. Running down Huron Church Road and alongside the Assumption Church, the bridge separated Sandwich both physically and psychologically from the church and the City of Windsor. It also solidified the marginality of Sandwich in this new environment of mobility.

The economic boom prior to the Depression led to urban and suburban development throughout the border cities and their hinterlands. Sandwich had become a place of modest housing for industrial labourers. Urban transit and rising municipal taxes had pushed development to the periphery of the border cities, while settlement along the highways outside the urban centres intensified. With the exception of a few new streets, however, residential settlement in Sandwich remained unchanged during the 1930s and 1940s. Some of the urban workers who had lost their jobs during the Depression had resorted to small-scale farming. This eclectic mix—modest residential neighbourhoods surrounding the old Sandwich town centre, commercial and industrial land uses, failed developments, and not-quite-rural landscapes—survives today and testifies to the area's subservient role. In the presence of mobility as the dominant land use, people make do.

The Great Depression and political forces beyond Canadian borders had detrimental impacts on the region. The U.S. Congress passed the Smoot-Hawley Tariff Act in 1930, a result of U.S. protectionism. Facing a gloomy economic future, the United States also put restrictions on the employment of Canadians and other non-Americans within its borders. Nearly thirteen thousand people left the Canadian border cities between 1930 and 1933.²⁷ Over the following two decades, Windsor's population grew by only 20 percent. Advocates for the Ambassador Bridge and the Detroit-Windsor Tunnel had argued that

Windsor would become a residential suburb of Detroit. They did not foresee the vulnerabilities of border towns to domestic political concerns. At the start of World War II, many square miles of undeveloped subdivided suburban property and vacant lots within the city limits of Windsor remained.²⁸

Following the decline in international trade during the Depression, motor vehicle exports had diminished, but as local manufacturing diversified into vehicle production for the armed forces, economic prosperity returned. When World War II began, the Ford plant at Windsor employed eleven thousand workers; this had increased to seventeen thousand by the end of the conflict. Windsor became the largest source of military transport vehicles for the British Army and its Commonwealth Allies. In the boom that followed, the roads to the Ambassador Bridge became busier and land development intensified. Windsor was fourth among Canadian cities in 1953 in the gross value of manufactured products.

Urban Effects of a Changing Borderland

All the settlements adjacent to Windsor along the Detroit River have been disrupted and disordered by the relative advantage their location afforded international trade. H.W. Gardner speculated in 1913 that Windsor and its hinterlands would grow and prosper because of their "unsurpassed transportation facilities by rail and by water and unique advantages with respect to the exchange of products between Canada and the United States."29 Indeed, in succeeding years, corporations such as the Dominion Steel and Coal Company—which had purchased US Steel property—had begun smelting, and the Canadian Salt Company forever turned the once-fertile agricultural lands of the black oak savannah into sites for salt mining. Brighton Beach, southwest of Sandwich, was a neighbourhood of modest wood-frame bungalows interspersed with gardens, but by the 1950s its residents looked at (and smelled) Zug Island across the Detroit River, commonly described as a nightmare of steel mills and foundries (fig. 7.3). Brighton Beach, being "so far down it's almost out of town," also became a dumping ground for toxic refuse from all over Windsor-"insult piled on



FIGURE 7.3. View of Zug Island from vantage point at old ferry terminal in Sandwich. Photo by authors.

injury," a contemporary observer has written. A place out of sight and out of mind, many well-established citizens of Windsor characterized Brighton Beach as a "dog-patch," a marginal and abused place. In the predicament of Sandwich paled beside the accumulating neglect of this location. In different ways, both communities were caught in a process of developing underdevelopment, lingering on the periphery of the rising City of Windsor to the east, where many were eager for more fabulous routes to the river, the border, and the international markets beyond.

Wartime industrial growth in the border communities was accompanied not by urban development within the city limits of Windsor, but by the sprawl characteristic of contemporary North America. The population of the City of Windsor barely rose between 1941 and 1956, while its suburban population increased threefold on 2,700 acres of newly

