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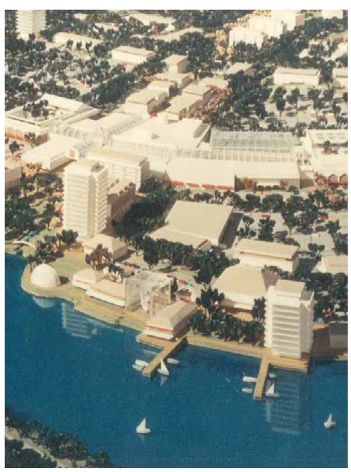
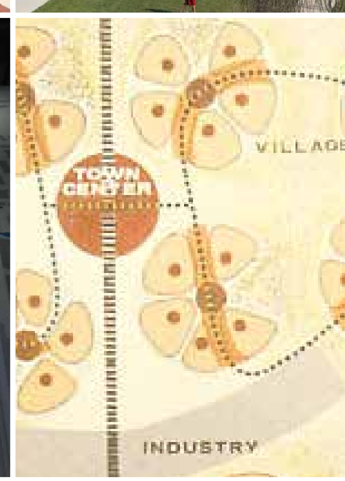
NOVEMBER 2014

Placemaking: Innovations In New Communities

Mahlon Apgar, IV





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PREFACE

The Royal Institution of Chartered Surveyors (RICS) and the Urban Land Institute (ULI) are independent, non-profit, non-partisan, international organizations that help to promote leadership in planning and development of the built environment through research, education, meetings, and publications. While each organization has a unique mission and emphasizes different areas of study and practice, we share the commitment to close and continuing cooperation among real estate professionals, business executives and government officials in addressing the challenges of rapid global urbanization. In this context, deep understanding of new communities and their contributions to real estate theory and practice is essential for developers, policymakers and planners.

Thus, we responded enthusiastically when Mahlon (Sandy) Apgar, IV, an RICS Fellow, long-time ULI leader and internationally known expert in this field, proposed to survey selected members of our organizations on innovations in new communities; interview experienced developers, government officials, business executives and thought-leaders; and distill principles that our members and others could use in their own activities. Mr. Apgar further offered to make the survey results, and the underlying database, available *pro bono* to our members and others.

This Report synthesizes his findings from more than 700 survey respondents, 20 in-depth interviews, and three workshops of staff and advisors. Our organizations, consistent with our missions, do not advocate specific recommendations from this study; but we commend the report to all who seek improved understanding of the built environment and the processes that shape it.

We gratefully acknowledge the financial support of Colliers International and Howard Hughes Corporation for this project.

Louise Brooke-Smith, FRICS

President

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Urban Land Institute

NOVEMBER 2014

INTRODUCTION

New Communities (NCs) are a hallmark of urbanization. Wherever they are created — in semi-rural “greenfields” with low residential densities and little or no prior development, or in compact, high-density existing cities that exemplify the “urban renaissance” — these novel forms of human settlement achieve a range of social and economic objectives, from improved housing and job choices to healthier, resilient living environments to strong, diversified local economies and, more recently, integrated transportation networks that reduce car dependence and energy usage.

This report was inspired by four experiences early in my career: a year at Oxford researching the British New Towns and realizing their innovations in policy and process; an internship with James Rouse and his team during Columbia’s formative years, discovering their path-breaking innovations; an appointment to ULI’s New Communities Council, learning the challenges of community-building with legendary figures in that unique forum; and co-founding the International New Towns Association to coalesce US, British and French leaders around common, cross-border policy, product and process objectives.

My focus on innovation is born of NCs’ unique management characteristics: exceptionally large, complex projects, requiring creative vision, business acumen, massive investment, sophisticated organization, technical expertise, and collaboration between business and government over extended periods. Innovation embodies uncertainties and unknowns. To achieve results, each stage of NC development and operations, from inception through completion and ongoing operations, requires NC policymakers and professionals to innovate.

Innovations, as used here, are improvements to the built environment and/or the processes for planning, financing, developing, and operating it. Innovations run the gamut from simple physical changes, such as greener building materials and dedicated bike paths, to complex organizational reforms, such as residents’ engagement in community planning and managements’ oversight of joint public-private partnerships. Innovations include the qualities, capabilities and tools that innovators apply in creating transformational changes and in enabling new ways for people to live and work. Collectively, I term these management innovations. They emerge from creative, effective leadership of NC organizations and of the development process.

While I have developed and documented management practices with many clients, I am not a professional researcher and this is not a traditional research study. Rather, it is a guide for decision-makers, grounded in case experience, survey data, and practical wisdom. I designed this initiative as a work-in-progress and hope that many others will contribute to its ongoing development.

The first part of the report profiles NCs, based on desk research, findings from online surveys of members in six professional organizations,* and insights from interviews with decision-makers and thought-leaders that I conducted in parallel with the survey. Building on this foundation, the second part of the report frames NC innovations for public and private sector decision-makers as they consider strategies to accommodate urban growth and to capture its business opportunities. The report’s final part proposes leadership initiatives to foster successful NC policies, practices, and projects. Each “innovation” and “initiative” is self-contained; you can review, adopt and adapt these individually or collectively. A separate Appendix includes a Survey Analysis, Survey Report, and related materials.

** Counselors of Real Estate, National Town Builders Association, Royal Institution of Chartered Surveyors, Royal Town Planning Institute, Town and Country Planning Association, Urban Land Institute.*

Sandy Apgar
November 2014

EXECUTIVE SUMMARY

Innovations

Innovations emerge from practical experience in New Communities (NC) development organizations and research among NC professionals.

Comprehensive Plans

NCs meet a range of needs and opportunities in their development strategies, set short- and long-term priorities, and marshal the financial and organizational resources for massive projects over long periods.

Portfolio Economics

NCs use "portfolio economics" to manage the large size, heavy investments and long time horizons that NCs entail, across and among numerous discrete projects.

Integrative Business Models

NCs integrate returns on invested capital with fees from organizing and operating large, complex projects in "total profitability" business models.

Public-Private Partnerships

NCs realize public purposes through private enterprise, leveraging government and business assets with experience and ingenuity in collaborative, strategic teams.

Resident-driven Services

NCs reframe traditional responsibilities of local government — e.g., schools, parks, safety, sanitation — by engaging private for-profit and non-profit organizations.

Initiatives

Initiatives would extend NCs to new geographies, product types, and processes; and spawn further innovations in NC principles and practices.

Prime Movers

Promote NCs as generators and organizers of responsible, responsive urban growth through partnerships with business entrepreneurs, knowledge-based institutions, and natural resource-based sponsors.

Information and Analytics

Elevate management information and deep analytics to the strategic agendas of decision-makers in NC development and management organizations.

Unconventional Uses

Advocate NCs as venues in which to test, evaluate and apply urban policies, targeting new and underserved markets and investment opportunities.

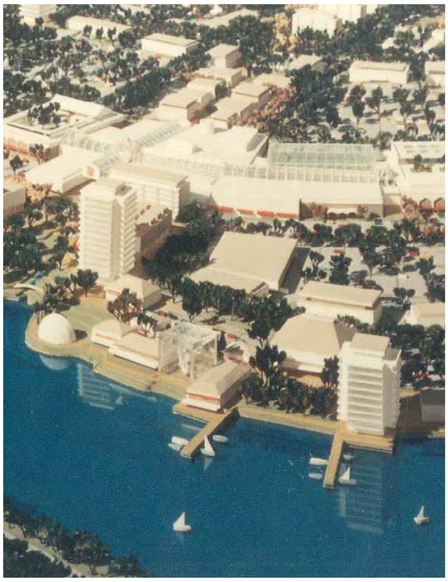
Community Designs

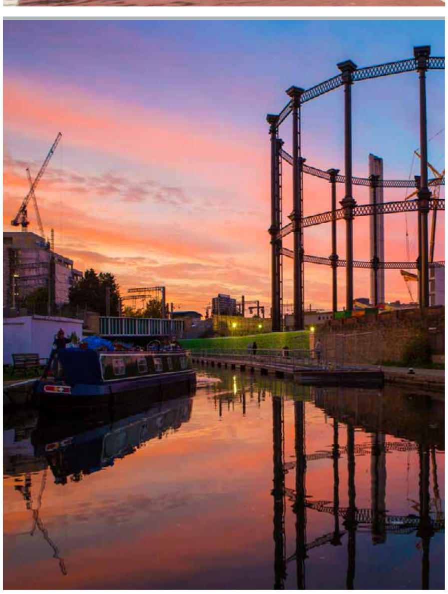
Provide platforms for urbanists and architects to create the "sense of place" and to experiment with novel community-level and individual building designs.

Investment Fund

Seed a private "NC Investment Fund" with sovereign wealth investors, pension funds, urban-oriented philanthropies, public venture funds, and other opportunistic sources.

Lazy Sunday, people sitting in the sun on the steps of Granary Square at Regents Canal





Columbia, Fort Belvoir, King's Cross

I - NEW COMMUNITIES DEFINED

NCs are planned, residentially-based, mixed-use settlements for populations from 1,000 to 100,000 that are located in urban and suburban areas of the United States and United Kingdom (as well as in many other countries). They include a range of income groups, housing types and employment opportunities; community and recreational facilities; retail and commercial services; schools, healthcare and other public services; and productive, as well as passive, open spaces. In the US, NCs are primarily *private sector* ventures known as "master-planned communities" such as Columbia, Maryland. In the UK, they are primarily *public sector* initiatives known as "new towns", such as Milton Keynes. In both countries, NCs increasingly are developed by *public-private partnerships*, such as the military housing community at Fort Belvoir, Virginia and the "urban regeneration" project at King's Cross, London.

NC innovations in America began with model projects such as Radburn (1929) and Greenbelt (1935); and progressed to today's industry of Master-Planned Community Developers (1950s); Community Homeowner Associations (1960s); Multidisciplinary Planning Teams (1960s); and Town Center "Main Streets" (1980s). In Britain, innovations emerged from Cadbury's company village in Bournville (1893); Ebenezer Howard's Garden City model (1898) and privately-sponsored projects in Letchworth and Welwyn (1920s); to the first public New Town Development Corporations (1950s); the recent revitalization initiatives in older cities (1980s-90s); and the current policy to revive Garden Cities (2014).

NCs differ from most conventional single-use real estate projects in six major respects: 1) *large-scale*, to enable economies, efficiencies and tradeoffs that elude smaller projects; 2) *comprehensive scope,* to incorporate social, economic, and environmental objectives while cross-fertilizing individual uses; 3) *unitary organizations,* with the sharp focus, management depth and technical expertise to develop and operate complex projects; 4) *multiple real estate uses* and mutually reinforcing activities to capitalize on the project's scale and scope; 5) *portfolio financing and management* to ensure that sufficient funds are available at each stage and that asset performance is monitored throughout the NC's life; and 6) *"partnership" structure and style* to solve ongoing problems in a collaborative, constructive manner.

This guide focuses on two major types of NCs — "Greenfield" and "Urban Renaissance". See the table *Selected US and UK New Communities* on the following page. *Greenfield* NCs have prevailed where land is relatively plentiful and cheap. Adapted to reflect 21st Century tastes and technologies, Greenfields still deserve attention as "smart growth" antidotes to the high land consumption and infrastructure costs of single-family tract housing. Greenfield redevelopments now embody NC principles with urban townhome densities, walkable neighborhoods, small-scale shopping, and local schools. Greenfield NCs often are easier to plan and execute than Urban Renaissance NCs because they have fewer stakeholders, simpler regulatory regimes, and (usually) lower costs. However, financial success may be harder to achieve on new, underdeveloped sites because the developer must create the market, not simply carve out a share of existing demand. In his landmark study of Milton Keynes, Harvard Professor Richard Peiser dissects its £650 million financial loss. While acknowledging the success of that pioneering NC on many social and economic measures, he concludes, "developing financially successful new towns is difficult under even the most favorable circumstances."

