

Broadway Corridor Vancouver, British Columbia

February 3–6, 2014



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Readying the Urban Corridor for Growth

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About the Urban Land Institute

THE MISSION OF THE URBAN LAND INSTITUTE is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. ULI is committed to

- Bringing together leaders from across the fields of real estate and land use policy to exchange best practices and serve community needs;
- Fostering collaboration within and beyond ULI's membership through mentoring, dialogue, and problem solving;
- Exploring issues of urbanization, conservation, regeneration, land use, capital formation, and sustainable development;
- Advancing land use policies and design practices that respect the uniqueness of both built and natural environments;
- Sharing knowledge through education, applied research, publishing, and electronic media; and
- Sustaining a diverse global network of local practice and advisory efforts that address current and future challenges.

Established in 1936, the Institute today has more than 32,000 members worldwide, representing the entire spectrum of the land use and development disciplines. Professionals represented include developers, builders, property owners, investors, architects, public officials, planners, real estate brokers, appraisers, attorneys, engineers, financiers, academics, students, and librarians.

ULI relies heavily on the experience of its members. It is through member involvement and information resources that ULI has been able to set standards of excellence in development practice. The Institute has long been recognized as one of the world's most respected and widely quoted sources of objective information on urban planning, growth, and development.

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About ULI Advisory Services

THE GOAL OF ULI'S ADVISORY SERVICES program is to bring the finest expertise in the real estate field to bear on complex land use planning and development projects, programs, and policies. Since 1947, this program has assembled well over 400 ULI-member teams to help sponsors find creative, practical solutions for issues such as downtown redevelopment, land management strategies, evaluation of development potential, growth management, community revitalization, brownfield redevelopment, military base reuse, provision of low-cost and affordable housing, and asset management strategies, among other matters. A wide variety of public, private, and nonprofit organizations have contracted for ULI's advisory services.

Each panel team is composed of highly qualified professionals who volunteer their time to ULI. They are chosen for their knowledge of the panel topic and screened to ensure their objectivity. ULI's interdisciplinary panel teams provide a holistic look at development problems. A respected ULI member who has previous panel experience chairs each panel.

The agenda for a three-day panel assignment is intensive. It includes an in-depth briefing, a site tour, and meetings with sponsor representatives; interviews of key community representatives; and a day of formulating recommendations. Long nights of discussion precede the panel's conclusions. On the final day on site, the panel makes an oral presentation of its findings and conclusions to the sponsor. A written report is prepared and published.

Because the sponsoring entities are responsible for significant preparation before the panel's visit, including sending extensive briefing materials to each member and arranging for the panel to meet with key local community members and stakeholders in the project under consideration, participants in ULI's three-day panel assignments are able to make accurate assessments of a sponsor's issues and to provide recommendations in a compressed amount of time.

A major strength of the program is ULI's unique ability to draw on the knowledge and expertise of its members, including land developers and owners, public officials, academics, representatives of financial institutions, and others. In fulfillment of the mission of the Urban Land Institute, this Advisory Services panel report is intended to provide objective advice that will promote the responsible use of land to enhance the environment.

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About the ULI Foundation

THE MISSION OF THE ULI FOUNDATION is to serve as the philanthropic source for the Urban Land Institute. The Foundation's programs raise endowment funds, major gifts, and annual fund monies to support the key initiatives and priorities of the Institute. Philanthropic gifts from ULI members and other funding sources help ensure ULI's future and its mission of providing leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.

The Foundation exists to support the content development and dissemination efforts of the Urban Land Institute and to educate the public—and those making decisions on behalf of the public—about responsible land use practice and patterns. Whether creating scholarship opportunities for worthy students, publishing original research on critical land use issues, or convening decision makers to discuss current industry developments, the ULI Foundation enables members to make a visible difference in communities around the world—and in the lives of countless individuals within those communities. The ULI Foundation has benefited from the generous philanthropy of many donors, who see in their giving an opportunity to provide for others through an organization that has meant so much in their own lives and careers.

Governors

ULI governors are a select group of members united by their commitment to ensuring the future of the organization. Becoming a governor is one of the most profound ways to make a visible difference to the future of our nation's communities as well as our collective professions. The Governors Program funds the largest and most significant endowment for ULI. The endowment has contributed approximately \$2 million during the last three years to support many key content initiatives.

GAP Panels

The Governors Advisory Program (GAP) is unique in that the ULI Foundation funds the program completely. Governor John S. Hagestad has generously funded the program for three years. Like Advisory Services panels, GAP panels are organized as interdisciplinary panels that can help communities address important land use and real estate development issues.

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Acknowledgments

THE PANEL WISHES TO THANK ULI British Columbia, especially Alan Boniface, chair; Shannon Paterson, coordinator; and Dorothy Sitek, who helped identify the need for a panel, organized many of the logistical issues, and participated in the tour, working dinners, and briefings. Additional thanks go to City Manager Penny Ballem; the city of Vancouver; Metro Vancouver, the regional agency coordinator; TransLink, the regional transportation network of Greater Vancouver; and the members of their staffs for their time and effort on this project. The panel especially thanks the city of Vancouver's Jerry Dobrovolny, director of transportation, and Brian Jackson, general manager of planning and development, as well as Tamim Raad, director of strategic planning and policy at TransLink, for their personal participation in this panel effort.

The panel acknowledges and thanks the more than 20 individuals who were interviewed and participated in various work efforts with the panel. Representing both city and regional government agencies and a diverse and informed public, these stakeholders provided valuable information and perspectives through their passion and understanding of the issues, greatly aiding the panel in its analysis.

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The GAP panel at work.



ULI Governors Advisory Program panel members at Trimble Park during a tour of the Broadway corridor. From left: Richard Gollis, Rick Rosan, Dick Reinhart, Brendan Cagney, and Ralph Núñez.

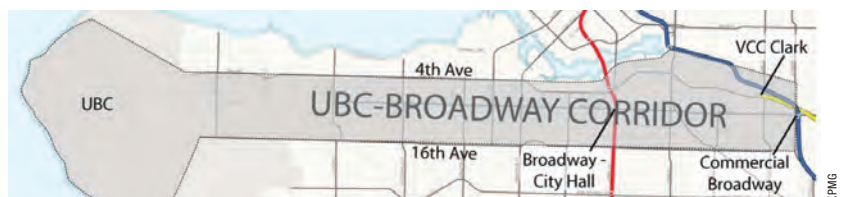
Background and the Panel's Assignment

VANCOUVER IS A COASTAL SEAPORT CITY on the mainland of British Columbia, Canada. The 2011 census recorded 603,502 people in the city, making it the eighth-largest Canadian municipality. Vancouver is one of the country's most ethnically and linguistically diverse cities: 52 percent of its residents speak a first language other than English. The Greater Vancouver area has about 2.4 million inhabitants, is the most populous metropolitan area in western Canada, and is the third-most-populous metropolitan area in the country.