developed land.³² Windsor put significant efforts into curtailing this trend of sporadic, extensive, unplanned development and looked for ways to renew many of its urban neighbourhoods. Consultants authoring an urban renewal report concluded that the city of 5,700 acres had 1,800 acres of declining industrial, commercial, and residential lands, and an additional 300 acres that were blighted.³³ Sandwich (annexed by Windsor in 1935) was declining, and parts of Windsor and Walkerville (also annexed in 1935) were not prospering, but according to the consultants, Windsor's downtown core was most in need of attention.³⁴ As the city government prioritized other areas of Windsor for redevelopment, the designation of the Malden Road Landfill in Sandwich in 1956 forcefully reaffirmed this part of Windsor as a municipal reserve of indiscriminate use. The landfill covered 180 acres of land, wedged between well-kept residential neighbourhoods in southern Sandwich and the town of Ojibway. The provincial environment ministry's Division of Industrial Wastes surveyed the landfill in 1968 and reported that 365,000 gallons of liquid wastes were dumped every month into open pits in the porous marsh.³⁵ The auto industry was undoubtedly a major contributor of this pollution. Near-equal parts paint wastes, spent oils, septic tank waste, and detergent and alkaline cleaners from domestic and industrial sources, these pools were simply covered up with dirt and rubble, the leachates directed via peripheral ditches into McKee Drain, through Sandwich and Brighton Beach, and ultimately into the Detroit River. The landfill stopped accepting industrial wastes five years after the survey, when it had become clear that it lacked the facilities required to properly dispose of these toxic materials. The health impacts of this site have not been documented, but evidence from studies of other hazardous waste landfills suggests that its presence burdened the residents of Sandwich long after the facility closed.³⁶

The communities of Sandwich and Brighton Beach embodied the negative externalities of producing mobility. The people of Windsor and their surroundings became disposable assets in a borderland where the community, the municipality, the province, and the nation were invested more in industrial growth than in local well-being. A number of actors with different stakes in the game shaped the local environment. In the late 1930s, the City of Windsor and the Canadian Salt Company

began acquiring property in Ojibway from the Dominion Steel and Coal Company. Rising private automobile ownership increased the demand for road salt, so much so that the Canadian Salt Company grew considerably following World War II, coming to occupy the majority of land along the Detroit River in Brighton Beach. In exchange for granting the right to mine under the Malden Landfill to the Canadian Salt Company, the city took ownership of the lands south of Brighton Beach and preserved them in perpetuity as an urban nature preserve named Ojibway Park. What remained of the town of Ojibway was sold to the City of Windsor in 1951. The neglect of this land has had the benign consequence that Ojibway Park, the Ojibway Prairie Complex, and Ojibway Prairie Provincial Nature Reserve exist today for recreational and research uses, immediately south of the planned superhighway and border crossing.

Sandwich and Brighton Beach, which predated the growth of automobile dependence, were not serviced by extensive road networks. When the age of automobility and suburbia arrived, redefining how North American cities were planned, the greater Windsor area was ill prepared for the change—particularly the attendant increase in traffic. Most pressing was the lack of an east-west thoroughfare linking the eastern facilities of Ford, General Motors, and Chrysler with industry and regional transportation networks to the west. The solution was a two-lane highway along the Third Concession and E.C. Row Avenue named after Edgar Charles Row, president of Chrysler Canada from 1951 to 1956—linking provincial highways 39 in the east end and 18 in the west end of the Windsor area. In 1963, the Windsor Area Transportation Study (WATS) proposed that this highway be expanded to create the four-lane E.C. Row Expressway.³⁷ However, the expressway's western leg between Huron Line and Ojibway was not completed until 1983, by which time traffic and land-use demands in Windsor had changed significantly.38

The engineering and traffic staff from the City of Windsor and a representative of the Ontario Department of Highways worked together on WATS, with the result of an unfortunate precedent for downloading provincial highways onto local jurisdictions. The study's authors noted that "a casual glance at the area map will quickly indicate that Windsor

is served by an abundance of Provincial highways."³⁹ Although some highways were downloaded or consolidated immediately, provincial control over other local highways ended when Windsor subsequently annexed more land. Problematically, highways met municipally managed streets. Overlooking the complications associated with increased cross-border traffic, the city focused on border-crossing plazas and the tunnel, rather than on the bridge, to ease congestion in downtown Windsor.