Selected US and UK New Communities — Work-In-Progress As Of 10/09/14

NAME	LOCATION			PRIMARY DEVELOPER		METRICS						YEAR	
	CITY / METRO	STATE	NATION	PRIVATE	PUBLIC	ACRES	HA	POP	DUs	POP / Ac	DU / Ac	START	END
Greenfield													
Celebration	Celebration	FL	US	Disney		4,900	1,980	20,000	4,060	4	1	1994	
Columbia	Baltimore-Washington	MD	US	Hughes	Howard County	14,000	5,656	90,316	37,315	6	3	1967	
Ebbsfleet	Kent		UK	Land Securities		1,035	418		15,000		14	2014	
Fort Belvoir	Washington	VA	US	Clark Realty	US Army	576	233	7000	2,154	12	4	2003	2013
Irvine Ranch	Irvine	CA	US	Irvine		97,000	39,188					1960	
King's Hill	Kent		UK	Liberty Trust	Kent County	800	323	6,000	2,750	8	3		
Milton Keynes	Buckinghamshire		UK		Milton Keynes	22,000	8,888	248,800		11		1967	
Playa Vista	Los Angeles	CA	US	Hughes-Brookfield		1,087	439	6,000	5,957	6	5		
Rancho Santa Margarita	Rancho Santa Margarita	CA	US	Santa Margarita		5,000	2,020	47,853	14,000	10	3	1985	
Reston	Washington	VA	US	Simon-Mobil		7,400	2,990	58,404	25,522	8	3	1963	
Urban Renaissance													
Battery Park City	New York	NY	US		BPC Authority	92	37	15,000	8,500	163	92	1997	2011
Cambourne	Cambridge		UK	Bovis	Cambridgeshire	1,046	423	10,000	4,250	10	4		
Kings Cross Central	London		UK	Argent Group		65	26					2006	
Lodge Hill	Kent		UK	Land Securities		720	291		5,000		7		
Mission Bay	San Francisco	CA	US	Catellus	SF Redevelopment	303	122		6,000		20	1998	
Pacific Park	Brooklyn	NY	US	Forest City-Greenland		22	9		6,430		292		
Poundbury	Dorchester		UK	Cornwall		400	162		2500		6		2025
Presidio Landmark	San Francisco	CA	US	Forest City	Presidio Trust	4	2		161		40		2010
Salford Quays	Manchester		UK	Peel Holdings									
Union Station	Denver	CO	US	East-West Partners	Denver	27	11	6,000	2,500	222	93	2005	

COMPILATION: *Lists compiled by S. Apgar from interviews and published sources; data sourced with assistance of J. Campbell, ULI; A. Finkelstein, Colliers International; A. Butcher, Strutt & Parker.*

PROJECT RECOMMENDATIONS: *US: M. McAvey, ULI; E. McMahon, ULI; S. J. Peterson, ULI; P. Phillips, ULI; R. Peiser, Harvard GSD. UK: P. Hall, UCL; A. Martin, Strutt & Parker; J. Newsum, Grosvenor; P. Vernon, Grosvenor.*

DATA SOURCING METHOD: *1. Wikipedia entries / updated since 2012. 2. Developer and Project websites for data not entered / updated in Wiki. 3. Phone / email contact with primary developer where current data is unavailable or conflicts with Steps 1-2.*

DATA ASSUMPTIONS: *Metrics = approved or projected acreage, populations, dwelling units as defined by primary developer; low end is used when ranges are cited.*

NC Survey: Top 5 Preferences
% Strong / Somewhat Agree. Preferences for NCs With…

	Total	US	UK
Public transportation / infrastructure	92%	92%	93%
Innovative designs	92%	92%	93%
Market-driven mixed uses	87%	88%	81%
Business opportunities	87%	87%	89%
Lifestyle benefits	86%	87%	81%

"Decision-makers should compare NCs across national borders for new insights."

Urban Renaissance (UR) is a collective term for the second type of NC: planned mixed-use projects within cities that aim to correct negative effects of earlier polices such as slum clearance; to propel high-impact demographic, economic, and physical improvements in target areas of established cities; and to increase utilization of underdeveloped land and buildings. Urban Renaissance NCs, while smaller and denser, face even more complicated conditions than Greenfields in cities where established zoning codes and political processes may require institutional reforms before the NCs can be planned, much less built.

In the New Communities Survey, US and UK professionals delineate distinct ranges for land area, population, and density in New Communities. See *Metrics Tell The Story* below. 62% of US Survey respondents believe the minimum population for successful NCs ranges up to 10,000, while 69% of UK respondents set the range higher to 50,000. Desk research and interviews portray prototypical "new neighborhoods" of 2,500 residents in 1,000 housing units on 100 acres; with several such neighborhoods aggregated in "new communities" of 10,000 people on 400 acres. At a density of 25 persons per acre, this model is the low end of the range for successful Urban Renaissance NCs that were cited in the US and UK Surveys. A land area of 400 acres defines both a large Urban Renaissance NC and a small Greenfield NC.

Overall, the survey revealed distinct preferences for NCs with sufficient support for transportation and infrastructure, innovative designs, market-driven mixed-uses, opportunities for business relocations, and lifestyle benefits that households cannot find elsewhere. See *NC Survey — Top 5 Preferences* table to the left. US and UK Survey respondents agree on the most important features of NCs but place marginally different values on them. In both the US and UK, 80% prioritize owner-occupied and market rental housing; and 70% target housing for second and third quintile income levels. 65% in both countries prefer semi-detached, mid-rise, and low-rise housing as the predominant housing types, while nearly 30% of the US respondents prefer detached housing. In both countries, standard office space, pre-serviced parcels and incubation units are the main real estate products to attract employers. In the UK, 81% of respondents rank schools among the top five facilities. Open spaces and parks, neighborhood shops, moderately-priced restaurants, community centers and access to public transport also are key features for over 50% of respondents, with individual features showing higher values. [See

Metrics Tell The Story

US and UK Survey respondents define distinct ranges for land area, minimum population, and density for a successful New Community.

Here are the specifics:

LAND AREA

75%

expect Greenfield acreage that is 8X Urban Renaissance.

POPULATION

65%

expect minimum UK New Community population that is 5X US minimum.

DENSITY

70%

expect minimum Urban Renaissance density that is 2.5X Greenfield.

RESULTS

	US Acres	UK Acres	US People	UK People	US Ppa*	UK Dpha*
New Community	—	—	1,000-10,000	5,000-50,000	—	—
Urban Renaissance	10-300	10-300	—	—	20-50	25-90
Greenfield	Up to 2,500	200-2,500	—	—	5-20	10-30

* Ppa = persons per acre, Dpha = dwellings per hectare. 1 Hectare = 2.47 Acres. Roughly equivalent measures of density: UK persons per dwellng = 2.3 (2013); Multiplier to convert Dpha to Ppa = 0.92 (2.3/2.47).

separate Appendix: *Innovations in New Communities Survey 2014 Analysis* (independent reports by Rockbridge Associates and University of Michigan New Communities Research Team)].

Despite differences in urban form and wide ranges of project size and scope, the interviews, field research and survey findings reveal considerable coherence in practitioners' views of US and UK land use criteria and key NC attributes. Thus, decision-makers who are faced with frequent debates about "overbuilding" and, in the UK, encroaching the "greenbelt," may confidently expand their horizons and selectively examine cross-border comparisons for relevant, reliable insights.

II - NEW COMMUNITIES INNOVATIONS

The focus on innovation differentiates this project from most others in urban planning and real estate. NCs did not invent these innovations. Rather, their leaders have identified, staged, and scaled them through their size and scope. NC developers, private and public, enjoy the comparative advantage of management depth and technical expertise that may be unaffordable to, or simply overlooked by, smaller or single-use developers.

This section synthesizes five innovations that define NCs and the management practices that produce them. They are drawn from case experience, expert interviews and the New Communities Survey data. See *Interviews with Selected New Communities Executives and Experts* list to the right.

Comprehensive Plans

NCs meet a range of needs and opportunities in their development strategies, set short- and long-term priorities, and marshal the financial and organizational resources for massive projects over long periods.

NC executives are expert at envisioning the whole while parsing the parts of complex plans for multi-billion dollar projects. Their fusion of art and science, imagination and analysis, scope and synthesis, may be the NCs' greatest contribution to community-building. Because real estate, design and related disciplines remain somewhat compartmentalized, innovations emerge when dedicated professionals collaborate across functional and organizational silos to share their wisdom, experience, and research.

NCs are not businesses, but they have much to learn from the ways business plans and executes. Charles Fraser, the legendary resort community developer, pioneered five real estate business innovations in the 1960s: 1) defining NC projects as "products," subject to the same marketing rules as major manufacturers; 2) basing NC economic models on sales of pre-serviced lots, both to builders and to individuals; 3) replicating successful NC product concepts to drive strategic momentum, leverage team talents, and redeploy asset value from one project to the next; 4) recruiting bright, ambitious MBAs by appealing to their professional as well as their entrepreneurial aspirations; and 5) delegating substantial authority for planning, budgets, and execution to project managers.

NC innovators use the broad scope and purposeful discipline of the planning process to produce livable communities: who is to be served (clients), why their needs are not now met (gaps), what they intend to achieve (objectives), how they will provide the products and services (delivery), and which indicators they will use to judge results (metrics). NC organizations exemplify the interlocking economic, environmental, and social objectives of "triple bottom line" management.

With the advent of the Information Age, business has learned that organizations are communities of people whose needs and wants are central to their business missions. By focusing on both customers and colleagues, companies have successfully raised their productivity and mastered their competition. Successful communities, like successful businesses, are built on successful teams.

"NCs fuse art and science, imagination and analysis in community-building."

Interviews with Selected New Communities Executives and Experts—as of September 26, 2014

CONTEXT — UK, US

Sir Howard Bernstein: Chief Executive, Manchester City Council

Louise Brooke-Smith, FRICS: President, Royal Institution of Chartered Surveyors

Greg Clark: Senior Fellow, ULI Europe; Urbanist, Author, Moderator

Jeremy Edge, FRICS

Sir Simon Jenkins: Chair, The National Trust; Urbanist, Author, Columnist

Alexandra Jones / Edward Clarke: Chief Executive, Centre for Cities

Gabe Klein: Senior Visiting Fellow, The Urban Land Institute

Richard Meier: Partner and Project Director, Argent Group

Jeremy Newsum, FRICS: Former Chairman, The Urban Land Institute; Trustee, The Grosvenor Estate

Patrick Phillips: Chief Executive Officer, The Urban Land Institute

Ben Rogers: Director, Centre for London; Urbanist, Author

Neil H. Smith: Former Chairman, Mobil Land (Reston); Partner, Rockwood Capital

M. Peter Steil: President and CEO, National Council of Real Estate Investment Fiduciaries

Steve Quartermain: Chief Planner, UK Department for Communities and Local Government

Daniel C. Van Epp: Executive Vice President, Newland Real Estate Group

Stephen Wild: Managing Director, Media City (UK), Peel Holdings

MILTON KEYNES — UK

Professor Sir Peter Hall: Bartlett Professor, University College, London (d. 2014)

Dr. Richard B. Peiser: Spear Professor, Harvard Graduate School of Design

COLUMBIA, MARYLAND — US

John E. DeWolf, III: Senior Vice President, Development, The Howard Hughes Corporation

Milton W. Matthews: President / CEO, Columbia Association

Robert Tennenbaum, FAIA: Former Chief Planner and Architect, Columbia

FORT BELVOIR, VIRGINIA — US

Casey Nolan: Developer, Fort Belvoir RCI; Partner, Clark Realty Capital LLC

Dr. Barry Scribner: Principal Real Estate Consultant, RCI; Co-President, Jones Lang LaSalle

The Cadbury-Howard-Rouse thesis that NCs are laboratories for lifetime learning endures: Rouse referred to the “creative tension” in Columbia’s planning, believing that teams produce better ideas in less time than individual experts working alone. Yet, for all of Columbia’s innovations in community planning, Rouse was vexed by the unwillingness of many in the financial community to reflect the full value of the NC’s underlying property assets in pricing the company’s stock. It was not until the company’s sale years after its founding that investors reaped the rewards its visionary foresaw.

The UK’s widely studied planning process, while cumbersome in certain details, adds value to their NCs because it combines economics and execution. More than two-thirds of UK Survey respondents opined that long-term community plans have made “significant differences” in urban policy and practice. The UK has formalized the distinctions between town planning, land development and building construction, which often are submerged in American urban policy. UK “master developers” override structural boundaries to create landmark projects through intricate partnerships with government authorities, though many successful UK developers prosper more by efficient replication than by innovation.

SEE INTERVIEW: Jeremy Newsum, *Private Development and Investment in Urban Communities*

And the pioneering French NC program, which prizes innovation, demonstrates the power of combining creative insights and disciplined analysis on a national scale.

American master-planned NCs, operating in a more fluid entrepreneurial environment, apply lessons of business management to conceive innovative ways of providing NC services.

“Neighborhood retail centers” take form when they integrate revenue-producing shopping with active open space programming, culture and entertainment. “Interfaith facilities” enable multiple congregations to reduce – even eliminate – costly, underutilized buildings and consolidate in convenient locations on sites often donated by the developer. “Community schools” offer coordinated service provision by public agencies and private providers in centrally located, well-equipped facilities at the heart of their natural markets.

SEE CASELET: New Community at Columbia, Maryland

As Sir Howard Bernstein, Chief Executive of the Manchester (UK) City Council, says of the planning process, “Cities are constantly evolving. You can never say “That’s it, the job’s done.”

SEE INTERVIEW: Sir Howard Bernstein, *Urban Renaissance in Manchester*

Portfolio Economics

NCs use “portfolio economics” to manage the large size, heavy investments and long time horizons that NCs entail, across and among numerous discrete projects.

Comprehensive plans work best if they are complemented by a “portfolio approach” with four economic fundamentals: 1) front-end capital commitments for infrastructure and common areas before revenues are generated from sales and rents; 2) “patient capital” which defers repayments and returns on front-end investments before the project can afford them; 3) phased planning and expenditures to balance cash outflows with value appreciation; and 4) close financial and operations management throughout the project lifecycle to periodically monetize increased values without imperiling the long-term capital structure.

The NC portfolio model identifies all real estate uses that have been envisioned in the project strategy; the risks of each use, both separately and collectively; the synergies, efficiencies, and total values of various mixed-uses; cash flows at each stage of the process, showing negative amounts and fluctuations to be financed; and the tradeoffs between income-producing facilities and cash-generating activities that occupy them. The planning processes of UK public authorities and US private developers are remarkably similar. They might seem to diverge in the British policy to “compulsorily purchase” land at its existing use value, or in the US via “eminent domain”. Yet in practice, such powers have rarely been invoked: the UK New Towns corporations were able to buy sufficient land by negotiated agreement; similarly, US government guarantees for extraordinary events such as base closures have not been required for the military NC projects. The commitment alone has sufficed to contain the risk and attract market rates.