Located in the heart of Vancouver, the Broadway corridor is a key east–west connector and business hub. A total of 13 kilometers in length and about 1 kilometer north to south, the route runs along Broadway Avenue from Commercial Street to Alma Street, Tenth Avenue from Alma Street to Blanca Street, and University Boulevard to the terminus at the University of British Columbia (UBC).

The entire length of the Broadway corridor has been developed, so there are no greenfield concerns in the Vancouver portion. The UBC portion of the corridor (see map) includes a golf course as well as Pacific Spirit Regional Park, both of which are protected lands. Any development along the corridor needs to consider these land uses. Infrastructure and utilities line the corridor and provide adequate capacity for the current population. At this time, no significant infrastructure or utility projects are planned beyond those outlined for rapid transit in the “UBC Line Rapid Transit Study.” All modes of transit—car, bus, bicycle, and pedestrian—are accommodated in the corridor.

Central Broadway—between Main Street in the east and Burrard Street in the west—is the second largest employment center in the province, after Downtown Vancouver. Half of all people working in Central Broadway come from outside Vancouver. Regional destinations such as Van-



couver General Hospital (VGH, the largest hospital in the province) and UBC (western Canada's largest university) lack sufficient connections to the regional rapid transit network and other important regional destinations. Forty-nine percent of all westbound bus rapid transit passengers are headed for Central Broadway (including VGH), with 38 percent continuing on to UBC.

Transit on the corridor is at capacity, and passengers are often passed up. Even with conventional bus services running every two to three minutes, over 2,000 passengers are left behind at the Commercial Broadway Station every morning. This is particularly problematic given the important business destinations located along the corridor, namely at Central Broadway and UBC.

The regional transit authority, TransLink, in partnership with the government of British Columbia, city of Vancouver, UBC,

Top: Metro Vancouver, Vancouver, and UBC lands outlined in red.

Above: The Broadway corridor, as depicted in KPMG's The UBC–Broadway Corridor—Unlocking the Economic Potential report.

Three Preferred Options and High-Level Evaluation Criteria

	LRT 1		COMBINATION 1	RRT 1 (SKYTRAIN)
				
DESCRIPTION	LRT from Commercial Dr to UBC via Broadway, West 10th Ave, and University Blvd.		Combination of RRT and LRT, with RRT from VCC-Clark to Arbutus, and LRT operating from Main Street-Science World to UBC.	Mainly tunnelled route from VCC-Clark to UBC via Great Northern Way, Broadway, 10th Avenue, and University Blvd.
	Street level	Partially tunnelled		
LENGTH OF LRT	13.5 km	13.5 km	12.0 km	—
LENGTH OF RRT	—	—	5.1 km	12.4 km
TRAVEL TIME Commercial Dr to UBC (base case = 38 min)	28 min	26-27 min	29 min	17 min
TRAVEL TIME Commercial Dr to Cambie (base case = 9 min)	8 min	7 min	5.5 min	5.5 min
CAPITAL COST	\$1.1 billion	\$1.4–1.8 billion	\$2.7 billion	\$3 billion
ANNUAL OPERATING COST (in 2041)	\$11.9 million	\$11.9–12.2 million	\$12.9 million	\$14 million
DAILY BOARDINGS (in 2041)	160,000	160,000–163,000	350,000	320,000
NEW DAILY TRANSIT RIDERS/TRIPS (2041)	11,000	13,500	44,000	54,000

the University Endowment Lands, and Metro Vancouver, conducted the “UBC Line Rapid Transit Study” to explore rail rapid transit options to replace the bus rapid transit. Although three options were identified (see figure above), a preferred option has not yet been selected. Factors including cost, impact, affordability, and other regional transportation needs will be considered. This will be done through regional consultation and the development of a regional transportation strategy, which began in 2013 and will be completed in 2014.

Implementing rapid transit service along the Broadway corridor is essential to achieving ambitious provincial, regional, and local environmental targets and to encouraging economic growth. Moreover, several important clusters are located along the corridor, including a burgeoning tech sector, a life sciences sector, municipal government, and UBC. An improved transit service will also allow for more efficient regional links to these centers of innovation.

Rapid transit service also presents several important opportunities for transit-oriented development, which will be essential to the overall success of the transit system (i.e., delivering sufficient passengers to provide revenue for operating costs, etc.). As transit service is built up along the Broadway corridor, careful planning must be done to ensure that it is in step with residential and commercial development, and vice versa. Development may occur at several locations along the corridor, each with its unique context, possibilities, and limitations. The challenge will be to select the areas that contribute not only to the immediate surroundings, but also to city, regional, and provincial objectives for sustainable development, transit access, and innovative business sector partnerships.

The Panel’s Assignment

TransLink, the government of British Columbia, the city of Vancouver, UBC, and Metro Vancouver believe this is an important time to seek the input of a ULI Governors Advisory Program (GAP) panel because decisions that are made now will significantly influence how the Broadway corridor develops into the future. The ULI panelists were asked to provide strategic advice about such development and suggest best practices that TransLink and the city should consider as the planning initiative for the Broadway corridor progresses. Such suggestions will make use of lessons learned from similar exercises in other cities in North America and focus specifically on private sector real estate development on and near transit lines.

The panel was asked to answer the following questions:

- Which three distinct neighborhoods along the corridor are most suitable for station development?

- What best practices should be applied at each of these nodes? Are there precedent examples that can be applied to this corridor?
- What is the ideal form of future development at these nodes?
- How far should the development extend around a proposed station?
- What are the economic and social implications for the selected neighborhoods, the city of Vancouver, and UBC?
- What are the trade-offs among the different transit modes—LRT 1, Combination 1, and RRT 1—and which mode would you recommend? (See graphic on facing page for additional information.)



The intersection of East Broadway and Kingsway. Development and uses along the Broadway corridor are varied and in context with the neighborhood.



A bird's-eye view of West Broadway at Cambie Street.



The intersection of West Broadway and Columbia Street.

Summary of Recommendations

THE PANEL RECOGNIZES THAT the Broadway corridor is a large, complex segment of Vancouver's real estate. Owing to the limited time and information available, the panel cautions that it cannot easily render detailed recommendations. In that light, the panel hopes this enquiry provides a fresh look at the issues without historical local constraints and suggests some thoughts on best practices that panelists have seen work in other cities.

