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Changescapes: Walmart Supercenters as Catalysts for Territorial Change

Abstract

This design research examines the cycle of growth and decline associated with Walmart Supercenters as a way to reconsider the transformation of suburban territories. The project utilizes case-study sites in San Antonio, Texas to establish three distinct Walmart Supercenter typologies: urban, suburban, and exurban. The central thesis asserts that many of the negative externalities that emerge from commercial big box developments result from the difference between the financial lifecycles of the building structures and the surrounding urban landscape. The project seeks to re-align these life-cycles: first, by examining the increments of change related to the various components of the big box development; and second, by re-proposing a framework within which the requisite change can be more productively managed.

Keywords: Suburban Sprawl, Big Box, Walmart, Shopping, Urban Design, Urban Change, ShoppingScapes, ChangeScapes, San Antonio, Landscape Design

1 Embracing Change

Whether they are growing or shrinking, change is the only constant in cities today.

Dana Cuff and Roger Sherman (2011, p. 30)

The retreat from urban form making in the United States may now be complete. Where architects once designed boulevards, traffic consultants now engineer arterial solutions; where urban designers envisioned grand housing projects, developers now roll out residential cul-de-sacs. In retrospect, the birth of urban design as a discipline in the mid-twentieth century appears to have been a professional mirage. The delusion, of course, was that designers would be central players in the construction of U.S. cities. Time has dispelled such heroic aspirations. Today, urban designers stand discredited by the grand miscalculations of urban renewal, weakened by a historic recession and immobilized by a fragmented political structure that renders regional planning virtually impossible.

This paper asserts that the best way for urban designers to re-engage the construction of urban space is by shifting their attention away from the production of urban form, and toward the design of critical urban processes. The design research, therefore, begins by considering what is perhaps the most fundamental of all urban processes: change.

The life of any city, of course, is marked by continuous physical transformation. This process is one that designers can resist, control, or embrace. Given the enormous consequence of change as an urban process, however, a designer's attitude towards change largely defines their place within the broader urban discourse.

As we know, neo-traditionalists resist change, contending that shifting morphologies are the enemy of healthy urban growth. History tells us that efforts to repel formal change will fail, doomed by the relentless pressure of shifting technologies and economies. Similarly, urban planners seek to constrict change, advocating urban growth boundaries as an anecdote to a phenomenon that they avoid at all costs: geographic expansion. Growth boundaries are highly compelling in concept, but virtually impossible to execute in the U.S. given the fragmented municipal political structure and lack of regional planning authority. In short, few regions have a political mechanism to implement and enforce such restrictions.

Architects, conversely, are apt to embrace change: fully aware that from change comes growth, and from growth, commissions. Unfortunately, such acceptance often lacks critical insight; disregarding the negative externalities that transformations can have on existing urban fabric. Too often, this results in a cynical embrace of

processes that are dismissed as too unknowable to comprehend, too complex to control.

This paper recommends a third way, one that neither resists nor embraces change, but rather engages it. This paper proposes that as urban designers, we strategically design change as a mechanism for managing urban growth in the North American landscape. The work sets out four goals to this end: First, to examine existing theoretical frameworks that address the relationship between urban form and change; second, to consider existing formal systems that deal with issues of urban change; third, to consider the critical increments of change in various urban scenarios; and fourth, to propose a new framework that proactively manages the urban change associated with Walmart Supercenters.

2 Catalyzing Change

The design research utilizes the growth of big boxes and specifically Walmart Superstores as a case-study to study change in the post-sprawl metropolis. Since the first Walmart Supercenter opened its doors in 1988, the big box typology has emerged as the primary form of commercial development in North America ("History Timeline," 2013). In the U.S. today, the ten largest retailers are all big box developers ("2011 Top 100 Retailers," 2012). Wal-mart Inc. alone has 3,029 Supercenters sites in the U.S. ("Our Stores," 2012).

The Wal-mart model is the ubiquitous form of retail in the U.S.--truly the gold standard for retail. In 2010, U.S. consumers purchased more than 7% of their retail goods at a Walmart or a Sam's Club store (Perry, 2011). In 2011 Wal-mart's domestic sales exceeded 2% of the gross domestic product ("Wal-mart Stores, Inc. Data Sheet," 2011).

Of course, the influence of the mega-retailer is not limited to North America: In 2011, Wal-Mart Stores, Inc. boasted 10,130 locations in 27 countries and annual revenues of 400 billion dollars ("Wal-mart Stores, Inc. Data Sheet," 2011). If Wal-mart were a country, it would have the world's 26th largest economy, right behind Austria (LeCavalier, 2010).

Wal-mart's extraordinary economic expansion is leading to previously unseen geographic expansion, fundamentally altering the physical form and scale of the suburban landscape in the U.S. Indeed, its physical presence is difficult to overstate. Today, 60 percent of U.S. residents live within 5 miles of a Wal-Mart location, while 96 percent live within 20 miles (Zook and Graham, 2006, p.20). In fact, with 4,468

domestic stores and counting, today Wal-mart Stores, Inc. may be the most important generator of urban form in the U.S. Sound crazy? Consider that the total floor area of Wal-mart retail locations in the U.S. is now larger than the footprint of Manhattan (LeCavalier, 2010).