Antipathies between the province and the municipality jeopardized the accommodation of cross-border traffic passing through the city. Most significantly impaired were the connections between Highway 401 and the border crossings. The 401 "superhighway," completed through Essex County in 1957, terminated well outside the urban area of the border cities. The province wanted the highway to transect the Sandwich South and Sandwich West townships and terminate at provincial Highway 18 near Ojibway. 40 This would have brought Highway 401 near the shores of the Detroit River, southwest of the Ambassador Bridge. The City of Windsor preferred a highway terminus that would funnel traffic from Highway 401 through its downtown and into the Detroit-Windsor Tunnel. The Sandwich townships strongly opposed both these plans, which would take car drivers around—rather than through—their municipalities.⁴¹ Thus did the superhighway terminate at Highway 3, which led to Huron Church Road and the Ambassador Bridge; a small branch of Highway 401 was added to link with Highway 3B and the tunnel. These provincial highways terminated at the Windsor city limits of the day, only two kilometres from the bridge plaza and three kilometres from the tunnel plaza. However, by the late 1990s, only segments of Highway 3 remained, as a provincial Connecting Link. Combined with Highway 401, this left only two of seven provincial highways in the regional road network connecting one of the world's busiest highways to North America's busiest border crossing.

As the postwar boom was coming to an end in the late 1950s, urban renewal consultants advised city planners that Windsor had "no special attraction to particular industry types that would make it competitive against the industrial region of south central Ontario."⁴² City officials

worked hard against long odds. Industrial centres exist at the mercy of their markets. Windsor's locational advantages were disappearing, as the dynamic and flexible logistics of the trucking and air transport industries surpassed the efficiency of water and rail transportation systems. In a maturing, globalizing economy, distant business and political spheres determined demands on the highway system differently. Windsor and its residents were forced to cope with the environmental footprints of policies at the federal levels of government in the United States and Canada, particularly those aimed at mobilizing resources and capital.

The rise of the postwar automobile industry reduced Canadian dependence on natural resource extraction, but protectionism in the United States threatened to destabilize this new industrial base. The "Big Three" automakers—Ford, General Motors, and Chrysler—were crucial to the new economy yet hampered by old tariff agreements incompatible with the new global economies of scale. Consumers preferred that all makes and models have different options for powertrains and frills, fragmenting demand. This meant that the Big Three needed to centralize their operations to serve the entire North American market and increase world-export capacity. Separate auto production systems in Canada and the United States were unsustainable, and during the recession of the late 1950s, six thousand employees in the Canadian automobile and parts industry lost their jobs as Canada fell into a debilitating trade deficit. The Canada-U.S. Automotive Products Agreement, or Auto Pact, signed into effect in January 1965, guaranteed that future ratios of automobile production to sales in Canada would never drop below a baseline from 1963-1964 and allowed for tight control of the North American auto industry in favour of the Big Three. The agreement enabled corporate globalization, allowing transnational companies to act autonomously and direct international trade policies.43

The creation of a borderless auto industry brought prosperity but also challenges. As the border became more permeable, Windsor's role in facilitating mobility and the advantages of a border location receded. Although Ford and Chrysler expanded their operations in Windsor, Ford Canada had already moved its head offices to Oakville, and the Big

Three opened new plants and facilities in St. Thomas, St. Catharines, Oakville, Oshawa, and Montreal. Car production in Canada doubled between 1965 and 1970, leading the industry to radically reorganize. The Ford engine plant in Windsor, which had previously produced nine different engines in eighty-six different versions for cars sold in Canada, now produced only one engine in fifteen versions for shipment to plants in both Canada and the United States. Independent parts makers followed suit, and shipments across the border increased.⁴⁴ Highway 401 became the primary trading corridor between the Big Three headquartered in Detroit and their Canadian branch plants. Total volumes of cross-border traffic through Windsor rose steadily throughout the 1970s, overloading the border approach built in 1957. However, the only large change in infrastructure was the widening of Huron Church Road—the primary corridor through Windsor for trucks travelling to and from the United States via Highway 401—from two to six lanes from the city limits to the Ambassador Bridge in the early 1980s. 45 This configuration remained unchanged until 2011.

In the decades following the Auto Pact, the Canada-U.S. Free Trade Agreement (1988) and the superseding North American Free Trade Agreement (1994) increased levels of trade in all goods and services and, in turn, increased pressure on cross-border traffic infrastructure. However, a 2001 World Trade Organization ruling that deemed the Auto Pact an illegal restriction on international competition placed even greater demands on Windsor as an acquiescent participant in a globalizing economy. This decision released the automakers from the obligation to meet production-to-sales ratios in Canada. The Big Three almost immediately announced plant closures in Canada, several of which were in Windsor.