Transit Mode

Existing transit along the Broadway corridor is a failure under current conditions. New transit will both ameliorate that situation for the current workforce and residential populations, and provide capacity for the growth that is anticipated to occur over the next 25 years or so. With the presence of major educational, technological, and residential activity—both now and projected—at the UBC campus, there is a long-term need for any improved transit along the corridor to provide service that transports people along the length of the corridor as well as on intermediate travel within the corridor.

Future development typologies, densities, and square footage in the Broadway corridor, whether for employment or residential, will be affected by the modal choice of new transit. Although TransLink's analysis indicates that either rail or bus rapid transit would satisfy volume demands, the city makes a plausible case for the subway alternative on the basis of quantitative supply and demand over the long term. In addition, there are qualitative differences between the surface light-rail transit (LRT) alternative and the underground regional rail transit (RRT) (subway) alternative, including construction impacts and long-term impacts on streetscapes, parking, and traffic flow. Finally, there are the obviously critical quantitative differences in the financial costs of the alternatives, and any decision on

mode must consider the long-term marginal value of the cost differentials.

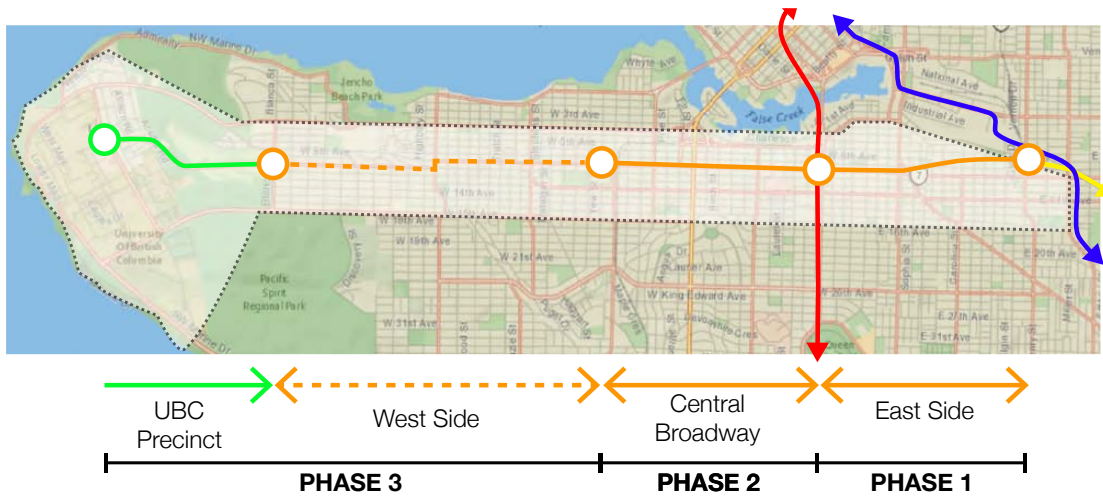
The differences in current and likely future development along the corridor expand and shrink substantially as a traveler moves from one end to the other: more dense and primarily employment activity in the eastern segments (from Great Northern Way to Cambie) with evolving institutional and commercial uses from Cambie to Burrard in the medical center and offices, then less dense, smaller-scale residential and retail out to Blanca Street, and a return to large-volume—if not high-density—educational, technology, and residential development, both existing and projected, west of Blanca Street.

These differences in use, density, and scale mean that development along the Broadway corridor should not be looked at as a whole but in segments, with differing development criteria and zoning and possibly staged phasing of construction of the chosen transit alternative.

The panel also recognizes that there are other issues outside the Broadway corridor. Some include the possible provincial referendum on a new transit funding source and competing demands from elsewhere in the metropolitan region—issues that the panel cannot take into account given the timing and lack of specific information.

The panel believes that certain considerations must be addressed during planning and the development of public consensus. The final choice of transit mode needs to take account of the following expectations, thereby offering sufficient value to justify public expenditure:

- Construction would be respectful of site-specific conditions and incorporate best practices for reducing the environmental impact of the construction (e.g., eliminate or drastically reduce noise, disruption of traffic).



Suggested Broadway corridor phasing plan.

- Construction would occur in phases (see figure above).
- Institutional entities within the corridor such as UBC and VGH would participate actively in the planning of station locations and of timing/phasing, and if at all possible, would provide financing contributions.

Land Use and Development

The panel considers it vitally important that future land use along the corridor fit the profiles of the various neighborhoods, each of which has its own pattern of uses (residential, employment, retail), its own scale and density, and its own personality at the street level.

In the Central Broadway area, increased density and height are appropriate for both the scale of the area and the need to add employment space. In the more residential neighborhoods, zoning needs to recognize the existing fabric while providing for some increased density, with limited height, at nodes appropriate for the addition of retail and services to meet residential growth. The area included in any rezoning would also differ by neighborhood, depending on distance from transit stops both along Broadway and on either end of the corridor.

Specific details of rezoning are beyond the scope of this panel's work, but the panel does suggest later in this report some concepts that show how such variety might be put into practice: in essence, zoning changes along the

corridor should be based on market conditions at street level and disconnected from the modal choice—i.e., a subway does not justify very high densities at all locations along the corridor.

Process

To achieve an efficient and effective process to drive the Broadway corridor future requires education, communication, and marketing. The panel believes it is critical to both the short-term decisions regarding transit improvements and the long-term success of new and infill development that the city and the neighborhoods work together closely. All stakeholders need to be on the same page so that they develop positions, both for and against, based on the same set of facts and so that each stakeholder can have a high level of confidence in the other's candor.

Vancouver is to be congratulated for its history of thoughtful planning and its efforts to include all constituents in the process. Although residents, as in many cities, tend to see the problems, Vancouver is seen by the rest of the world as a success. The city is doing lots of things very well. However, in its short time in the city, the panel saw a need for a more coordinated education and communication process among the constituent parties: the city, Metro Vancouver, TransLink, and neighborhoods and citizenry. This is not unique to Vancouver. The panelists have seen this need in their own communities; too often, disagreements arise

from misunderstandings of facts. The panel believes that ULI BC can play an important role in bringing together the constituent groups to get everyone on the same page. ULI has acted as convener in many cities and has processes, e.g., Reality Check, that have proven very successful in helping to achieve consensus on sensitive and controversial issues.

Finally, even after the representative public and private groups have come together, there still needs to be effective marketing to the greater community, and other regional/federal players, about the impacts and benefits of any particular project, transit, or development. The process should be organized to educate, communicate, and market to all the stakeholders about the goals and objectives of the transit project.