The land use mix is often the key to survival as well as success. As Richard Meier, Project Director of Argent’s King’s Cross Central project, says, “During the Recession, we were able to keep investing. We weren’t developing spec offices or market-rate residential buildings. But because we had ground funding in place, we were able to carry on with affordable housing and start the university complex.”

Because of their scale and scope, NCs are proving the potential of full-spectrum housing for owners and renters to “trade up” as they, and their communities, mature. From entry-level studio- and one-bedroom apartments, to their relocation in single-family homes, to returning to condos and townhomes as they age, US and UK residents alike reflect the strong traditions, and clear preferences, to remain in or near their communities. Columbia, Irvine, Reston and other established US NCs are in their third resident generations; some British New Towns are in their fifth. For developers and investors, multiple generations secure the NCs' value.

Community developers structure their models to capture these economics and update them as they sell lots, finance buildings, and adapt uses to meet new demands. Moreover, they frequently change course as the original NC concept itself matures. More than half of the Survey respondents listed long-term financing as their "most important" objective. To attract patient capital for NC projects and portfolios, investors are compensated by premiums for the investment size and time required to achieve the full value. The highest hurdle for most NCs is to secure the capital base during the long period of negative cash flows while income-producing properties are under development. NCs which combine existing rental properties with new developments are especially attractive because cash flows from their current tenants, even if modest, help to fund renovation and new development while reducing exposure during their highest-risk period. Correspondingly, investors expect a premium return on their "development capital" for the upfront period. All parties measure both cash flows, as they are expended, and capital asset values, as they build up.

A 'layered' portfolio, reflecting both capital and operating commitments and short- and long-term priorities, helps management to allocate resources for overall NC value objectives as well as funding current project and organizational budgets. As Meier says: "We have staff pitching and negotiating fees with food vendors out on the square for immediate occupancy and income, alongside a team member who's spending as much time trying to get Google to sign on for space. Both are important; some drive overall value, others drive direct value."

Integrative Business Models

NCs have spawned new "total return" business models which integrate returns on invested capital with fees from organizing and operating large, complex projects.

The NCs' integrative business models combine two elements of profitability: returns on real estate capital invested in the NC, and fees from NC project planning, development and operations. This lifecycle business structure is more robust than the traditional design/engineering/construction model. Real estate developers and investors in conventional projects seek market-rate returns on their total capital commitments, commensurate with their risks at each development stage. For decades, long-term returns in land development projects have ranged from 15% to 30%, and in specific cases, considerably higher; while debt/equity ratios typically have centered in the 50% to 70% range.

To achieve these leveraged returns, developers of conventional mixed-use projects must meet standard real estate business tests. But their funding sources and structures do not offer incentives, or even the scope, to invest in innovation or provide the flexibility to allocate scarce capital through "R&D" budgets. NC developers, by contrast, thrive on many types of innovation, both to realize their multiple economic and social objectives and to distinguish their projects from smaller, single-use competitors.

As real estate ventures, the NCs are based on similar risk-adjusted project economics. As businesses however, their capacity to innovate is rooted in three structural advantages: higher leverage ratios, longer financing horizons, and "triple bottom line" (i.e., economic, social, environmental) performance measures.

The capital stack under a NC public-private partnership (P3) model has a 99% leverage ratio, which requires only 1% of equity. Because the equity slice is so small, total development value is largely based on market-rate fees and early cash flow. Return on Equity is but one measure of the developer's success, and for most, it is not nearly as important as profits from fee-based services, including planning and development, investment origination, construction management, asset management, property management, and oversight of the developer's interests in income properties. Developers also receive

"The land use mix is the key to survival as well as success."

"With long-term partnership structures, NC developers can afford to innovate."

lease or rent payments from existing tenants to help fund the first phase of renovation and redevelopment. Thus, front-end fees and payments substantially reduce the P3's risks.

The P3 model originated by the US Army (see the following "Public-Private Partnerships" section) projected 16% long-term returns over 50 years on total capital requirements of $250M to $1B for each project (the largest project in this program to date is $2B), consistent with returns in the institutional market at the time. To compare conventional private mixed-use developments (MXD) with P3s, the diagram illustrates $350M projects under each structure. [See *Comparing "Conventional MXD" and "P3" Projects*]. Although complicated, the P3 structure is worth understanding because it produces exceptional results, both in the active development period and in its "out-years." The P3 model assumes $3M in equity; the MXD assumes $105M. A 16% Internal Rate of Return on the $3M P3 investment over 50 years is about $25M. The P3 developer also earns fees totaling roughly $22M in the first five years, whereas conventional MXD projects do not generate ongoing fee revenues until the project reaches stabilized operations. After the initial five-year development period, $500M in out-year funds are available for completing the development; the developer receives about $25M in additional construction and development fees. As the project matures, the P3 developer also receives asset management and property management fees of roughly $75M. Thus, total fees would be about $125M over the project's life and total profitability could range up to $150M.

Using such long-term partnership structures, NC developers welcome – and can afford – innovation. They receive more funding than conventional developers for improving the NC's product range and project scope. The 50-year horizon enables higher upfront spending with longer payback periods, whereas the typical developer is focused on short-term returns and preoccupied with bank lending requirements and procedures. The 40-year bond structure removes refinancing risks and may even offer refinancing potential to increase funds flows if interest rates and terms improve. Finally, multiple economic, social, and environmental objectives enable innovative developers to address community needs even if the short-term economics may be at best breakeven. Investments in sustainable products and technologies (such as photovoltaics and building materials) are not limited by expectations of immediate paybacks.

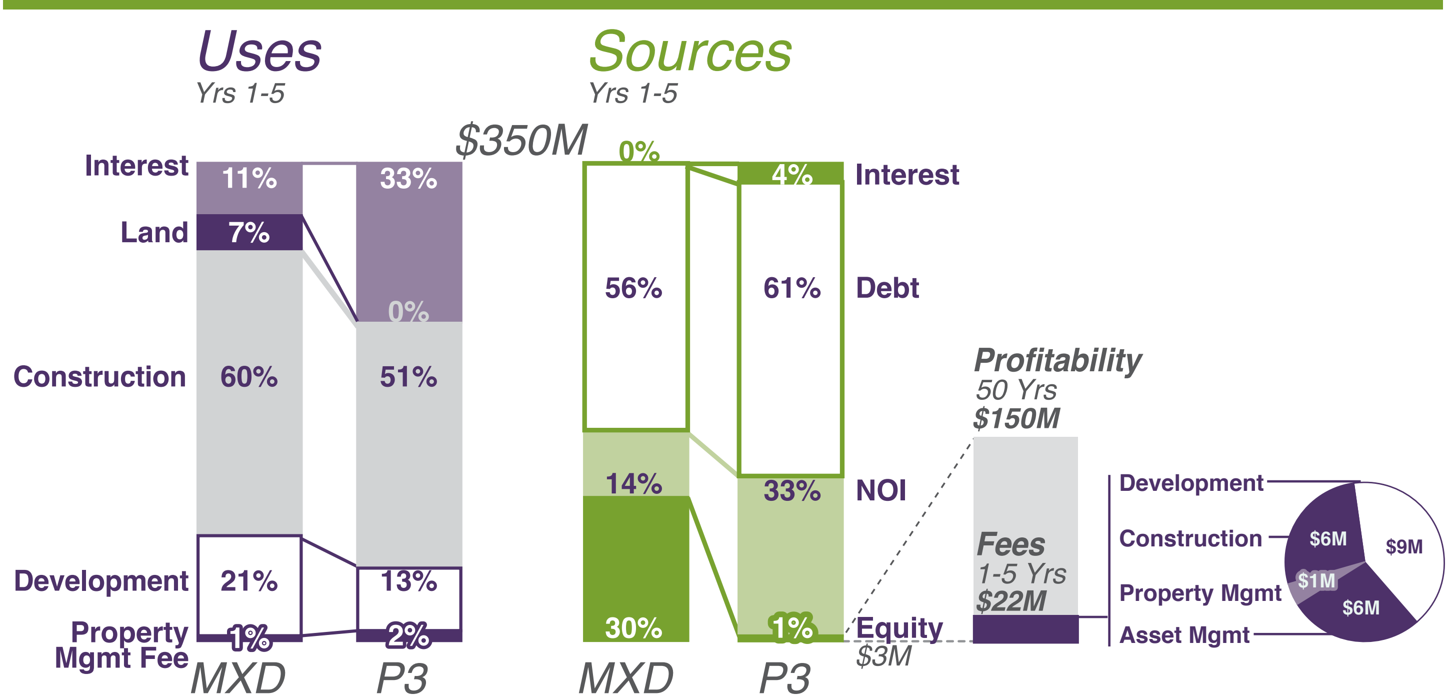
Public-Private Partnerships

NCs realize public purposes through private enterprise, leveraging government and business assets with experience and ingenuity in collaborative, strategic teams.

Public-private partnerships (P3) have become a central component of US and UK urban policy as government leaders face limits on resources while business leaders recognize the strategic potential of NC markets.

NCs exemplify the ideal of achieving public purposes through private enterprise by defining their objectives, missions, structures and financing to serve both public and private interests. Before today's mantra of corporate social responsibility, Rouse declared "…(our companies) proceed on the assumption that profit, properly understood, is a reward for service well-rendered, not the legitimate purpose of business in its own right." Donald Bren, developer of Mission Viejo and Irvine (both in California), defined principles of "comprehensive planning, environmental stewardship, (and) collaborative citizenship" for his companies and communities. In 1970, the US Federal New Communities Act (known as "Title VII") specified that the US private sector would lead a national

Comparing "Conventional MXD" and "P3" Projects



program to create NCs – contrasting with Britain's government-led strategy. Simultaneously, Neil Wates, a leading UK homebuilder and Rouse admirer, spearheaded a private NC at Horley.

SEE CASELET: Public-Private Partnership at Fort Belvoir, Virginia

Real estate developers are more often recognized for savvy deal-making than for strategic foresight. Yet, despite different historical eras and political systems, Ebenezer Howard in 1900s Britain and James Rouse in 1960s America forged similarly robust, far-sighted strategies for their NCs: articulate a compelling vision; acquire land parcels stealthily at the lowest price without revealing the buyer's ultimate purpose; create value through careful, robust planning and imaginative marketing; capture the increased value to sustain large-scale, long-term development; design for urban density to increase social interaction and enliven community activities; maintain "human scale" at the street level by avoiding excessive height and mass; create nodes of commercial and leisure activities; seek private financing through low-interest loans; and avoid the costs and waste of suburban sprawl.

The US Army P3 program cited earlier (see "Integrative Business Models" section) engaged the homebuilding industry as "partners" of military commanders to meet an acute need for family housing. Called the Residential Communities Initiative (RCI), this has attracted $12B of private capital from 10 developer groups, alongside $1.9B of public investment, to produce $1.5B in annual portfolio income with a 7-to-1 multiplier of private to public dollars. The investment has produced 86,000 new and renovated units on 44 Army installations, or 98% of the Army's US housing stock, to a higher quality standard than government-built housing achieves for comparable public expenditures. RCI has also created some 235,000 construction and permanent jobs. These outcomes, enhanced by the innovations cited below, make RCI an unusually successful public policy and private profit structure for neighborhood-scale NCs, and a stage-setter for P3s in other government functions.

Nearly 75% of US and 60% of UK Survey respondents opined that P3s have "significantly improved" urban policy and practice. From reviews of more than 50 P3s, five distinct features have emerged: 1) *clear roles,* to delineate the public property assets, articulate needs, and define the outcomes and performance measures; 2) *mutually beneficial relationships,* with the management and financial strength to deliver a complex, long- term project, while ensuring that rewards to the private partners are commensurate with their investment and organizational risks; 3) *lifecycle planning and management,* with continuous engagement of major stakeholders — customers, regulators, constituents, suppliers — in the decision-making process, from the project's visioning through final disposition; 4) *comprehensive communications,* incorporating community outreach, frequent conversations among stakeholders throughout each stage, progress reports at key milestones, and outcome-based reports on the long-term value for money to be realized; and 5) *entrepreneurial stewardship* to encourage proactive, but disciplined, change over the project's life while avoiding adversarial, contract-driven governance. The art of P3s is in tailoring these features to each project. A P3 proponent's primary responsibility is to ensure that each project incorporates the full menu of features but weights them to reflect the specific needs that drive its strategy and structure. Wise judgment, infused with common sense, ultimately should prevail.

"NCs achieve public purposes through private enterprise."

Resident-driven Services

NCs reframe traditional responsibilities of local government — e.g., schools, parks, safety, sanitation — by engaging private for-profit and non-profit organizations.

Resident-driven services are central to NC developers' visions of thriving, sustainable places. As communities strive to stretch their resources, developers, residents, and visitors alike look for innovative alternatives to "public" services that heretofore were solely government responsibilities.