Since 2000, contending plans for an improved Detroit River crossing have revealed starkly the different political economies, public cultures, and policy preferences of these neighbouring nations. Projects to facilitate mobility, when they arise at international borders, as they often do, illuminate national differences; the creation of these environments of mobility draw heavily on national treasuries. Such is now the case at the Windsor-Detroit crossing. Improved connections between Canada and the United States in this most important North American

trade corridor are sorely needed. The Ambassador Bridge of 1929 is now a costly bottleneck to commerce, industry, and labour. This key border crossing is so clogged as to impede trade, which since 9/11 has been further constricted by heightened security concerns in the United States. Moreover, lines of idling heavy vehicles have created an environment of twenty-four-hour immobility, toxic to the health and well-being of the tens of thousands who live nearby. More fluid connections are required to accommodate the increased flows of goods and people, while the contemporary international crises of rising unemployment and diminished production make the trading relationship even more welcome and urgent. These issues are felt acutely in the automobile sector, the material lifeblood of the Windsor-Detroit region.

Canadian and American authorities have considered several alternatives that might improve the Windsor-Detroit crossing. The Canadian government's plan for a new bridge defeated the idea of twinning the privately held Ambassador Bridge. This illuminates foundational differences between the two neighbours. Whether the Liberal, Conservative, or New Democratic party is in power, federally or provincially, Canadian administrations turn readily to Keynesian instruments for infrastructure improvements and stimulus to employment. In the United States, such policies are more problematic historically, particularly when Republicans govern. The owner of the Ambassador Bridge, who has moved aggressively to protect his private interests, is a financial backer of agreeable legislators on both sides of the aisle in Michigan. On the Canadian side of the Detroit River, the bridge owner has assembled property in Sandwich and adjacent to the existing bridge for a future twin span without the necessary permits from the Canadian government.46 Ground to create a new access ramp for truck traffic on the Canadian side of the Ambassador Bridge has already been broken, and ramps on the American side for a twinned bridge are waiting for a span that will almost certainly never come. Millions of dollars were spent on media campaigns in Michigan against a new, publicly owned bridge. Lawsuits have been filed against different levels of governments on both sides of the border.47

Hazarding the possibility that their Gordie Howe International Bridge through Brighton Beach might be a "bridge to nowhere,"

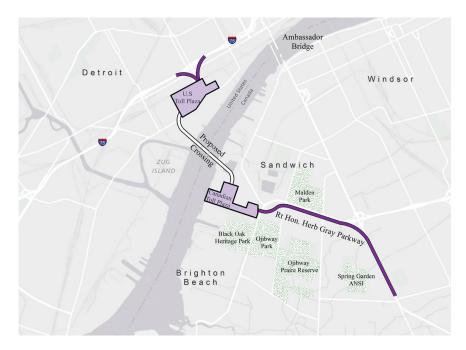


FIGURE 7.4. Map showing proposed location of new crossing and parkway through Windsor. Map by authors.

Canadian governments have pursued their preferred alternative to a privately owned bridge, using the rights of the Crown to expropriate lands required for their preferred access route to the crossing (fig. 7.4). While the City of Windsor, along with community groups and private-interest groups such as the automakers, has been an important player in debates over a new crossing, it is difficult to tell if contemporary strides of globalization are leaving Windsor behind. Windsor's exclusion from the Detroit River International Crossing (DRIC) Project partnership—which included Transport Canada, Ontario's Ministry of Transportation, the U.S. Federal Highway Administration, and Michigan's Department of Transportation—certainly suggests the city's reduced prominence as a stakeholder in this crucial node of the North American trade and transportation network. The City of Windsor's "GreenLink" proposal of an outrageously expensive and

infeasible alternative to the DRIC Project partnership plans casts suspicion on the balance of power and the ability of the city to guide the form of its own local environment.

Conclusion

This front line of trade, once a national frontier, has persistently felt both the pain and the gain of being an environment of mobility. First, prospering from their situational advantage as primary trading posts for the emerging markets of the British North American colonies and the needs of their growing American neighbour, the communities of Sandwich and Brighton Beach are now at the mercy of transboundary politics. While Brighton Beach will almost certainly be all but paved over for the new bridge plaza, Sandwich will find itself cleaved, once again, by the need to facilitate exchanges between society and nature. In so far as Windsor grew and thrived because it was on an international border, this formerly advantageous geopolitical locale has become a destructive burden—a borderland where a borderless economy takes precedence over the land. While the city was trying to adjust to and cope with the local effects of changing transnational tariffs and political agendas, the world started moving through, rather than in and out of, Windsor. The border-crossing megaproject may further intensify this marginal position as well as reshape the boundaries of Sandwich an already socially, politically, and economically fragile community. Undoubtedly, Windsor will continue to be defined as a borderland, but as international boundaries take on different meanings, so will the future of this Canadian environment of mobility.