Market and Land Use Policy Conclusions and Implications

AFTER CONDUCTING EXPLORATORY RESEARCH

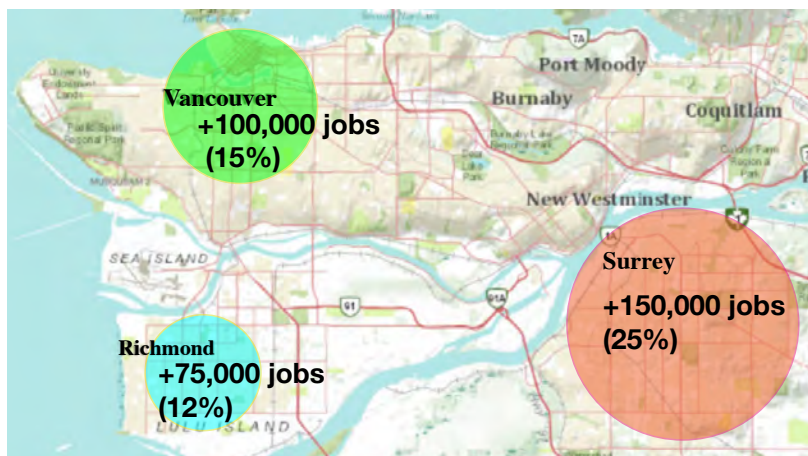
through review of published reports and interviews with key stakeholders, the panel identified five critical market and land use policy conclusions that have strong implications for development patterns along the Broadway corridor. It is important to note that the transit modality and technology solutions, such as underground heavy rail subway versus above-grade light-rail options, are independent of these considerations.

Growth Is Coming

Metropolitan Vancouver's contemporary growth patterns date to the successful Expo 86 and 2010 Winter Olympics. Each of these international events spurred major public investment in infrastructure and catalyzed private investment in commercial and residential space. Corresponding policy initiatives focused on quality of life and the environment—such as the city of Vancouver's stated goal of becoming the “world's greenest”—are inducing population and employment growth across the region.

According to forecasts published by Metro Vancouver, the region is expected to add over 1 million people and 600,000 new jobs through 2041. The majority of population growth—75 to 85 percent—will be from domestic and international in-migration, indicating the desirability of the region as a destination for Canadians as well as for Asian nationals. The city of Vancouver, which currently provides 36 percent of all employment in metropolitan Vancouver, is projected to attract about 15 percent of new growth and an additional 100,000 new jobs.

The dispersion of new growth across the metropolitan area, with 150,000 new jobs in Surrey and 75,000 in Richmond as shown in the exhibit, suggests that each major node will be required to accommodate growth in



Metro Vancouver growth projections, 2006–2041, from “Metro Vancouver: 2040 Residential Growth Projections,” November 2009.

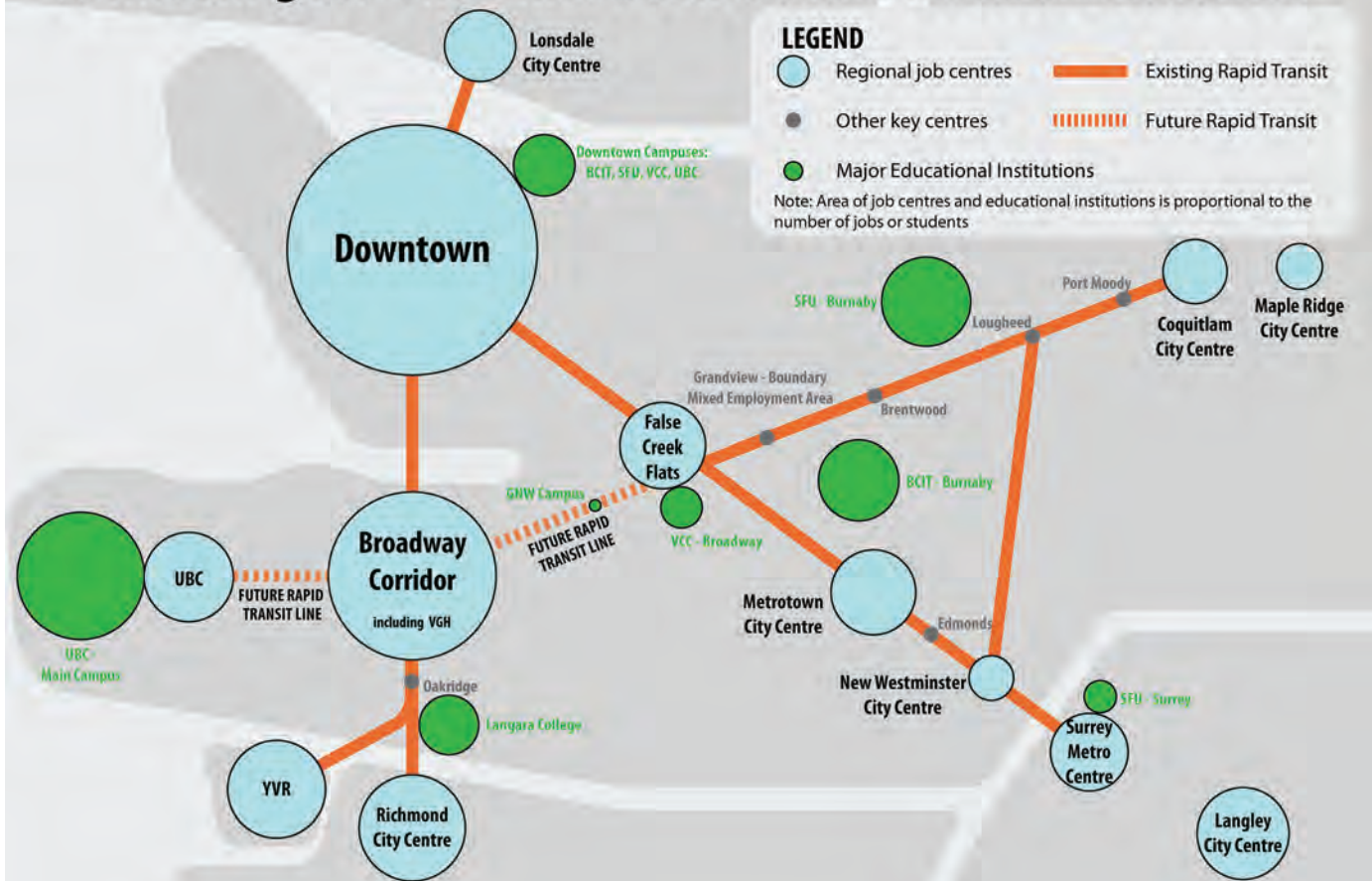
ways that are consistent with their economic, political, and community goals. The Urban Centre and Frequent Transit Development Areas (FTDAs) provide an important policy tool to guide and concentrate growth in locations best suited for future growth while planning for transportation connections throughout the region.

These population predictions imply that growth should be accommodated by appropriate measures, applied across the region through policies and practices, to balance new infrastructure investment (including transportation), economic potential, and community livability.