In the words of Louise Brooke-Smith, president of the RICS: "Residents are taking ownership of key decisions in their communities. This is 'grassroots': the community coming together, identifying what's important to them. But they need research, guidance, and support to pull their plans together. If they don't get it, it's back to planning at the pub, and if they don't have a good relationship with the planning authority, it can be very confrontational. Successful communities have presented professional plans at referendum; and they've had money. Most developers have bought into the idea of working with the community. This should not be a battle. They have a product and need community buy-in. Developers would be foolish to ignore the community because it can work to their advantage."

SEE INTERVIEW: Louise Brooke-Smith, *Policy and Practice in New Communities*

Economists opine that communities are public as well as private goods. If the "portfolio" does not include community services, then individual decisions on housing, jobs, and recreation are unlikely to create the lifestyle benefits that attract NC residents. Singles and families alike prize urban lifestyles that combine commercial features such as coffee shops, convenience stores, and restaurants, with proximate social services like community centers and health clinics.

NC service providers respond to these preferences by thinking like owners. Even in projects whose sole objective is to provide a public good, such as early child education, they manage assets and services with sound commercial principles. NCs have introduced real-time techniques to improve service performance, responsiveness, and quality, such as 1) streamlining sign-up procedures for programs and activities through neighborhood-level, interest-specific software; 2) developing overall strategies for community-scale operations with meticulous customer segmentation, using public GIS and Census data; 3) dividing host responsibilities among "micro-volunteers" (see below) to engage and diversify the talent pool for staffing community programs; 4) providing accessible smartphone applications for individual needs, such as parking and shuttle bus availability; and 5) enlisting neighborhood and building equivalents to traditional "block captains" for early warning signs of basic deficiencies before they become crises.

Community Associations are an American innovation to support services that neither the developer nor the local government would otherwise provide and to enliven the community through a range of creative programs. Generally structured as non-profits, they combine the interests of residents, developers, and local governments in long-term "partnerships" and are ideally suited for the NCs' missions. The Columbia Association (CA) is perhaps the largest, most complete of these with over 100 functions and 40 facilities, from childcare and fitness centers to ice rinks and dog parks, a $66M budget, and 1,500 full- and part-time professional staff. Its governance reflects Columbia's two-tier structure, with boards representing each of the NC's ten villages and an overarching board for the entire community.

"NCs look for innovative alternatives to government-provided services."

CA is financed by: annual fees from residential and commercial property owners, activity fees from users, and program revenues that support additional operations. The Association applies best business practices, from customer satisfaction surveys and market studies to professional education and conferences. CA's broad scope and structure are estimated to directly contribute $1.5B annually to the area's economy, including over $80M in taxes.

Howard County, Columbia's local authority, in coordination with CA, the developer, and the new Downtown Partnership, provides zoning, schools, economic development, transportation, roads, sanitation, police, and fire services. The County approved the original Columbia Master Plan in 1963. And in a far-reaching, nationally-recognized innovation, it acquired a failing Columbia Village Center from a REIT in 2014 to help ensure its future and spearhead its redevelopment.

Reston, the pioneering NC in northern Virginia, began in 1964 with a mixed-use model and a trading up concept that its founder, Robert Simon, styled "live, work and play." As it has matured to 60,000 residents with numerous community organizations, the principle of "service" has been added to the original tag line.

III - NEW COMMUNITIES INITIATIVES

The following initiatives frame an agenda for business and government leaders with responsibility for major urban issues, offer a fresh look at the dynamics that foster NCs, and encourage bold steps required for innovative, transformational change.

Prime Movers

Promote NCs as generators and organizers of responsible, responsive urban growth through partnerships with business entrepreneurs, knowledge-based institutions, and natural resource-based sponsors.

NCs, like all innovations, require prime movers who not only create the vision of what the community could be but also instigate bold action and energize complex organizations.

Companies. 19th Century entrepreneurs created "company towns" for ideological and practical reasons. George Cadbury, founder of the UK chocolate company, was appalled by employee housing conditions in Birmingham, England. He built Bournville in stages from 1893 to 1900, setting a far-reaching model of community design, building quality, and social integration. Scroll forward to 2014. Facebook is pioneering a 21st Century urban neighborhood, infused with attributes that appeal to Gen X and Y employees, in a 400-unit, $120 million mixed-use apartment complex within power-walking distance of its Menlo Park, California, workplace. Among planned features, a "pet spa," "grab-and-go" store, "iCafe," sports pub, bike repair, wellness center, pool, entertainment deck, and concierge service are hallmarks of luxury developments. But these amenities are focused entirely on Facebook's prototypical workforce for whom "24/7" engagement fuses lifestyles and workstyles. Similarly, Kevin Plank, CEO of Under Armour, the $3B apparel maker, is positioning its Baltimore headquarters in a former Tide soap-making plant as a "cool" innovative workplace. Centered in a newly vibrant urban neighborhood, Under Armour is spearheading on- and off-campus infrastructure and service upgrades to "control the experience," as NC developers strive to do.

Developers. In the absence of a public planning framework such as the UK's, America's private "master developers" create visions for NCs, assemble land, perform comprehensive planning, and marshal organizational and financial resources for the 30- to 50-year development process. The land is "owned" by investors; but the master developer plans, develops, and manages the NC, receives fees and other revenues, usually incurs disproportionate risks, and claims corresponding rewards for this role. Builders do not take development risk or receive developer rewards; as "manufacturers," their success depends on more conventional operating business models. Private master developers have also emerged for the UK's major urban regeneration projects; but its governments, at various levels, envision the project, designate land, and sponsor competitions for private developers. Peel Holdings' insight on the development potential of Manchester's Docks broke the mold by envisioning an entirely new destination with scale, accessibility, proximity to regional centers, environmental sustainability, and a new community of residential, office and public uses in what has become Salford Quays. In short, developers, whether private or public, are the motive force for NCs; builders supply the NCs' products; and the result is a two-tier development industry structure.

Universities. In today's "knowledge economy," universities and other knowledge-creators look for sites on which to assemble scholars, students and employers in Greenfield and Urban Renaissance NCs. The University of California has embarked on a multi-decade, pedestrian-oriented, sustainable, $1B "academic community" for 25,000 students on 800 acres in a relatively underdeveloped area, with adjacent mixed-uses for faculty and related private and public employees. The P3 is likely the most viable – and perhaps the only – model to fund and manage this large, complex, long-term commitment. Cambridge University (UK) has launched a long-term, multi-faceted strategy to solve a housing shortage facing faculty and staff by developing infrastructure on 400 acres it owns outside the city, supporting both university-sponsored affordable housing and private market-rate housing. By addressing both its own and the community's needs, the university is also improving its relationship with the local government.

Resource-based. As policymakers confront the "great issues" of our time, water, energy and waste top most lists in economic and social importance. These natural and human resource needs could underpin Greenfield and Urban Renaissance NCs of the future. Receding water tables in the American Southwest could become catalysts for reversing the 30-year trend of massive relocations from the Northeast and Midwest in favor of water-rich Northern states (e.g., Michigan, Minnesota, Wisconsin) and Southern Canada, with the potential for a ring of "Great Lakeside" NCs. Oil shale extraction in the Dakotas and Montana have already set the conditions for "Boomtown NCs" where oil companies become the 21st Century equivalents of Mobil's leadership in underwriting Reston and Mitchell Energy's role in The Woodlands. Tesla's $5 billion, 10 million square foot battery plant in Nevada, with 6,500 jobs on 500 to 1,000 acres, could anchor a major NC; and its acquisition strategy of evaluating and preplanning sites in multiple states could spawn other NCs, even at sites which it bypassed.

"NCs are a 'smart growth' antidote to suburban sprawl."

Information and Analytics

Elevate management information and deep analytics to the strategic agendas of NC decision-makers in development and management organizations.

Analytical information – robust, relevant, refreshed – helps decision-makers to understand how the NC organization is performing on its original aims, prioritize improvements and new opportunities, and decide its resource commitments.

Case experience and interviews reveal that NC developers face a fivefold information challenge: 1) *defining decision-makers' needs and priorities* for analytical information amid the tsunami of available data; 2) *identifying metrics of those needs* among near-infinite possibilities; 3) *designing report formats* to highlight relevant metrics for stakeholders' issue agendas; 4) *selecting systems* for efficient, cost-effective data processing; and 5) *disseminating timely results* to the right users in usable formats.

Data is, in effect, a new type of property with incalculable value. Because it is "intangible," accountants do not yet have reliable valuation measures. Thus, innovators like Argent, developer of King's Cross Central, London, begin with the basics. Says Project Director Richard Meier: "We collect data from our public-facing, food-and-drink offers within the site, who is coming to the university, to various events, to a new gallery. Likewise, we measure how public spaces are used when we curate events such as a festival — counts of the number of people, how well the stores are doing in trading. We collect data from the start and track its evolution. For example, at the ice cream festival, we didn't have enough to offer: so many people turned up, we couldn't support the queue. We analyzed that information to improve the visitor experience next time."

SEE SIDEBAR: Urban Renaissance at King's Cross, London

Argent is also building technology to monitor usage patterns for its dialogues with tenants. During construction, newsletters and phone banks capture feedback from call-ins. Post-occupancy surveys measure qualities such as "vibrancy." Social media capture individual staff and visitor concerns. Says Meier: "We review the feedback in different forms throughout the project. Our management team can download concerns directly from people on the street." This data supports their leasing strategies by providing unique, tenant-oriented, analytical information.

Because NCs are among the most structured, concentrated micro-economies in both countries, they have – or have access to — extraordinary volumes of data on customer traffic flows, store spending patterns, and building utilization as well as security. Their planning teams amass available data from public agencies and private sources. Yet after the initial requirements, few NC organizations then invest the time, talent and expense to maintain and mine data for ongoing strategies, designs, and operations. Moreover, the NC industry, for all of its deal-making prowess, is not proficient in using analytical information. As one interviewee observed, “Even if you spend millions to create high-value data, half the property managers will print it out, store it in a big file and never use it.” The link between transactional and activity-based data and its use for strategic asset management still eludes most.

NCs’ scale and spirit breed natural interest in internet-based initiatives. “Micro-lenders,” once found only in emerging economies, have provided entrepreneurs with small-scale loans to help create jobs and revitalize neighborhoods. “Nextdoor’s” private network connects people in 42,000 neighborhoods with neighbors whom they may not know. “Micro-volunteering,” a UK innovation that also has caught on in the US, allows time-stretched residents to help all manner of organizations anytime, anywhere through online calendars, without rigid schedules and formal commitments.

Technology enables organizations to capture and interpret data from telephones, computers, store and office systems, cameras, and even appliances. The innovations from “big data” analytics, already legion, cover the spectrum of planning and site operations, from simple to sophisticated — cutting equipment costs and deterioration by systematic rotation, reducing travel costs by teleconferencing, improving open space security by video monitoring, and repurposing sites for higher-value uses by merging retail and community activity patterns.

“NCs must become proficient in using analytical information.”

Privacy concerns can obscure the high value of such information and distract leaders from the necessary investment. But as NC industry leaders like Disney (US) and Grosvenor (UK) have shown, NCs will better accommodate demographic changes, capture new technologies, and adapt or revise policies if they have robust analytical information.

Unconventional Uses

Advocate NCs as venues in which to test, evaluate and apply urban policies, targeting new and underserved markets and potential investment opportunities.

NCs are test beds for innovative policies and projects where new uses can be piloted at low risk, expanded or swapped when they work, but collapsed and recycled when they do not.

Campuses. From the 1960s onward, major US companies, spearheaded by icons like AT&T, GE, and IBM, decanted from cities to neighborhood-scale suburban complexes on 200 acres or more with high-finish offices, conference centers, full-service dining, gyms, pools, landscaping, and vast parking lots. By the 2000s, budget constraints and new technologies led owners to re-purpose these sites for luxury condos and mixed-use NCs. Similarly, Britain’s National Health Service sold off surplus hospital sites within 20 miles of core cities. Jeremy Edge, FRICS, observes, “These were self-contained, 200-acre communities, on high ground, with onsite power and swaths of open space — ideal for residential reuse. Most were converted to large residential satellites, sometimes with retail, employment, and village clusters within an overall master plan.”

Alleyways. Long-forgotten alleys and mews between urban buildings become mainstream spaces in Urban Renaissance NCs. In both US and UK cities, they serve any or all of four roles: 1) extending neighborhood life into unoccupied, potentially dangerous spaces; 2) connecting people in informal rear areas as counter-weights to ceremonial street-facing front gardens; 3) reviving traditional play for all ages (e.g. bean bags, scavenger hunts) to replace all-consuming electronics; and 4) reclaiming unproductive sites that had long been used for shops, stables, laundries and the like but suffered from obsolescence. Washington, DC, has counted over 1,200 urban alleys; in one, a developer aims to build 125 micro units for single Millennials, leveraging the fitness, gourmet coffee, and upscale dining that already exist.

Retailing. Whole Foods, the $14B exemplar of sustainability and “healthy eating,” is locating in Chicago’s depressed Englewood neighborhood, where residents’ hidden spending power is diffused by fast food and convenience stores. Its co-CEO, Walter Robb, has committed to changing shopping habits with innovations like relative pricing, rebranding, and farm-to-table sourcing from an urban enterprise run by a non-profit on a former industrial site that plows its produce earnings into job-training for ex-convicts. Chicago’s voluble Mayor, Rahm Emmanuel, who has committed nearly $11M to pre-service the 13-acre site for retail and residential development, talks of Englewood’s “resurgence” and “resilience.” Whole Foods’ mantra – launching a business, not a charity, buttressed by a long-term lease – sets a model for Urban Renaissance NCs in other challenged communities.