Notes

- 1 For authoritative studies of French settlement on the Detroit frontier, see Ernest Lajeunesse, ed., The Windsor Border Region, Canada's Southernmost Frontier: A Collection of Documents (Toronto: University of Toronto Press, 1960); Guillaume Teasdale, "The French of Orchard Country: Territory, Landscape, and Ethnicity in the Detroit River Region, 1680s–1810s" (Ph.D. diss., York University, 2010).
- 2 An infrequently recognized geographic curiosity is that the present-day city of Windsor, this chapter's area of interest, is in fact south of Detroit.
- 3 Cole Harris, The Resettlement of British Columbia: Essays on Colonialism and Geographical Change (Vancouver: UBC Press, 1997).
- 4 From 1797 to 1850, Sandwich was the capital of the Western District of Upper Canada, a region that spanned from the Detroit River to the outskirts of present-day Hamilton.
- 5 The importance of the event was encapsulated on January 18, 1854, by the *Detroit Daily Free Press*:
 "To-day the ice fetters will be broken, for the last link [Niagara to Windsor] in the great chain of communication between the east and the west is finished."
- 6 Economic historians debate the direct economic impact of the treaty versus the structural shifts that occurred in the economy due to expansion of the railroad network. See Robert E. Ankli, "The Reciprocity Treaty of 1854," Canadian Journal of Economics 4,

- no. 1 (1971): 1–20; and Lawrence Officer and Lawrence Smith, "The Canadian-American Reciprocity Treaty of 1855 to 1866," *Journal of Economic History* 28, no. 4 (1968): 598–623.
- 7 For more on the arrival of electric rails in the border cities, see Jack E. Schramm, *When Eastern Michigan Rode the Rails*, vols. 1 and 3 (Glendale, CA: Interurban, 1984).
- 8 The Milner-Walker Wagon Works, founded in 1897 in part by the famous distiller Hiram Walker, was located in Windsor's eastern suburb of Walkerville. This company, led by its industrious manager, Gordon McGregor, and its owner, Henry Ford, became the Ford Motor Company of Canada. See David Roberts, In the Shadow of Detroit: Gordon M. McGregor, Ford of Canada, and Motoropolis (Detroit: Wayne State University Press, 2006).
- 9 Philip Mason, The Ambassador Bridge: A Monument to Progress (Detroit: Wayne State University Press, 1987), 32–33.
- 10 Neil Morrison, A Canadian Commercial Geography (Toronto: Ryerson, 1930), 342.
- 11 Mason, Ambassador Bridge, 47.
- 12 Ibid., 23; Neil Morrison, Garden Gateway to Canada: One Hundred Years of Windsor and Essex County 1854–1954 (Toronto: Ryerson, 1954), 317–25.
- 13 Publicity Committee of the Essex County Council, Essex County, the Sun Parlor of Canada: Opportunities for Farming and

- Gardening (Sandwich: Essex County Council, June 1912).
- 14 "Canada's Steel City: Ojibway" (advertisement), Windsor Evening Record (hereafter Evening Record), 30 May 1913, 12.
- 15 "Ojibway: Buy Lots Now" (advertisement), Evening Record, 18 April 1913, 11.
- Eugene Beaulieu and J.C. Herbert Emery, "Pork Packers, Reciprocity, and Laurier's Defeat in the 1911 Canadian General Election," Journal of Economic History 61, no. 4 (2001): 1083–101.
- 17 Evening Record, 12 July 1913, 4.
- 18 Roberts, In the Shadow of Detroit,6.
- 19 Windsor saw a growth rate of 140 percent and 75 percent in the 1910s and 1920s, respectively. Detroit grew 112 and 58 percent during the same periods, while London had a relatively modest 31 and 18 percent growth. Morrison, Garden Gateway, 264.
- 20 Ibid., 60, 76, 226, 270.
- 21 Ibid., 268.
- 22 See, for example, "Opinions Vary as to Tunnel" and "Claim Tunnel Plans Vague," *Border Cities Star*, 24 September 1925, 3, 5.
- 23 Mason, Ambassador Bridge, 55.
- 24 Ibid., 69.
- 25 "Popular Majority for Bridge in County," Border Cities Star, 6 January 1926, 5.
- 26 For a comprehensive review of the impact of the Ambassador Bridge and other transportation technologies on the town of Sandwich, see Donald Lafreniere