Broadway Corridor Is Economically Significant

In 2013, a KPMG report, *The UBC–Broadway Corridor—Unlocking the Economic Potential*, described the Broadway corridor as “the second largest concentration of jobs and employment in the province.” The corridor stretches about 13.5 kilometers from the Great Northern Way (GNW)

Connecting Job and Innovation Centres in Metro Vancouver



Sources: Census 2006, YVR 2011 Economic Report, UBC Our Place in the Region 2009, Metro Vancouver 2011 (based on Ministry of Advanced Education, Innovation and Technology 2010).

This illustration from the KPMG UBC–Broadway Corridor report identifies the major economic hubs in the Broadway corridor and the potential for an effective rapid-transit connection to foster further development and growth.

The entrance to the University of British Columbia and the developments on University Endowment Lands.

Campus on the east, to VGH and the medical complex in the core, to UBC to the west. As shown in the graphic, it is a critical node among the regional job centers linking UBC to Downtown and important centers to the east.

In terms of scale, the corridor's 85,000 residents and 100,000 jobs (including the University Endowment Lands) represent 16 percent of the city population and 30 percent of employment. Correspondingly, Downtown captures 26 percent of city population and 41 percent of employment. At the west end of the corridor, UBC is continuing to ex-

pand and to play a larger economic role in the city. UBC's institutional floor space has grown 50 percent since 2000 and is projected to grow from 18 million square feet to over 22 million square feet in the next five years.

The corridor's share of city businesses is well segmented, demonstrating its diversity and importance to the city's economy. Reports indicate the following characteristics for the study area:



- 40 percent share of the city's health care providers and social assistance agencies, concentrated in the Central Core (between Cambie and Granville) and at UBC
- 25 percent share of the city's high-technology sector, including the burgeoning gaming, entertainment, and medical technology firms that are aggregating in the GNW area
- 20 percent share of the city's residential-serving establishments and small businesses, consistent with its share of population; the west side, from MacDonald to the University Endowment Lands, is predominantly residential-focused.

The evidence is clear that the corridor is valuable to the city and to regional economic engines. Therefore, stronger links are required to the corridor, and within it, in order to realize the full economic potential of the economic sectors spread from GNW to the Central Core and the University Endowment Lands.

Transit Plays a Critical Role

Throughout the discovery and interview process, the requirement to improve transit in the Broadway corridor was the most striking point of agreement across the stakeholder groups. Transit represents about 30 percent of the mode share, demonstrating both the volume and the stubborn persistence of automobile traffic along the corridor. Labeled the “busiest bus corridor in North America,” Broadway sees public buses carry over 100,000 trips per day, connecting automobile and rapid transit lines from

The Commercial-Broadway Station, where the SkyTrain Expo and Millennium lines meet.



within and outside the city. The 99B route runs 22 buses per hour and is over capacity at peak hours now, without accounting for the projected economic growth along Broadway. Even at off-peak times, the 99B route operates at 75 percent capacity.

Passengers collect at a stop along the 99B bus route in the Broadway corridor.

Based on current capacity constraints alone, rapid transit is required in the Broadway corridor to accommodate travel at peak times. Accounting for future growth projections in the dynamic economic areas from Commercial to Arbutus and through to UBC, the case for improving transit capacity is irrefutable.

Transportation Modes Must Support Regional Economic Activity

The Broadway corridor is acknowledged as a vital source and connector of regional economic activity. As such, trips along the corridor are varied and segmented by objectives, origins, and destinations. The majority of trips are made by commuters intending to travel as quickly as possible through the corridor from Commercial to Cambie/Oak and on to UBC. Internal trips within the corridor are concentrated in the Central Core as workers conduct business in the medical and service sectors. They require quick, reliable movement along Broadway. To a large degree,

the objectives of these trips conflict and require a delicate balance of access, speed, and throughput.

A significant volume of trips are connections from other rail and bus hubs in the city and in neighboring eastern and southern jurisdictions and regional centers. Trips in all modalities from these origins are expected to increase. Growth forecasts indicate continued commuter inflow to the Broadway corridor from the expanding FTDA's across metropolitan Vancouver through to the University Endowment Lands, in parallel with UBC's expanding economic role in the region.

Transit connections inside the corridor need to be unified and seamless within the regional system to ensure efficiency between residential and employment centers. Irrespective of the technology decision, the corridor's transit solutions need to be designed with recognition of the varying objectives of its current and future users.

Transit Solutions Must Not Drive Zoning

In the panel's fact finding, examples appeared for each of Vancouver's growth cycles (pre- and post-1986, and pre- and post-2010) of mass transit decisions that did not balance zoning changes with economic potential and community livability. Invariably, stakeholders perceived that neighborhood impacts were overlooked or underrepresented in order to fast-track major transportation projects. "Blanket up-zones" were applied at transit hubs, leading to rampant speculation and dislocation of residents and businesses.

Based on the Broadway corridor's specific characteristics, it will be important to apply three guiding conditions for zoning, irrespective of the transit technology decision:

1. New development can be concentrated in existing C-3A zones, which are reportedly only 60 percent built out in the corridor's Central Core. Other locations along the west side do not need to be upzoned in concert with new transit investments.



Del Mar Station Village in Pasadena, California, is an example of development consistent with the height and mass of the surrounding buildings and the existing traffic-handling capacity of adjacent streets and the light-rail right-of-way.

2. Strategic and focused upzoning can be designated in linear and radial directions from Broadway to address the mixed-use nature of the corridor. Land use issues related to retail shop visibility, on-street congestion, and supportive parking still need to be addressed as transit is improved. The addition of new housing (market and affordable) will also need to be addressed in scale, as will development of new commercial and employment space.
3. Zoning patterns can balance regional and local needs in order to preserve distinct neighborhood character. Careful consideration of view corridors and sun cones is important in community planning criteria. Transit access points can be designed to fit the varied neighborhood scale throughout the corridor.

Zoning must meet the scale and scope of street conditions and proximate development patterns. A "one size fits all" upzoning across the Broadway corridor is not appropriate for economic or residential vitality.

Urban Design Principles







SEVERAL CONSIDERATIONS should be taken into account when developing the Broadway corridor for population growth and mass transit.

Traveling west to east along Broadway, the panel noticed that the character of the street changed several times. From Commercial Drive to UBC, the 13-kilometer portion of the street, panel members observed many specially zoned districts from light industrial and educational campuses through municipal and health care districts to multi-family neighborhoods to single-family neighborhoods. The Broadway corridor is a nice east–west section cut through the city because the land use patterns and neighborhoods are distinct and showcase the diversity of Vancouver. Therefore, it is imperative to preserve the existing qualities of the neighborhoods.