Green Cities are taking root in Asia. The Philippines is re-using a former US Air Force base to marshal growth in its capital region, manage congestion, and deter urban sprawl. The NC of 4M people and 1M jobs is intended to produce $36B in economic output, and to be “environmentally sustainable, socially inclusive, economically competitive, culturally relevant, and technologically integrated.” 30% of the total 23,000-acre site is to be left undeveloped. To generate sufficient capital, the anticipated development and financing vehicle is a 50-year P3. The first-phase development is planned for 2019 on 3,200 acres, costing $1.4B and anchored by a university campus. Unlike most Greenfields NCs, this benefits from an adjacent “Freeport Zone,” with established employers, approved incentives, and a stable workforce.

Conservation Land is inherently controversial: environmentalists see encroachment whereas developers see growth. California’s state conservation agencies can impede NCs: Playa Vista, near Los Angeles Airport, pursued approvals to work around its wetlands for over a decade. Now, the Coastal Conservancy has launched an innovative partnership to invest $400K toward the $12M cost of a 31-acre resort campground, for up to 300 visitors at rates from $30 per night for walk-ins to $200 for reserved cabins, with mixed recreation uses, a clubhouse, pool, shops, and space for RVs. After the initial payback over five years, the agency will share 2%+ of revenues with the landowner for 30 to 50 years. But its primary goal is to provide affordable access to the coastline, which has been developed largely with costly, high-value projects.

What may be unconventional uses today may become mainstream NCs tomorrow. Innovation speeds up and solidifies that process.

Community Designs

Provide platforms for urbanists and architects to create the “sense of place” and to experiment with novel community-level and individual building designs.

NC designs – imaginative, responsive, well-executed – refocus decision-makers from deal-making, financing, and sales to placemaking. By engaging residents as customers and consumers, community design creates economic value – and shows NC innovation at its best.

More than 80% of the UK Survey respondents ranked distinctive design and “sense of place” as very or extremely important in successful NCs.

Developers “know” good design though they may be challenged to explain it. What we interpret as their innate sense of place comes from deep immersion with customers and residents, informed by extensive research and creative sketches by multiple designers.

NC developers typically turn to architects when they envision a NC. Others resist architectural “statements” because consumers favor traditional designs with which they are “comfortable” – a governing mantra for US and UK NCs. People do not like to be unsettled by their neighbors’ architecture. A jarring house next door sullies their experience and may impair their property’s value. But subtle design changes in public spaces – e.g., child-friendly water features, artist-decorated pocket parks, coffee nooks in bookstores – have outsized impacts on residents’ engagement as well as profitability.

Practice has shown that imaginative solutions emerge from creative tension between developers, designers, financiers and marketers, leveraged by the flexibility of mock-ups but leavened by the discipline of numbers. This process is hallmarked by seven principles: 1) *assemble specialists*, from designers and engineers to subject and functional experts; 2) *set the tone* of free-form dialogue with problem-solving direction; 3) *tap generalists,* with broad, deep experience in NCs and in other complex arenas; 4) *promote mini-pilots* to test game-changers which entail large investments and high risks but could yield significant benefits; 5) *scrutinize existing services* — who provides them, to whom and where, and how each could invigorate community spaces; 6) *apply workplace improvements*, such as flat organizations, space intensification, and sensor-enabled facilities; and 7) *‘hug the trees,’* both to beautify the streetscape and to sustain the NC’s ecology and economy.

“NC developers are designers as well as deal-makers.”

NC design innovations may hide in community plans. RCI introduced “New Urbanism” in its pilot projects to acclaim by policymakers and tenants. The neighborhood structure, walkability, connectivity, mixed-uses, density, diversity, local materials, and other NC principles fundamentally challenged recent government practices of utilitarian design and poor building quality, reclaiming the elegant designs of historic Army posts.

The landscape is as central to placemaking as are buildings and streets. Thus, innovative developers focus on natural features as well as on construction. This begins with eye-level solutions, such as street plantings, beds, and window boxes; migrates to “pocket parks;” and climbs upward. As Richard Meier of Argent observes, “Trees are fundamental; they provide the step between people and taller buildings.”

Urban Renaissance NCs share unique opportunities to create the sense of place by adapting historic buildings through contemporary uses and amenities, and incorporating a neighborhood’s historic roots into planning and design. Baltimore’s conversion of three august but obsolescent banks into apartments; Chicago’s adaptation of a former US Steel mill brownfields site to a 700-acre “green” NC; Washington’s Southeast redevelopment of a gleaming quarter anchored by the historic Navy Yard; the transformation of Denver’s landmark Union Station – all speak to singular placemaking strategies.

SEE SIDEBAR: Urban Renaissance at Union Station, Denver

Micro-unit apartments are the latest incremental urban innovations. In dense, high-rent, transit-oriented cities like New York and San Francisco, “micros” range from 250 to 400 square feet, compared with 400 to 600 square feet for studio apartments and 650 to

Millennials and New Communities

The Millennial generation, aged 18 to 33 years, is the most important new US market cohort in decades. Their numbers, lifestyles and aspirations favor new communities.

Millennials are 74 million strong and growing. They blend unique urban lifestyles – vital, social, peripatetic – with post-Recession caution.

Millennials share common aspirations with Boomers — marriage, family, work, homeownership – but in marked contrast to Boomers' optimism at the same age, many Millennials fear that these goals are out of reach. So, they are staying in school or delaying home purchases until the economy improves.

Like Boomers, Millennials are driven by idealism: sustainability is to them what civil rights were to their parents. Whatever their professions or politics, they believe in the environment and espouse policies to prevent pollution while promoting growth. And, more than 80% support Social Security, though they will not personally benefit from it for decades.

Whereas Boomers flock to retirement communities with people just like them, Millennials prefer urban communities with diverse cultures and lifestyles – if they are affordable. Thus, NCs are uniquely positioned to attract Millennials with mixed-use/mixed-income profiles; large, diverse housing product ranges; extensive open spaces; and active onsite and adjacent programming.

NCs have the built-in capacity for trading up from single studios to family homes and reversing the cycle as circumstances and ages change. The Millennials' personal values should make them solid lifetime credit risks. Three-quarters want to buy but only half can qualify for current financing. While governments ponder solutions to this challenge, creative developers could design vehicles to accelerate wealth transfer from Boomers in support of the Millennials' equity needs.

800 square feet for one-bedrooms. "Micros" are especially popular with Millennials – 18 to 33 year olds, now 74M-strong and growing — who tradeoff smaller, sometimes shared, spaces for centrally located settings. [See *Millennials and New Communities* to the left.]

Survey respondents agreed that NCs of the future should encourage "quirky," "imaginative," even "whimsical" urban designs, much as NCs are ideal platforms for incubating new enterprises. While some NCs have produced pedestrian designs, buyers and renters alike favor a distinctive vocabulary for the shapes, symbols, and signs that define their properties and neighborhoods. Although the impact of community design will be public, private developers could help to drive this trend because they can absorb the market risks of pioneering emotion-laden qualities.

Investment Fund

Seed a privately sponsored "NC Investment Fund" with sovereign wealth investors, large pension funds, urban-oriented philanthropies, public venture funds, and other opportunistic institutional sources.

NC investors — with long horizons, regional strategies, flexible standards, and partnership spirit — could fuel developer innovations by redirecting market drivers and reinterpreting conventional risks.

The lack of "patient capital" is a major obstacle to NC expansion. In years past, US institutions provided funds for land acquisition, site infrastructure, and building development; and successive UK governments underwrote New Towns' investment schemes. But the Recession dried up those traditional sources. Private development loans are now limited to conventional 3-to-7 year building cycles. More than half of US Survey respondents listed long-term financing as the "most important" objective in structuring a NC partnership.

Yet today, the NC "industry," including US and UK developers, is on the cusp of compelling changes that should attract large, long-term investors. Two market forces are driving NC demand. First, housing production in the US and UK was severely restricted during the Recession while household formation continued to grow; and land inventories shrank as banks cut lending, developers deleveraged, and local authorities withheld development permissions. Second, two large, fast-growing US customer segments – the 74M "Millennials" and the 76M "Boomers" – already demonstrate preferences for the housing types, mixed-uses, and amenity-rich urban lifestyles that NCs offer.

At the same time, the NCs' capital requirements for land assembly, infrastructure and vertical development; the complex interplay of entrepreneurial ingenuity and mega-project management; and the deep technical mastery of environmental and design features — all limit competition to a handful of experienced organizations. As both the US and UK economies recover, industry leaders who absorbed write-downs and recapitalized land holdings during the Recession, or acquired discounted portfolios from local developers and lenders, are well-positioned to pursue NCs.

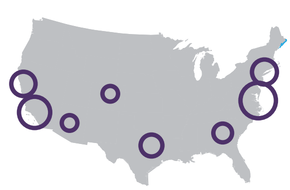
An NC Investment Fund would have seven main roles: 1) provide new sources of private capital that ordinarily are not available to NC developers; 2) build an international portfolio of privately funded NC projects to improve overall credit availability for the NC industry; 3) establish rigorous project selection standards to increase private resource allocation to NCs; 4) facilitate "one-stop" underwriting and loan approvals to save NC developers valuable time; 5) reduce high fees that accompany single-project real estate funds; 6) establish a revolving fund to support further NC projects; and 7) underwrite affordable housing projects in NCs that complement market-rate projects. As an important byproduct, this Fund also would provide a vehicle for attracting and training a cadre of "emerging leaders" to multiply the legacies of Fraser, James, Reith, Rouse, and other NC pioneers.

By committing for decades, long-term investors can take risks to create NCs that others cannot. They are not immune to short-term fluctuations, but they can align their expectations with the NCs' 30- to 50-year time horizons and monetize specific assets in 5- to 7-year cycles, consistent with the lot sales and income property programs in NC portfolio plans.

The Fund would stay abreast of NC fundamentals by combining the disciplines of real estate and investment banking. Its principals would have the flexibility to negotiate and close deals – similar to the acknowledged efficiencies of the US Resolution Trust Corporation and UK New Towns Corporations. The Fund would follow rigorous, but sensible, underwriting standards: 50-year horizons are difficult to reach with ten incremental sets of 5-year financings. However, as the P3 model shows, an assured stream of prospective buyers and tenants, supplied by nimble, customer-driven developers, can yield significant long-term, risk-adjusted profits. For opportunistic, but patient, capital sources that routinely invest in high-risk start-ups, one proposition could be, "NCs house the hard and soft assets that incubate your new ventures; and if some fail, as the 'dot.com' era proved, the NCs' underlying property values and development opportunities remain." [See *New Communities Clusters in US and UK* below.]

The Fund's main economic lever would be its partial interests in increased property values that, over time, would allow Fund investors to monetize portions of their assets and to redeploy new tranches for further NC projects. As a private initiative, this Fund would encourage new investment in NCs without government appropriations. Thus, it would avoid political obstacles that have blocked recent US proposals for a government-sponsored National Infrastructure Bank and would overcome failings of the Nixon-era Title VII NC Program (i.e., insufficient capital, inadequate capabilities, slow pace, and costly duplication). The basic fact is that private partners, properly motivated and overseen, excel at building, operating, and maintaining NCs – and at using those skills to manage private capital when it is available.

"Long-term investors can take risks to create NCs that others cannot."



New Communities Clusters in Largest US Metros

Washington-Arlington-Alexandria, DC-VA-MD-WV	23%
Los Angeles-Long Beach-Anaheim, CA	20%
New York-Newark-Jersey City, NY-NJ-PA	16%
San Francisco-Oakland-Hayward, CA	15%
Dallas-Fort Worth-Arlington, TX	14%
Atlanta-Sandy Springs-Roswell, GA	12%
Denver-Aurora-Lakewood, CO	10%
Phoenix-Mesa-Scottsdale, AZ	10%

New Communities Clusters in Largest UK Urban Areas

Greater London Built Up Area (BUA)	31%
Greater Manchester BUA	19%
West Midlands BUA	18%
Liverpool BUA	8%
West Yorkshire BUA	8%
Bristol	8%

CONCLUDING NOTE

New Communities are products of innovation. This guide documents some of the major insights I have distilled from collaborating on numerous new communities projects, as well as findings from the RICS-ULI New Communities Survey and the expert interviews.

As I wrote in the Introduction, this is a work-in-progress on a topic of profound importance for policymakers and practitioners. Thus far, I have drawn three conclusions:

1. New Community innovators are not only seers; they also seek to improve our built environment. Hence, their innovations change what we see around us and how we plan, finance, develop, and operate it.

2. New Community development is not performed by formula, any more than communities, their residents, and their stakeholders are formulaic. But the management principles can be codified and decision-makers can apply some or all of them in addressing the challenges of urbanization.

3. Innovation is not a choice for NC developers – it is a must. As John DeWolf, the Howard Hughes executive for Columbia, puts it, "If we're going to be the leading community developer, we have to innovate in our products and services through partnerships and internal growth."

Though this guide is not encyclopedic, it illuminates societal and market forces and professional practices that shape NCs. In a field that is driven by transactions and technical details, my aim has been to present significant innovations and to propose breakthrough initiatives that decision-makers can use in tackling real-world problems. Please offer your suggestions to deepen our collective knowledge and to guide future practice and research.