- and Douglas Rivet, "Rescaling the Past through Mosaic Historical Cartography," *Journal of Maps* 6, no. 1 (2010): 417–22.
- 27 Morrison, Canadian Commercial Geography, 297.
- 28 J. Lewis Robinson, "Windsor, Ontario: A Study in Urban Geography" (MA thesis, Syracuse University, 1942), 167.
- 29 H.G. Gardner, Windsor, Ontario, Canada, including Walkerville, Ford, Sandwich, and Ojibway: An Authentic Compilation Embracing in Word and Pictorial Representation the Growth and Expansion of These Municipalities (Windsor: Record Printing Company, 1913), 1.
- 30 Paul Vasey, *The Age of the Cities* (Windsor: Art Galley of Windsor, 1997), 1–2.
- 31 Ibid.
- 32 E.G. Faludi and Associates Town Planning Consultants Limited, Toronto, A Fifteen Year Programme for the Urban Renewal of the City of Windsor and Its Metropolitan Area (Windsor, 1959), 1.
- 33 Ibid, 22. The condition of residential buildings within the metropolitan area of Windsor was surveyed and, according to external conditions, categorized as very good or good (free from blight), fair (vulnerable to blight), poor (partly blighted) or very poor (blighted).
- 34 Ibid., 8.
- 35 Ontario Water Resource Commission, Division of Industrial Wastes, A Report on an Industrial Wastes Survey of Malden Road Landfill, Windsor, Ontario

- (Toronto: Ontario Ministry of the Environment, 1968).
- 36 Environmental health studies of other solid and toxic waste landfills in Canada include the Sydney Tar Ponds and the Miron Quarry landfill in Montreal. See Timothy W. Lambert and Stephanie Lane, "Lead, Arsenic and Polycyclic Aromatic Hydrocarbons in Soil and House Dust in the Communities surrounding the Sydney, Nova Scotia, Tar Ponds," Environmental Health Perspectives 112, no. 1 (2004): 35-41; Mark S. Goldberg, Jack Siemiatyck, Ron DeWar, Marie Desy, and Helene Riberdy, "Risks of Developing Cancer Relative to Living Near a Municipal Solid Waste Landfill Site in Montreal, Ouebec, Canada," Archives of Environmental Health: An International Journal 5, no. 4 (1999): 291-96.
- 37 John D. Tofflemire, The Windsor-Detroit Border: Significant Developments in the Last Half Century of the Windsor Gateway (Background Paper No. 1, Cross-Border Transportation Centre, University of Windsor, 2009).
- 38 The Windsor Urban
 Transportation Study,
 completed in 1980 by the City
 of Windsor and the Ontario
 Ministry of Transportation and
 Communications, reviewed the
 function of the E.C. Row facility
 and confirmed the need for a
 controlled-access freeway. Among
 the factors considered were rapid
 residential development in the
 town of Lasalle and the opening of
 the Ford Essex Aluminum plant in
 the early 1980s.

- 39 Tofflemire, *Windsor-Detroit Border*, 2.
- 40 Parts of Sandwich South and Sandwich West were annexed by the City of Windsor in 1966; following a major restructuring of Essex County in 1999 the townships were amalgamated with Tecumseh and Lasalle.
- 41 "Super Highway Limited Access Draws Criticism," *Windsor Daily Star*, 23 October 1953, 5.
- 42 Faludi, Fifteen Year Programme, 2.
- 43 In 1964, Canadians assembled one in twenty North American automobiles; this figure had increased to one in five by 1999. See Dimitry Anastakis, Auto Pact: Creating a Borderless North American Auto Industry, 1960–1971 (Toronto: University of Toronto Press, 2005).
- 44 Ibid., 130.
- The Windsor Urban
 Transportation Study (1980), which
 also addressed transportation
 requirements for the Detroit River
 crossings, recommended widening
 Huron Church Road between the
 Ambassador Bridge and city limits.
 This was implemented and formed
 the configuration until partial
 completion of the Rt. Hon. Herb
 Gray Parkway in 2014.
- 46 Jeff Bennett, "New Round in Fight over Detroit Bridge," Wall Street Journal, 11 January 2011.
- 47 Dave Battagello, "Moroun Launches Sweeping Lawsuit to Halt DRIC Bridge; Claims Exclusive Rights," Windsor Star, 10 April 2013.