The future mass transit system along Broadway from west to east has been dubbed the “Brain Train” as it will connect college campuses, research facilities, health care centers, and emerging tech hubs. Connecting this line with the SkyTrain hub will provide access for the many workers and students who currently use other means of travel. This connection will relieve some of the congestion that already affects the street.

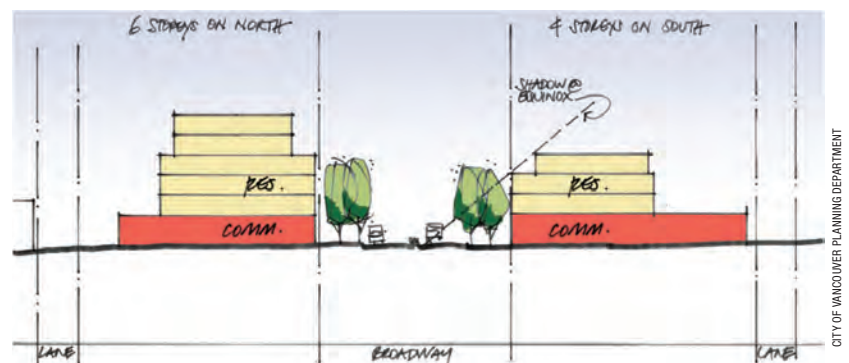
The city’s Planning Department and many neighborhood groups already have terrific design guidelines in place for the Broadway corridor and the neighborhoods that are connected by it. Many other cities use Vancouver as an example of high-quality urban design because of these practices. In the city’s May 2011 plan are many of the same principles as those in ULI’s *Ten Principles for Successful Development Around Transit* (see box, page 20). The extent of these design guidelines addresses the built form as well as the elements that create a desirable community. These guidelines pay specific attention to preserving view corridors, regulating building height, building mass,

Broadway Land Use Matrix

	UBC/UEL	UBC–Alma	Alma–Burrard	Burrard–Cambie	Cambie–Main	Main–Commercial
	UBC Campus		General Urban		Metro Core	
Built form						
Zoning types	Institutional Recreational	Commercial/ mixed use Institutional	Commercial/ mixed use	Commercial/ mixed use Institutional: health Office/light industrial	Commercial/ mixed use Office/light industrial	Commercial/ mixed use Office/light industrial
Residential zoning	Multiple dwelling	Single family	Single family Two family	Two family Multiple dwelling	Two family Multiple dwelling	Two family Multiple dwelling
Local amenities	UBC • Academics • Research • Health care	Point Gray Locarno Beach Park Jericho Park	Burrard Slopes • Digital media • Tech services • Design services	NGH Health Municipal government Uptown office district	Mount Pleasant industrial area: manufacturing/ high tech Arts District VCC	GNW campus • Digital media center • Emily Carr University

street cross-sections, setbacks, parking, sun penetration, public realm, human scale, open space, parks, walkways, connectivity, walkability, landscape, and street amenities. Currently, these design guidelines are documented in both neighborhood master plans and by the city of Vancouver planning department; however, the guidelines need to be incorporated into every new project as the corridor continues to be developed.

A sketch from the city of Vancouver’s Broadway corridor design guidelines illustrates streetwall, setback, and use concepts.



Development Principles Comparison

City of Vancouver, Cambie Corridor Plan

1. Provide land use that optimizes the investment in transit.
2. Provide a complete community.
3. Create a walkable and cycleable corridor of neighborhoods seamlessly linked to public transit.
4. Focus intensity and community activity at stations and other areas with strategic opportunities for sustainability, renewable energy, and public amenity.
5. Provide a range of housing choices and affordability.
6. Balance citywide and regional goals with the community and its context.
7. Ensure job space and diversity.

ULI Ten Principles for Successful Development Around Transit

1. Make it better with a vision.
2. Apply the power of partnerships.
3. Think development when thinking about transit.
4. Get the parking right.
5. Build a place, not a project.
6. Make retail development market driven, not transit driven.
7. Mix uses, but not necessarily in the same place.
8. Make buses a great idea.
9. Encourage every price point to live around transit.
10. Engage corporate attention.

This walking-radius diagram illustrates quarter- and half-mile distances from the Broadway–City Hall Station at West Broadway and Cambie Street.



Because the growth in population and jobs coming to the Broadway corridor is inevitable, the associated planning processes should be used to convey to neighborhoods excitement about an improved lifestyle through access to mass transit. This is especially true because some residents fear that construction of mass transit along Broadway will disrupt the quality of life they currently enjoy. Density can be a great thing if done well, and good, reliable transit is vital to higher-density living. Many people can gain access to resources and amenities.

It is important to engage and educate the public as early and often in the planning process as possible about what the vision for the neighborhood means. Part of making a stronger and healthier community is to get people physically moving. The current desired walking times are between five minutes (about 400 meters or a quarter-mile radius) and ten minutes (about 800 meters or a half-mile radius). A walking radius can be used as a guideline for public street improvements that supports mobility and provides access to a targeted location, like a transit station.

An aerial view of Arbutus Walk (solid outline) and the Carlings (dashed outline) residential development illustrates the greenway and the adjacent neighborhoods.



CANADA MORTGAGE AND HOUSING CORPORATION

However, it may be easy to misinterpret a walking radius as a bull's eye, targeting rezoning rather than accessibility.

One example of densification that the panel really liked is the Carlings, part of the Arbutus Walk neighborhood. This six-acre site was built partly on the former industrial site of a Carling O'Keefe (later Molson) brewery and is now a vibrant residential neighborhood. The Carlings consists of two four-story, multifamily buildings designed with an urban, brownstone look. Despite early opposition from vocal neighborhood organizations to increases in density and height, numerous creative public process events made it possible to address these concerns and integrate them into the final design. The Arbutus Walk has been considered a success from all perspectives and mitigated the fears of its critics.

It is important to create trust between neighborhood groups and include them in the planning process. There seems to be concern among neighborhoods that the development of transit along the Broadway corridor will result in the construction of towers, the upzoning of existing neighborhoods, and a loss of small, local businesses. Therefore, significant density and zoning changes along the corridor should be applied linearly, along the commercial front, adjacent to Broadway Street. Future projects and zoning upgrades should be limited to the corridor itself as much as possible, with care to reduce the impact flowing into the neighborhoods adjacent to Broadway. Although the panel recognizes that the market may ultimately dictate a lot of development decisions that accompany the growth in population and the increased opportunities that a mass

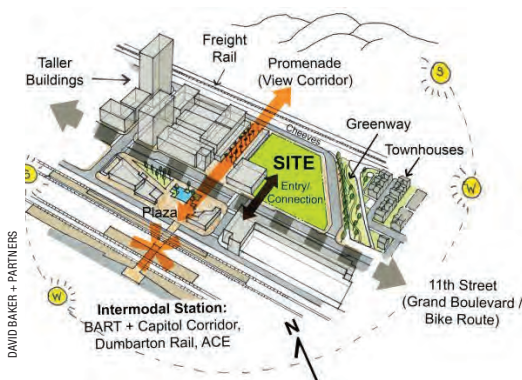


CITY OF VANCOUVER

transit line brings, it also recognizes that the local neighborhoods and districts give Vancouver much of its charm.