INTERVIEW

Private Development and Investment in Urban Communities

Interview with Jeremy Newsum, FRICS

The Grosvenor Estate, established in 1677, manages the family holdings of the Duke of Westminster, including property development, investment and fund management. Based in London, Grosvenor has offices in 18 cities around the world. Its directors have an exceptionally long view of investment and development. Jeremy Newsum joined Grosvenor in 1987, was Group Chief Executive from 1989 to 2008, and has been Executive Trustee of the Grosvenor Estate since 1993. He is a Past Chairman of the Urban Land Institute. Here are excerpts from my interview on July 9, 2014.

Planning. The Grosvenor Estate is a master planned community on 300 acres in central London. Many aspects of the original 18th-19th century designs are relevant to the way it works today. There is a single controlling plan and still one entity to manage the place. We have many individual developments on the site that are integrated into the whole. Master planning doesn't have to require ownership. But a single entity must have the whole within its orbit. Master planning allows an area to be understood as a unified piece. Those who plan and develop for the longer term are more capable of being innovators or certainly improvers.

Urban Development. The initial idea might stem from a private landowner or the state. Either may see an opportunity. The state might own or assemble the land. There must be an agreed brief on what is to be built, complete with objectives in relation to sustainability. The local authority will have written the first brief, but it has to be adaptable. The private sector responds to the brief, usually in a competition. The right structure is important; some believe that only the state can know the best answer but it is not one or the other, it's getting the right public/private arrangement. The master developer procures the designer as an advisor; and contracts with the builder. It's not essential to have a financial incentive to be a good partner. The reputation for everyone involved should be the primary motivation to do the job properly.

Design. Good design has long term value. In Liverpool, we wanted a mix of designs with a variety of architects. This resulted in a sense of streets rather than a typical shopping center. But it is easy to underestimate the costs of this 'shared complexity'. We have learned to budget for this but I think the value is self-evident in LIverpool.

Purchase. Compulsory purchase powers in the UK are greater compared to many places where you cannot then produce the ideal project, only what is possible based on the land available. In Liverpool, we were appointed as developer on behalf of the local authority with compulsory purchase powers, but as master developer, we made the decisions, not the authority.

Complexity. Cambridge University has a master plan for its North West Cambridge land, and about 10 designers for its initial phase. There will be several others working with private developers who are now buying land. So, on the same site and at the same time, there will be at least a dozen projects going on. The logistics of managing this are complicated and financially, it's an extra, expensive, dimension.

Risk. Although we think of ourselves as developers, we also represent a very large investment base. We're bound to consider both investor and developer perspectives. We calculate a cost of capital and a long-term return. During development, we require a return on capital to reflect the added risk. The most obvious property type which combines development and investment risk is shopping centers. When centers are finished and occupied, you will not see the final economic result; you need the extended operational period to allow the economics to settle down. Regarding large projects, managing the cash flow is critical. The more up front land cost, the faster development has to occur, which may have an adverse impact on the way in which it is designed and built.

Density is a policy choice. The presumption about what people want has changed. People are making active choices to favor more dense areas; certainly existing developed land is being densified. But it's a fashion that might change again. It's partly driven by clever professionals who institute changes and mindsets. New ideas are usually a reaction against what isn't liked. In extremely dense, deprived areas of 17th century London, the reaction was to reduce density. In America, we find reactions against low-density suburbs.

Milton Keynes. I think it looks pretty good. Commercially, it is successful. It's got a very large shopping center, which attracts people from a long way; and a large commuter community, which brings in a lot of cash. Compared to the earlier new towns, it is a much better model but it is on a vast scale which probably makes it easier to succeed.

INTERVIEW

Urban Renaissance in Manchester, UK

Interview with Sir Howard Bernstein

Manchester, England, has much in common with other long-established UK and US industrial cities: burgeoning new enterprises and young, vibrant newcomers amid pockets of poverty and obsolescent properties. The City Council's Chief Executive, Sir Howard Bernstein, is widely credited for a major urban transformation having broad regional reach. Here are excerpts from my interview on July 8, 2014.

Innovation. We developed a strategic framework for transformation; a strong, holistic vision about how the community should develop over a 20-year period. The private sector brought innovation about place and support in exploiting commercial assets. The City Council brought leadership, accountability and reassessment of public services to support growth and development. Tenants brought a sense of belonging and ownership. Other stakeholders brought private housing, social housing and financial resources. Our main role was effective, inclusive leadership. It was forward-driven, radical change.

Purpose. The best urban new communities encourage current people to stay and new people to come. They create mixed tenure where people in affordable housing live next to people in high net worth housing. Hulme is near the successful city center, but none of this location's benefits were captured by the community. We bulldozed a group of monolithic, high-rise buildings focused exclusively on social tenants; temporarily relocated those who wanted to return; built new housing, created a new town center; and opened opportunities for new businesses by expanding science parks and the University.

Planning. The strategic framework covers all parts of the city but there isn't a single planning approach that applies to every area. What we thought were lifestyle choices in 1995 weren't the lifestyle choices in 2005 and won't be in 2015. Therefore, we have to regularly review the relevance of those assumptions in each community to the dreams and the aspirations of the people who live there. We make a 'root and branch' assessment of all of our frameworks every five to eight years. But in dramatically changing areas, it's every year to embrace the market dynamics.

Participation. We were determined to enable an active role for tenants in the transformational change program. There is no substitute for openness and visibility: a clear approach, providing the platform to participate, offering opportunities to be involved in the actual design, its 'look and feel,' the meaning and importance of quality design because definitions of quality vary, what the experience would mean for people who lived there and for others.

Partners. We brought in private developers, housing developers and housing associations. We looked at their track records, their values, their approach; practical examples of how they saw our overall vision for an area; whether or not they would contribute to its delivery; and how they would add value. We worked together with the developer over a period of years and made a lot of progress. It's no coincidence that our partners on the biggest developments are not just a function of the procurement process; they understand our goals and stand by our side.

Programs. It's rare to be able to sequence development of this type as a program manager would. There are recurring, consistent themes: how to work with people so they feel like this is their home, how to create assets which attract investors, how to align house building with commercial development and market realties. But these are not linear processes; they are cross-cutting. They recognize that transport planning, economic development and housing policies need to be managed within market rather than administrative boundaries.

Processes. All 10 local authorities in Greater Manchester represent the region's economic geography. We pride ourselves on our capacity not just to lead processes but to facilitate execution. We work across sectors and organizational lines to plan a transport system, or a housing policy, or a reform to improve public services. But we can only deliver reforms and some of the strategies in the neighborhoods. We integrate all of those functions and services because they're the key to driving growth. Part of my role is to test the relevance of our planning to the way in which we execute at the neighborhood level; to make processes work not only for the organizations' benefit but also for the neighborhoods' benefit.

Places. We have lots of green space in the city but it's of poor quality and inaccessible. We have to keep the 'greenbelt' constantly under review. Probably 20% to 40% is of the highest quality. We want to ensure that it contributes to the city's economic well-being by attracting new house builders. We will not have all the executive housing people will demand over the next 10 years, so we have to look at places where people want to live. We also want to capture potential land values and partially fund the cost of building out brownfields. We help councils to manage these issues so that opponents do not simply go next door.

INTERVIEW

Policy and Practice in New Communities

Interview with Louise Brooke-Smith, FRICS

The Royal Institution of Chartered Surveyors (RICS) is an independent professional organization that accredits 118,000 members in 146 countries. RICS "promotes and enforces the highest professional qualifications and standards in the development and management of land, real estate, construction, and infrastructure. All individuals and firms registered with the RICS are subject to quality assurance." In 2014, Louise Brooke-Smith became the first female president in RICS history. Professionally, she leads a consulting practice in planning and land economics, based in Birmingham, England. Here are excerpts from my interview on July 4, 2014.

Identity. New communities have defined identities because of their style or design. If you drive, you'll see signs when entering and leaving. Buildings say 'I know I'm there.' Services also define the community: doctors, mechanics, open space, retail. Otherwise, it is just another housing estate. I recently examined a neighborhood plan in Hampton where residents had been asked to look at their area. What would they like to see? How can they bring their community together? The good news is they want an identity to make the community proud.

Schools are a good indicator. A successful school with a good reputation attracts people who want to live there and are proud of it. Failing schools reflect a weak community. Historic villages and small towns show that schools become community centers; people can link into them through sports and gathering spaces. The school can become the life of the community. But shops are no longer central because of the Internet.

Success is defined by the marketplace. Whether people rent or own, they want to be in vibrant communities – measured by take up of land and housing, and peoples' pride. If people have been pushed into living there, the community won't have that vitality. Community development has to be market led: there's no point having a wonderful blueprint unless the market supports it. Local authorities are administrators, they are not creators. There must be an instigator, a developer.

Demand for housing is overwhelming. That will influence whether new communities and Garden Cities are built — and how. Local authorities are under pressure to increase density, introduce better design, more technology, green solutions. Developers want to address the need; they know what's going to sell and they must make a profit. Planning authorities find it difficult to defend their position of knowing more than developers about innovation. And it's difficult for developers to bring out fantastic innovations if the two do not agree on basics like site locations and housing types.

Production is slow. It's a plan-led system with a 'get out of jail' card. The 'UK rule' requires housing supply to be identified for 5-years forward. Technically, this is one-third of the 15-year strategic plans that are driven by national policy; practically, it's not. Developers say, 'you need housing, take what we are offering: signs, money, planning applications.' The authorities reply, 'lovely, but too soon; that area should come forward in 10 years.' This is piecemeal: developers know that government policy is on their side, so the idea of long-term phasing is theory; in practice, the sooner they get housing out of the ground, the better.

Garden Cities are one of many solutions to the housing problem: more intensive development in existing urban areas and additions that hook onto them. The UK still has a huge amount of underdeveloped land beyond the Greenbelt; we should bounce over it for new settlements and cities. Garden Cities must be viable propositions with public transport at the core. You can't simply build a lot of houses and call it a Garden City.

Open space creates value. Housing drives open space requirements. It's a negotiation between the developer and local authority on how much the development could afford. But the dire need for housing decreases flexibility in the amount and nature of open space provided with the house. Pressure on land results in formal spaces: pleasant to look at, sit in, have your lunch – but fewer child-friendly spaces. Developers tend to provide landscaped areas because they sell properties. Water features also help: the only 'river' through Birmingham is in a culvert and looks like a sewer; whoever develops it would create a 'waterfront amenity' and substantially increase its value.

Transport. London has excellent public transport, but it's rare for other UK settlements to be so well served. People make a moral choice to use the bus or car or tram. If they put aside their aspirations for pubic transport, they'll take the car. A transport system depends on demand, and it's not yet there. Our new staff member from London can't drive, she's never had a car. Here, she commutes by train and has to learn to drive because it is impossible to get around without a car.

Planning Paradox. Because we face a housing crisis, developers are driving the planning system. When local authorities refuse building permission because proposals are too dense or not green enough or in the wrong phase, developers appeal. If the authority does not have a local plan in place, the presumption is that builders should build; the authorities are overridden. Developers even look for places that don't have plans because they can produce there. But that balance will tip over the next 18 months as demand is met; the local authority will regain its direction of the approval process.

SIDEBAR

Urban Renaissance at King's Cross, London

King's Cross is one of the busiest transport hubs in Europe and home to a complex 20-year, 67-acre, "urban renaissance" project that is transforming obsolescent railway lands and former gas works into a vital, mixed-use new community.

The area has had a checkered history, spanning industrial production and distribution to prostitution and drugs. But various government and private attempts at "regeneration" failed because of poor markets and weak management.

Since 2000, the Argent Group has pursued an innovative four-part strategy at King's Cross: mixed residential-retail-office-public uses that complement and reinforce one another; thorough, yet flexible, master planning; connectivity with surrounding neighborhoods; and a range of spaces, from open to intimate. In the words of Richard Meier, an Argent Partner, "With regeneration schemes, there are many references to build upon. In King's Cross, the site's essential character and quality are driven initially by retaining the historic buildings in the central part of the site and stitching new developments into the surrounding communities, neighborhoods, and physical infrastructure."

The plan envisions a diverse new neighborhood of 4,000 residents, with 1,800 new homes, from high-value apartments to affordable housing for students and families, set in 26 acres of public space, parks and squares; a vibrant retail destination under brick arches on cobbled streets, with shops, cafés, restaurants, galleries, music venues, and food stalls; and over 4M square feet of office space in 19 new and historic buildings designed by different architects making distinctive contributions to the scheme. Google is building its UK headquarters in a landmark building with sustainable workplace design. Each building has a unique identity and character. Design of outside spaces, gardens, terraces and even the temporary public realm benefits from equally careful consideration — e.g., a natural swimming pond in the middle of the construction site with filter plantings.

Argent secured outline planning permission on behalf of the King's Cross Central Limited Partnership (KCCLP) to redevelop the entire 67-acre site, including land around the rail stations and the old railway yards. The former Victorian gas-holder guide frames have been dismantled, refurbished and re-erected. 24 of 26 historic buildings have been retained. Detailed planning applications for each part of the site are being made on a "rolling program" basis, allowing flexibility for Argent to accommodate alternative but compatible uses and development types to suit market requirements without the traditional, cumbersome planning review and approval processes. Meier calls it "a lighter touch."