The panel also recommends that station stops for mass transit should reflect the character of the neighborhood. There is an appropriate design response for each location. Some locations along Broadway or perhaps at UBC are ripe for multi-use development with retail and housing. Other locations might require a more minimal solution, perhaps, the absence of a physical, above-grade terminal. This model is successful in other dense urban neighborhoods around the world.

The massing model from the East Broadway Revitalization Plan. This view facing northwest illustrates potential full buildout of Broadway East.



Far left: The concept plan from the 2013 award-winning transit-oriented development at Station Center at Union City, California. Left: For contrast, the classic art nouveau look of a portal to the Paris Metro.

Implementation

IN DISCUSSING IMPLEMENTATION, the panel returns to the questions asked by the local district council, ULI British Columbia, and by TransLink, the government of British Columbia, the city of Vancouver, UBC, and Metro Vancouver. As outlined above, there are many resources from which the city and all the public entities can pull to inform the process of developing a new transit system within the city. But having these guides and knowing how to apply them is challenging when there is lack of clarity regarding the vision. All of the questions posed to the panel presuppose that the choice of modality derives from what value can be captured along the line. This economic consideration is important, but it is contingent upon community consensus about how growth should be cultivated within the corridor's boundaries.

In order to make a strategic and appropriate transit expenditure choice, the panel recommends that a process be organized to educate, communicate, and market to all the stakeholders the goals and objectives of the transit project and that the selection of modality not be done before or independently of this process. Studies that have already been performed provide evidence that the city—and the region—is growing in population and economic activity, but the panel has found very little shared understanding of how the modality choice will support this growth. Thinking holistically about land development patterns and limited public resources, public leaders need to coordinate a process to generate a unified direction, shared objectives, and performance measures for regional transportation investment.

The panel believes that the local district council, ULI British Columbia, is well placed to assist in a community outreach and education process. As a membership organization, ULI British Columbia maintains a network of diverse private and public leaders; their skills and interests in urban

development could be of correlative support to the public officials leading the charge. In addition, as a component of the much larger Urban Land Institute network, ULI British Columbia can offer the experience and lessons learned from other councils that have aided similar efforts in their communities.

For example, in Denver, Colorado, the ULI Colorado district council helped inform the public and interested community development organizations through several programs. In a joint venture with the Denver Regional Council of Governments, the council launched a series of workshops for public officials in communities that would receive transit stations in the region's 119-mile, \$4.7 billion FasTracks system. The TOday Workshops focused on phased development during the ten-year buildout, public finance, and programming of complementary mixed-use development strategies for each station in a corridor.

In addition, local officials could consider organizing a transportation symposium based on ULI's regional visioning program, Reality Check, which provides a forum for diverse constituencies to gather and develop a region-wide awareness of the level of growth that is expected and lay the foundation for developing concrete next steps that ensure quality growth. ULI Reality Check events have been hosted throughout the United States. The recent RealityCheck2050, organized by ULI Charlotte, is a program model to consider. This event was part of the CONNECT Our Future project, which engaged 14 counties in North Carolina in a process to develop a regional growth framework that would help leaders and residents grow jobs and the economy, improve the quality of life, and control the cost of government. RealityCheck2050 brought together 400 regional leaders and citizens to discuss development issues and participate in an active learning experience that challenged their notions about these issues. The



Participants at the ULI Charlotte RealityCheck2050 GameDay event at the Charlotte Convention Center in Charlotte, North Carolina. Lego colors represent new residents and jobs over the next 35 years. Each participant connected these residents and jobs with a limited supply of string representing various modes of transportation.

local visioning process was part of a larger Sustainable Communities Initiative, funded by a grant from the U.S. Department of Housing and Urban Development.

These are but two considerations for programs of outreach and communication. However local leaders wish to tactically approach educating constituencies about public infrastructure investments, the programs need to include all the stakeholders in a manner that results in broad-based consensus. Good research on the various transit and land use options should be presented and debated. Among the constituencies that should be involved are the following:

- Representatives of the institutions along the route:
 - UBC
 - Vancouver Community College
 - GNW Campus
 - VGH
- Representatives of governmental bodies:
 - Provincial government
 - City Council and mayor's office
 - City Planning and Transportation Department
 - TransLink
 - Metro Vancouver
 - Others as identified
- Various community groups along the 13-kilometer route
- Public advocacy groups

Finally, if and when a referendum is scheduled, much in the way ULI Colorado did for the FasTrack effort, ULI British Columbia should hold a series informative seminars and dialogues to fully discuss the issues and the potential results of the scheduled referendum.

Conclusion

THE PANEL APPLAUDS THE DIVERSE city and regional government agencies and the public stakeholders that are proactively addressing the pressures of development in the metropolitan area. There is no doubt that those leading the public investment projects are considerate of the issues of impact and sustainability on the community; however, in-migration and the explosion of economic activity along the Broadway corridor present a challenge and require review of the strategies by which previous projects have been implemented.

The panel is grateful to have been invited to Vancouver to provide aid on this issue. It considers this process to be the first step of a much larger journey the region must undertake. The panel hopes that its observations will be considered for their potential and pragmatism and as suggestions for how to approach the vitally important task ahead.

Ultimately, whatever next steps are established to propagate future land use patterns, the panel believes Vancouver has ready the leadership to ensure that growth fits the profiles of the communities within the metropolitan region.

About the Panel

Richard Reynolds

Panel Chair

Boston, Massachusetts

In May 2013, Reynolds resumed his role as president of the Reynolds Group Inc., a strategic real estate consulting firm founded in 2004. An alumnus of Tufts and longtime member of the University's real estate advisory committee, Reynolds had returned to campus as vice president of Operations in January 2010 for an interim role that extended for almost three years. His responsibilities included facilities management of 4.9 million square feet on three campuses, construction, planning, public and environmental health and safety, and dining services.

Between 1993 and 2004 Reynolds was a principal with Spaulding and Slye LLC, serving in a number of roles, including managing director of the Capital Markets Group, transacting over \$1 billion of investment sales annually, and major transaction principal, managing joint venture developments, major tenant representation assignments, corporate relocation analyses, and client relationships. Reynolds also acted as lead principal for the acquisitions of over \$300 million of properties for Windsor Realty Fund II, a joint venture of the DuPont Company and General Investment and Development.

From 1987 to 1993, Reynolds was president of Reynolds, Vickery, Messina & Griefen, a development, property management, and advisory services firm for institutional and corporate clients. He was a partner in Hines Industrial, an office/industrial development affiliate of the Gerald D. Hines Interest, from 1978 to 1987. He started his career in 1970 with New England Life as second vice president in the underwriting and placement of debt and joint venture equity nationally.

Reynolds has been active in the Urban Land Institute for almost 30 years and is a governor of the ULI Foundation. He has served as chair of several flights of the Office and Industrial Parks Council, vice chair of the Office Development Council, and a member of the Public/Private Partnership Council. He also served as chair of the ULI Boston. He has participated in or chaired six Advisory Services panels across the country. Reynolds was president of the Greater Boston Real Estate Board in the early 1990s as well as chairman of the Massachusetts Government Land Bank.

Reynolds received a bachelor of arts degree in economics from Tufts University in 1967 and a master of business administration degree with high distinction from Babson College in 1970.

Brendan Cagney

Birmingham, Michigan

Cagney is the newest member of DesignTeam Plus LLC and Team-4-Community, L3C. DesignTeam Plus is a multidisciplinary design firm that offers architecture, interior design, landscape architecture, and urban design services. Team-4-Community offers the same multidisciplinary design services but is dedicated to educating and mentoring emerging young professionals on best practices in sustainable design. Team-4-Community's mission is to improve the quality of life in metropolitan Detroit and throughout the United States by engaging students in real world projects, taking theory to practice.

Cagney's professional experience includes working as the project manager for Warren, Michigan's Parks and Recreation Master Plan. He has conducted ADA barrier-free assessments of urban spaces and prepared recommendations for compliance. He has also worked on land planning

projects for single and multifamily residential developments in Rochester Hills.

Cagney received his masters of architecture degree in 2013 from Lawrence Technological University and his bachelor's degree from Albion College, where he studied psychology and neuroscience. While earning his masters of architecture degree, Cagney worked as a graduate research assistant for three years. His academic research focused on interdisciplinary knowledge transfer, the emergence of public interest design in architecture, and designing healthy urban communities. During this time, he worked with the LTU Detroit Studio to develop master plan concepts for two large parks in Detroit. This work helped advocacy groups secure funding and create partnerships with other organizations.

In 2013, Cagney's public interest design concept, Solutions at the Root, a project aimed at raising empathy for victims of gun violence through landscape design, won third prize in the ArchInnovations competition. Cagney was also the first prizewinner of the 2013 Gordon Bugbee scholarship, enabling him to study urban markers of monumentality in Paris. In 2014, some of his graphic work will be featured in *Architectural Design Methodologies: Applying Thinking Frameworks to Practice Strategies*, published by Routledge Press.

Richard Gollis

Newport Beach, California

Gollis is a cofounder and principal of the Concord Group (TCG). A national strategy firm, TCG also has offices in San Francisco and New York City. TCG's clients include private equity firms, institutional and entrepreneurial capital, investment and commercial banks, public agencies, and developer/builders. The firm has specific experience in urban mixed-use and transit-oriented development, encompassing housing (for-sale and for-rent), office/commercial and hospitality. As a founding partner, Gollis has crafted and cultivated TCG's unique approach over the past 15-plus years, integrating deep market knowledge with creative analytics.

Gollis's expertise includes strategic market and financial analysis, development programming, transaction due diligence, and valuation across all real estate sectors. He has particular interest in how urban areas and surrounding neighborhoods are influenced by transit and in the corresponding emerging development opportunities.

Gollis is active in the Urban Land Institute, where he is a trustee, governor of the ULI Foundation, past chair of the Community Development Council, and juror for the Awards for Excellence. He is currently cochair of the Advisory Board of the Department of Policy, Planning, and Design at the University of California, Irvine.

Ralph L. Núñez

Birmingham, Michigan

Núñez is the principal partner of DesignTeam Plus LLC, a multidisciplinary design firm, offering architecture, interior design, landscape architecture, and urban planning. DesignTeam has over 29 years of experience in working effectively with clients on creative problem solving. Balancing clients' goals with environmental sensitivity meeting regulatory requirements, DesignTeam has a proven record of working within tight time frames and budgets to bring complex projects on line and is known for balancing clients' goals with environmental sensitivity and meeting regulatory requirements.

Before starting DesignTeam Plus, Núñez was associate vice president and director of Planning and Landscape Architecture for PRC Engineering, an international planning, design, and development company. His most significant project while in the Houston office was the Enclave, a \$250 million office campus in West Houston.

Núñez has over 35 years of experience as a landscape architect, land planner, and urban designer, with particular emphasis on project design, management, and development strategies. Projects include master plans and development plans for residential communities, senior living, commercial, office research campuses, and recreation facilities. He has been responsible for master planning

more than 210,000 acres, over 100,000 dwelling units, 6.5 million square feet of office research, and 18 million square feet of commercial projects throughout the United States and internationally. Núñez has been qualified as an expert witness in planning, landscape architecture, and design. He is often called upon to develop plans to resolve difficult and stalled projects before they go to litigation.

His commitment to sustainable design and is evidenced by his teaching and professional activities. He has been a guest lecturer and served as an adjunct professor at Lawrence Technological University for the past 20 years. He has participated in numerous ULI Advisory Services panels throughout the country.

Richard M. Rosan

Washington, D.C.

Rosan is the past president of the ULI Foundation, the philanthropic arm of the Urban Land Institute. With a corpus of more than \$40 million, the Foundation supports many of the Institute's general research and education activities, as well as local programs offered through ULI's district council network. In addition, the Foundation provides endowments for specific activities, including those related to workforce housing, infrastructure, sustainability, and public leadership in land use.

Rosan was Foundation president from 1992 to 2013. He also was ULI's top executive from 1992 to 2009. Under his leadership, ULI experienced a fourfold increase in membership, expanded its global outreach into Europe and Asia, and secured many new funding sources. Rosan broadened ULI's intellectual content through the creation of the ULI senior resident fellows program and the funded centers, which are supported through endowments from the Foundation.

Rosan is an architect and a fellow of the American Institute of Architects. He spent 22 years in New York City in several capacities, including 12 years with the city government, concluding with his service as the city's economic development director. He also was president of the Real

Estate Board of New York for six years and spent five years in the private development business as a project director for several large New York City development projects.

Rosan received a bachelor of arts degree from Williams College in Williamstown, Massachusetts, in 1964. He received a master's degree in architecture in 1967 from the Architecture School of the University of Pennsylvania and continued postgraduate work in regional planning in 1968 at the University of Cambridge, England.

A Governors Advisory Program Panel Report



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