The ownership structure also is critical to Argent's success by providing "patient capital" to enable adherence to the overall strategy while progressing rapidly to deliver products. London and Continental Railways (LCR), parent of the Eurostar high-speed rail service which anchors the site, originally owned two-thirds of the land, and DHL, the international shipping arm of the German Postal Service, owned one-third. The owners agreed to form the KCCLP partnership in which they hold 50% according to their original two-thirds / one-third land shares, and Argent and Hermes (which manages funds on behalf of the British Telecom Pension Scheme) own 50%. The partnership's combined commitment is £300M ($483M). About £155M of this capital base effectively was recycled to deliver the required site infrastructure.

King's Cross represents a breakthrough in urban renaissance projects by establishing a clear framework for strong, long-term governance from the outset. The development team can layer on numerous specific elements within this framework, such as supporting emerging retailers and restaurants. When market or political pressures threaten the agreed vision, stakeholders revert to the outline plan. Combined with the partnership's strong financial base, this governance model preempts the default to a production and trading model which so often compromises creative development projects.

SIDEBAR

Urban Renaissance at Union Station, Denver, Colorado

Union Station is the new hub for Denver's mass transit system and home to a major "urban renaissance" development program that ultimately will create 1.8M square feet of new offices, 350K square feet of retail, 2,000 residential units, and 500 hotel rooms on over 25 acres. Under overall management by master developers East-West Partners and Continuum Partners, Union Station is the new heart of downtown Denver and one of the largest public-private partnerships in the US.

Eight transit modes converge in Union Station, generating over 200,000 trips per day: long-distance Amtrak trains, airport train connections, light rail, commuter rail, downtown shuttle/circulator, express busses, and busses serving downtown Denver, suburban communities, and the Boulder corridor. The site is proximate to cultural landmarks; major sporting events at Coors Field (Colorado Rockies), Pepsi Center (Colorado Avalanche and Denver Nuggets) and Mile High Stadium (Denver Broncos); and to more than 300 bars and restaurants.

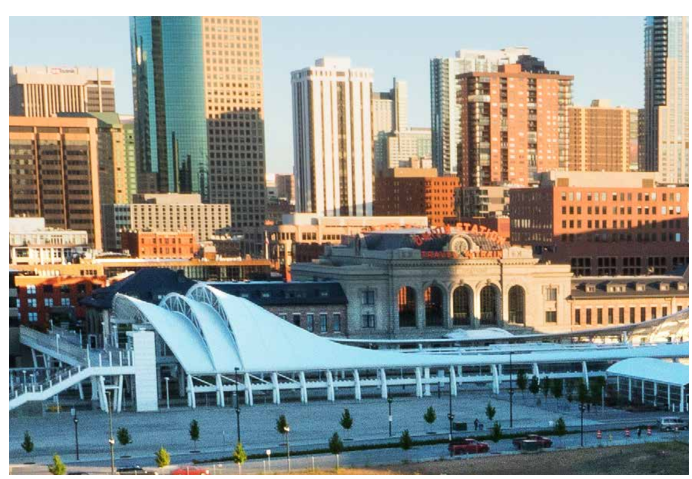
Building on the economic mix of transit, residential, employment, and visitor uses, a significant part of the Union Station redevelopment program is the restoration of the historic Station complex as an entertainment, shopping, and hospitality destination. The building has been renovated over the last four years at a cost of over $50M, creating 20K square feet of new retail space, a shopping district, and over 130 additional hotel rooms.

Union Station also includes three unique public spaces: the fountain plaza in front of the Terminal Building, Wewatta Plaza connecting the Station to the Pepsi Center, and the 17th Street Pedestrian corridor connecting the Light Rail station to the main platform on top of a bus terminal three city blocks long.

East-West and Continuum, with support from Starwood Capital, crafted a private development plan for some 20 acres of former rail yard land around the Station. The partners negotiated a 5-parcel purchase agreement with the Denver Regional Transportation District (RTD) for a total investment of $27M, enabling RTD to provide pubic improvements, including plazas, gardens, and some of the Station building's restoration costs. RTD completed the transit components of the project using more than $500M in federal and local funds. Private investment on 20 acres of office and apartment projects in the Union Station neighborhood is expected to exceed $1B.

Union Station is the final piece that connects the ULI Award-winning Riverfront Park residential neighborhood to Denver's historic downtown. Riverfront Park is an "urban renaissance" master planned neighborhood of some 2,000 lofts, townhomes, condominiums, and apartments, and a 35K square foot retail hub, located along Commons Park which was completed by the City of Denver in the early 2000s. With total investment exceeding $1B by East-West, Crescent Real Estate Equities, and others who have been active since 1999, Riverfront Park is now 95% developed with two parcels totaling approximately 3 acres remaining for future projects.

Union Station exemplifies the critical importance of continuity in public-private partnerships. Despite the extraordinary pressures of the recent Recession, the project's basic financial structure and commitments to execute the far-reaching, innovative development were maintained.



CASELET — New Community at Columbia, Maryland

PROJECT NAME: Columbia

CITY / METRO AREA: Columbia, Maryland

PRIVATE ORGANIZATIONS:

- **Developer:** The Rouse Company (1963-2004); General Growth Properties (2004-10); Howard Hughes Corporation (HHC) (2010-)
- **Manager:** Howard Hughes Corporation

PROJECT OVERVIEW:

Columbia was envisioned by developer James W. Rouse as a mixed use, mixed-income, privately financed and developed "complete city," which "respected the land, provided for growth of people and made a profit." Columbia exemplifies innovations in planning, design, development, finance, and governance. 9 villages and 26 neighborhoods cluster residents with related activities and services (schools, recreation, health clinics, amenities), interspersed with small-scale retail. Columbia is largely built-out, with approximately 100,000 people, 40,000 households, and median household income of $100,000+.

The Town Center, developed originally as a regional mall, is undergoing "rebirth" as a "Downtown District"; its updated master plan approved in 2010 allows 5,500 new residential units, 4.3M square feet of new commercial office space, 1.25M square feet of new retail space, 640 hotel rooms.

Howard County, the local government, has evolved from rural "no growth" to suburban "smart growth" constituencies and policies, becoming a proactive partner in Columbia's affairs. The Columbia Association, a hybrid homeowners' association and unofficial government, provides a wide range of facilities and services with a two-tier Board and professional staff. To help retain property values over time, Columbia enforces architectural guidelines and controls.

PROJECT SCHEDULE / STRUCTURE:

- **Initial Stage:** 1963, The Rouse Company acquired 14,000 acres for development; 1965, Howard County approved development plan; 1967, first residents moved in.
- **End State:** 1980s, Columbia largely built out outside of Downtown. 2030-40, expected completion of Downtown's 30-year master plan.
- **Expansion:** Ongoing retail, commercial, residential, business expansion; outside Downtown, future will be focused on redevelopment.

PROJECT METRICS (2014):

- **Acres:** 16,450 (6,646 Hectares)
- **Population:** 99,615
- **Dwelling Units:** 40,135
- **Population / Acre:** 6.1
- **Dwelling Units / Acre:** 2.4
- **Dwelling Units / Hectare:** 6.0
- **Office Gross Square Feet:** 14.4 million
- **Retail Gross Square Feet:** 4.6 million
- **Hospitality / # Rooms:** 1,421

PROJECT INNOVATIONS:

Columbia's innovations are based in organizational roles, community functions and development process.

Organizational Roles:

- **The Rouse Company (1963):** acquired original site (14,200 acres) from 140 owners; developed comprehensive, village-centered plan; installed site-wide infrastructure; sold pre-serviced lots to homebuilders; owned Mall, other income-producing properties.
- **Howard County (1963, 2014):** local authority for zoning, schools, economic development, transportation, roads, sanitation, police, fire; approved original master plan 1963; acquired failing Village Center 2014 to ensure its future, lead its redevelopment.
- **Columbia Association (1966, 1982):** 501C6; novel hybrid homeowners association / unofficial "government;" annual budget, $65M; 260 full-time employees; enforces design covenants; provides / operates extensive range of community facilities and services. Original Board: 1 Rouse director replaced every 11,000 new residents; full resident control achieved by 1982. Current Board: one representative for each Village; Village Boards elected by residents; no business representatives.
- **Downtown Arts and Cultural Commission (2009):** established by HHC; oversees artistic / cultural activities; operations / programs to be funded by HHC's donation of Merriwether Post Pavilion.
- **Howard Hughes Development (2010):** main property owner in Downtown Columbia, responsible for community programs and amenities; manages planning and development outside Downtown through zoning petitions and 40 covenants for non-residential areas.
- **Downtown Partnership (2012):** 501C4; established by County; scope covers marketing, transportation, maintenance, beautification, security, cultural programming.

CASELET — **New Community at Columbia, Maryland** (continued)

- **Housing Fund (2012):** enables "full-spectrum", "open," "affordable" housing Downtown via purchase, construction, rehab, preservation, financing, renter / owner assistance; HHC contributes $3M; developers one-time payments $2,000-9,000 per unit; commercial owners $.05 psf / year. Housing Foundation established (2009-12) to manage funds.

Community Functions:

- **Housing Unit Type / Mix:** Single family (41%), Townhouse (26%), Apartments (33%) (2010); Housing Unit Sales Prices: Single family ($188.5K-1.1M); Townhouse ($110K- 535K); Condo ($58K-595K). Apartment Monthly Rentals ($1,000-2,700). (2014)
- **Employment Base:** Secured major GE distribution facility; now 19 industry sectors onsite, including retail, office, education, health care, information technology, finance, hospitality, manufacturing, construction, residential and commercial real estate.
- **Employment Opportunities:** 5,500 business / government employers; 63,000 onsite jobs.
- **Health / Wellness:** early-adopter health management organization (Columbia Medical Plan) established by Johns Hopkins, underwritten by Connecticut General; opened 59-bed facility in 1973 for Plan members; now a 233 bed general hospital
- **Education:** 27 elementary, middle and high schools; 119-acre community college.
- **Open space:** 3,600 acres open space; 94 miles walking, jogging, biking paths; 3 lakes, 41 ponds.
- **Recreation:** 23 neighborhood pools, 53 tennis courts, 2 18-hole golf courses, 20 squash/racquetball courts, ice rink, 167 tot lots, multiple private athletic clubs.
- **Culture:** Community orchestra, ballet, arts / cultural groups; Columbia Festival formed 27 years ago by citizen-led group.
- **Neighborhood Services:** child-care facilities, community centers, pathways / parks, elementary schools, swimming pools, tot lots.
- **Religion:** interfaith centers established 1969, used by all denominations
- **Community Philanthropy:** Columbia Foundation founded 1969 by Rouse for Howard County civic / charitable groups; now an independent 501C3 Community Foundation.

Development Process:

- **Economic Model (CEM) (1964)**: forerunner of universal project tools; imposed economic discipline on intuitive physical planning; integrated costs, pace, cash flows, financing, marketing; required quarterly reviews, continuous updating; accepted by funders.
- **Work Group (1965):** pioneered interdisciplinary, "reality-based" planning, with leading academics / practitioners / innovators in heath, education, housing, child development, elderly care, family life; addressed then-novel tradeoff issues – eg, economic / cultural, / racial mix; individual participation / community life; adult education / technology.
- **"Creative Tension" (1965):** management style of fluid, frequent feedback among executives / experts under CEM's cost discipline with feedback / pushback of unconventional norms.
- **Neighborhood Structure (1965):** planned variety of housing types for range of income levels; later County requirement for % of "moderately priced DUs" in each new project.
- **Employment Structure (1966):** planned 1:1 ratio of jobs to housing units, on- and off-site.
- **Symphony Woods Redevelopment (2012):** residents formed independent not-for-profit "trust" to plan / develop 36-acre "cultural park" on land owned by CA around Post Pavilion.
- **Village Center Restructuring (2013):** VCs are original nucleus for each Village, anchored by grocery stores; now impaired by small size, offsite competition; re-visioning underway to improve commercial performance; County acquired majority stake in Village Center after defining "urban renewal zone," plans to lead redevelopment effort.
- **Headquarters Office Adaptive Re-Use (2014):** redevelopment of Gehry-designed former Rouse headquarters as multi-tenanted building with Whole Foods Market; wellness center / spa; HHC regional offices; small community center.
- **Sustainability (2014):** "Sustainability Framework" plan inserted into design guidelines (livability, water, transportation, energy, ecology, materials); functional landscapes for stormwater management; open space for placemaking in Downtown redevelopment; implementation by Downtown Partnership.

MAIN CONTACT:

John E. DeWolf, III, Senior Vice President, Development

Howard Hughes Corporation

www.howardhughes.com

CASELET — RCI at Fort Belvoir, Virginia

PROJECT NAME: Fort Belvoir, VA Military Housing (Residential Communities Initiative)

CITY / METRO AREA: Washington, DC

PUBLIC AGENCIES:

- **Primary:** U.S. Department of the Army (DA).
- **Other:** Army and Air Force Exchange Service (AAFES).

PRIVATE ORGANIZATIONS:

- **Developer:** Clark Realty Capital LLC.
- **Owner:** Fort Belvoir Residential Communities LLC (FBRC); partnership of DA, Clark.
- **General Contractor:** Clark Builders Group LLC.
- **Asset Manager:** Clark Realty Capital LLC.
- **Property Manager:** Michaels Management Services (consultant to Clark).

PROJECT PURPOSE:

To enhance and restructure the existing housing areas on Fort Belvoir, VA, into functional, livable communities, including new community facilities, additional infrastructure, and a supporting neighborhood retail center. Fort Belvoir Residential Communities LLC (FBRC) will demolish and construct 1,192 housing units, perform major renovations to 524 homes, and renovate 170 existing historic housing units during the Initial Development Period (IDP); and provide ongoing maintenance and management. FBRC will also demolish and build 268 housing units that were not replaced or renovated during the IDP. FBRC will create and implement an Out-Year Development Plan for ongoing revitalization through construction of additional amenities and systematic renovation and replacement of existing structures through the 50-year lease period. This project is part of the DA Residential Communities Initiative (RCI) program to eliminate inadequate military housing at installations across the United States by creating quality residential communities for 98% of the Army's family housing inventory; and leveraging public real estate assets and funding with private sector expertise, creativity, innovation and capital.

PROJECT OVERVIEW / STRUCTURE:

- **Contract:** Construction performed by Clark with guaranteed maximum price (GMP) construction contracts for each phase of the project. GMP may be adjusted from pro forma per Means Construction Cost Data Report or other criteria in the Construction Agreement following Closing.
- **End State (IDP):** Ending inventory of 2,154 units (approximately equal to existing units) for IDP determined by Fort Belvoir leadership after NEPA Analysis of land available for housing construction and projected environmental impacts.
- **Expansion:** Decision to proceed on additional home construction over 50-year project life based on environmental commitments, commercial feasibility, other factors; when additional housing need is identified, FBRC will work with Army / Fort Belvoir to conduct site-specific NEPA analysis.
- **Unit Size:** New houses average 1,900 square feet, 550 square feet larger than current government-built average on post.
- **Unit Cost:** New houses average $250,000 per unit / $130 per square foot; conventional government-built houses built to the same scope and standards cost $275,000 per unit / $145 per square foot.
- **Technology:** Existing houses will be provided with high-speed internet; new houses will be wired to an underground fiber backbone using latest standards of structured cabling, in conjunction with the IDP.

PROJECT SCHEDULE:

- **Launch:** 2003
- **IDP Completion:** 2011
- **Out-Year Completion:** 2053

PROJECT METRICS:

- **Site / Acres:** 576 (Hectares: 233)
- **Population:** 7,000
- **Dwelling Units:** 2,154
- **Population / Acre:** 12
- **Dwelling Units / Acre:** 4 (Dwelling Units / Hectare: 9)
- **Occupancy:** 96%
- **Retail Units / Square Feet:** 11 units, 14,000 Square Feet
- **Community Facilities / Square Feet:** 7 facilities, 35,000 SF
- **Open space / Acres:** 90

PROJECT FINANCIALS:

- **Goals:** Align interests of Army and FBRC, optimize project's capital structure, during IDP and Out-Years, minimize financial risks to project and partners.
- **Features:** Allowed project to raise $27 million more than traditional fixed interest rate debt structure through flexibility to refinance at low interest rates less than 18 months after closing.
- **Costs:** Infrastructure $80M; Development $385M; Total $465M.

CASELET — RCI at Fort Belvoir, Virginia (continued)

- **Sources / Uses of Funds:**

Sources		**Pro Forma**
Loan Proceeds		$434,000,000
Developer Equity		6,000,000
Government Equity		-
Net Operating Income		239,000,000
Interest Income		29,000,000
	Total	708,000,000
Uses		
Development Budget		465,000,000
Debt Service		218,000,000
Reimbursables & Incentive Fees		15,000,000
Debt Service Reserve Fund		10,000,000
	Total	708,000,000

PUBLIC BENEFITS:

- **Community:** New amenity structures with formal common areas and greens within a 10-minute walk of most houses, encouraging families to gather and socialize in their neighborhoods.
- **Place:** New houses and amenity buildings have diverse, distinctive architectural styles yet retain the character of the Virginia region.
- **Connection:** Each home is connected to the larger framework of the Fort Belvoir community, linked to a hierarchy of residential communities — villages, blocks, homes.
- **Education:** Review / monitor existing learning activities as part of FBRC's ongoing community activities; fill gaps identified by community forums.
- **Health and Wellness:** Recreational amenities across residential areas will provide convenient opportunities to fit exercise into busy schedules.
- **Cost Savings:** Lifecycle savings (construction plus operations and maintenance) are projected to reduce 10% of long-term costs.

PROJECT INNOVATIONS:

Development / Management:

- **Public-Private Partnership (P3):** first mixed use residential / retail military community in RCI housing privatization program.
- **Financing:** P3 structure enables Army to monetize real estate value, raise private financing for development and operations.
- **Portfolio planning:** 50-year horizon and shared information / lessons learned among competitors' projects enables DA / private partners to collectively benefit.
- **Organization:** new management relationship between public (military) and private developer; partners resolve challenges (economic issues, policies, procedures, resident concerns) in contrast to adversarial contractual relationship.

Residential:

- **Energy management:** electricity, natural gas, water/ sanitary sewer were not originally submetered; P3 implemented "Resident Responsibility Program" to incentivize utility conservation by providing refunds for below-average use and surcharges for above-average.
- **"Lifecycle" Economic model:** lifecycle cost analysis used to select major building components during construction, continued for long term capital improvement plans.
- **"New Urbanism" design:** compact development encourages walkable neighborhoods and social connections; playgrounds within a 5-minute walk of every home; hierarchy of neighborhoods defined through grids of streets, walking paths, bike trails.
- **"Green building":** first LEED Platinum building on military installation; all new homes Energy Star certified.
- **Accessibility:** first prototype homes designed for Wounded Warriors and other family members with accessibility needs set a new standard for universal military housing design.

Retail "Town Center":

- **Partnership:** Unique partnership between AAFES, which controls Army and Air Force base retail offerings, and Clark, as master developer.
- **Cross-organization Cooperation:** Cooperative design / development by AAFES and Clark across organizational "silos".
- **Financial structure:** AAFES leases retail spaces from public/private partnership, then subleases to tenants; AAFES cash flow pays Clark for retail development cost. Clark operates apartments, receives soldiers' housing allowance. Project requires no equity or costs for Army; lowers construction expenses by 30 percent.
- **Integration:** compact development / integration of neighborhood retail encourages walking over driving.
- **Outcome:** Successful retail strip; FBRC exploring new, broader-based town center; other military installations use this as model for town centers.

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APPROACH

Purpose. The overall aim of this guide is to inform public policy and industry practice in the US and UK by defining "planned new communities" (NC), providing fresh insights into NCs, and adding practical wisdom, case experience and survey data to the existing NC knowledge base.

Audience. The guide is intended for decision-makers in urban planning, development and management, and their advisors. It is a primer for anyone who has had little or no direct experience with NCs and an update for those who are professionally engaged in the subject. Our communications standard is clear, readable, jargon-free prose, informed by relevant, compelling facts. Scholars and specialists who wish to probe further are invited to review the survey data and analysis in the Appendix.

Organization. The scope and complexity of this initiative entailed a team organization, incorporating members and staff from professional organizations, technical contractors, and university graduate students. The Royal Institution of Chartered Surveyors (RICS) and the Urban Land Institute (ULI), with their large memberships and international scope, were invited to support the project. A Working Group of some 15 senior staff leaders and members from both organizations was established to help develop and conduct the survey. Rockbridge Associates was retained to administer the survey and provide technical support. An Advisory Group of RICS leaders and former ULI Chairs was formed to review the draft guide. A Research Team from the University of Michigan Taubman College of Architecture and Urban Planning assisted the author in evaluating the survey methodology and results.

Process. To achieve the purpose and reach the intended audience, the approach was designed to be pragmatic, practitioner-based, and issue-driven, combining standard research and consulting techniques with the author's direct personal knowledge. A three-pronged program was launched in 2013: review relevant literature, survey qualified practitioners, and interview selected leaders. The literature review covered more than 100 publications and indexes over a 12-month period.

The author and ULI staff collected facts on more than 50 NCs, using a customized worksheet. Three Workshops of RICS and ULI representatives met to brainstorm issues; convert them to questions (both normative and descriptive); test the questions through multiple iterations, specifically to simplify the vocabulary and tighten the survey structure; and define the survey sample size and scope. During this process, members of the Counselors of Real Estate and the National Town Builders Association were also invited to participate. In parallel, an interview guide and candidate list of some 50 NC executives and thought-leaders in both countries were developed; over 20 of them have been interviewed thus far.

The proposal for a separate UK version arose after the author reviewed the completed, pre-tested US version with RICS and ULI members in the UK. Their consensus was to adapt the US version, not only for obvious semantic and spelling differences but also for different conditions between the two countries (eg, acreage, population, density) and policies (eg, in the UK, "social" housing and "greenbelt" protections). In producing the UK version, changes to the US base document were minimized in order to control cost, reduce time, and improve comparability.

The final survey has two main components: metrics to categorize and size NCs; and statements drawn from the author's initial premises, the Workshop discussions, and exploratory interviews about NC "attributes" and "characterizations". Together, these define NCs as the survey respondents see them. Approximately 730 recipients completed and submitted surveys.

The survey analyses by Rockbridge and UM are summarized in the guide and included in the Appendix. They are presented as a work-in-progress for professionals and scholars to analyze at will, with the author's encouragement to contribute additional case examples, data and insights.

PARTICIPATING ORGANIZATIONS

SPONSORS

Colliers International

Colliers International is a global leader in commercial real estate services, with over 15,800 professionals operating out of more than 485 offices in 63 countries. A subsidiary of FirstService Corporation, Colliers International delivers a full range of services to real estate users, owners and investors worldwide, including global corporate solutions, brokerage, property and asset management, hotel investment sales and consulting, valuation, consulting and appraisal services, mortgage banking and research.

The Howard Hughes Corporation

The Howard Hughes Corporation (HHC) owns, manages and develops commercial, residential and mixed-use real estate throughout the US. Their properties include master planned communities, operating properties, development and expansion opportunities, and other assets in 16 states, including the new communities of Columbia, Maryland, Summerlin, Nevada, and The Woodlands, Texas; and the urban renaissance project at South Street Seaport, New York. HHC Is publicly traded on the NY Stock Exchange.

SUPPORTERS

Royal Institution of Chartered Surveyors

The Royal Institution of Chartered Surveyors (RICS), established in 1868, is an independent professional organization that promotes qualifications and standards in the development and management of land, real estate, construction and infrastructure. It accredits 118,000 professionals in 146 countries; registered individuals and firms are subject to quality assurance. RICS works to deliver a single, international standard in property matters that will support a safe and vibrant marketplace for the benefit of all.

Urban Land Institute

The Urban Land Institute (ULI) provides leadership in the responsible use of land and in creating and sustaining thriving communities worldwide. Established in 1936, ULI has more than 32,000 members, representing the entire spectrum of land use and development disciplines. The Institute relies heavily on the experience of its members to set standards of excellence, and has long been recognized as one of the world's most respected sources of objective information on urban planning, growth, and development.

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This guide took many minds and much legwork. To simplify a complex web of contributors, I first list those who are affiliated with the Sponsor and Supporter organizations, followed by other individual contributors and their affiliations. If I have unintentionally omitted anyone, I sincerely apologize.

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Author

Mahlon (Sandy) Apgar, IV, advises senior executives and boards of companies, institutions, and governments on development strategy and operations, with a focus on public-private partnerships. In consulting, public service, teaching and research, he positions planned communities, infrastructure and real estate as strategic assets, combining public policy with innovative business practices and analytics.

Sandy began his career with the visionary developer, James W. Rouse. As a partner of McKinsey & Company, the Boston Consulting Group (BCG), and Apgar & Company, he has served over 150 clients on some 500 projects in 13 countries, including planning and advisory roles in community developments at Irvine and Playa Vista, California; Columbia, Maryland; Brandermill, Virginia; and Disney World, Florida. He also led consulting teams in the UK's Urban Guidelines program, the French *Villes Nouvelles* program, Japan's business new communities program, and Saudi Aramco's headquarters community expansion. Building on case experience and an original methodology, Sandy received a US patent for a portfolio evaluation system known as the "Apgar Real Estate Score."

President Clinton appointed Sandy as Assistant Secretary of the Army for Installations and Environment, with responsibility for the Army's global real estate portfolio, environmental remediation, and base closure/realignment process. In that role, he led the design and launch of the Residential Communities Initiative (RCI) — the military housing privatization program which received a ULI Award for Excellence.

Sandy is a member of the US State Department's Advisory Committee on International Economic Policy, Vice Chair of the Urban Land Institute's Public Development and Infrastructure Council, a ULI Foundation Governor, a Fellow of the Royal Institution of Chartered Surveyors, and a Counselor of Real Estate. He has authored over 100 publications, including a real estate set in the Harvard Business Review. His writings, including the award-winning "New Business From New Towns" and "New Perspectives on Community Development," have guided numerous policymakers, planners and executives. He cofounded the International New Towns Association. He received a BA from Dartmouth College and an MBA from the Harvard Business School, and researched the British New Towns at Oxford University.

Sandy and his wife, Anne, live in Baltimore's historic Federal Hill neighborhood.