3 Theorizing Change

The theoretical framework necessary to understand the relationship between urban form and change exists most clearly in the work of urban morphologists such as M.R.G. Conzen and James Vance (Lukez, 2007, p.16).

In 1960 Conzen, examining English towns, recognized that urban expansion into perimeter areas did not develop continuously; but rather endured periods of acceleration, deceleration, and stoppage in response to economic and political shifts. During slow growth periods, development often leapfrogged the established perimeter; finding sites beyond the urban fringe (Whitehand, 1987, pp.77-78). Conzen's work is pioneering in its recognition of the cyclical, non-linear nature of urban expansion. His work is critical in our effort to understand and intervene in the dynamic processes that formulate Wal-mart urbanism.

Thirty years later, James Vance built on Conzen's work by considering the concept of urban morphogenesis, a term that describes the processes that facilitate change and adaptation in cities. One of his most important observations involves the primacy of land speculation, a process that began well before the seventeenth century and has driven the transformation of cities since. According to Vance, a necessary precondition of land speculation is the establishment of a predictable process for patterning and transforming urban land (1990, p.35). One of the clearest examples of this phenomenon involves the 1785 Rectangular Survey of the United States, a case that we will examine in greater detail in the next section.

Conzen and Vance address issues of urban transformation in different but related ways: Conzen emphasizes the importance of lot structure as a determinant of development patterns, while Vance emphasizes the importance of predictability as a necessary condition for land speculation and ultimately urban change. Both ideas are integral to the formulation of this design research proposal.

More recently, architect Paul Lukez deals with the matter of urban change in yet another way: by emphasizing the disparity of lifecycles associated with specific urban systems (2007, pp.35-36). Lukez points out that while site infrastructures enjoy lifespans of 120 years or more; the shell life of a building is closer to 60 years.

Likewise, while the structure of buildings last for approximately 45 years; building appliances typically last for just 15 years. He goes on to discuss the accelerating development cycle in the commercial and retail sectors; a trend that pressures developers to bypass opportunities in inner suburbs while maximizing growth in exurban areas (2007, p.37).

Lukez's observations are powerful to the extent that they bring to light one of the central challenges facing capitalist cities: namely, the differential lifecycles that exist between buildings, infrastructure, and financial systems. The ChangeScapes project takes the position that this discrepancy is largely responsible for the negative externalities associated with Walmart Supercenters in the U.S. These externalities come in many forms: empty or underutilized big boxes, redundant parking and storm-water infrastructure, and excessive street infrastructure. The discrepancies in lifecycle, however, also provide an enormous design and planning opportunity: namely, to re-align the formal planning of American suburbs so that it better accommodates the market logic of retail big box developments in general, and Walmart Supercenters in particular.

Galina Tachieva, a partner with the New Urbanist firm Duany Plater-Zyberk & Company, seeks to regulate urban change in yet another way: by controlling form. In the Sprawl Repair Manual, Tachieva proposes to fix fragmented suburban developments by incrementally repairing defective morphologies (2010, p.1). Tachieva proposes the insertion of missing elements—specifically buildings, public spaces and connective networks—into existing suburban fabric in an attempt to densify, diversify and ultimately complete these communities (2010, p.1).

Tachieva's work is most compelling in its strategic embrace of incrementalism. For example, she imagines the sequential change that would be required to repair a strip-shopping center: first, wrapping the big boxes with small-scale retail strips; second, replacing the big boxes with urban blocks, and third, supplanting the drive-thru restaurants with urban blocks (2010, p.126).

The proposals are less convincing, perhaps, in their outright rejection of contemporary building typologies. The big box, after all, is a building that succeeds on many levels: satisfying the economic demands of consumers, the technological demands of the automobile drivers, and the financial demands of Wal-mart Stores, Inc. Tachieva never explains the political or economic circumstances that would cause the prevalence of big boxes to decline, instead suggesting that we simply de-emphasize or remove the buildings from the urban landscape. The work also downplays the cyclical nature of economic and physical change: focusing on incremental growth while ignoring incremental decline.

This design research takes the position that a realistic theory for managing change in the suburban landscape will necessarily confront the big box on its own terms: as a building typology and as an inherently volatile model of capitalist investment.

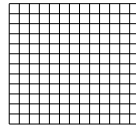
Architect Roger Sherman, co-founder of the Los Angeles think tank cityLab, is more clear in his embrace of capitalism within the context of U.S. cities. Unlike Tachieva, he accepts the reality that architecture is a commodity that draws value from the process of land speculation. As such, Sherman recommends that architects begin to approach projects like entrepreneurs, imagining that design can create a supply which in turn creates demand by activating latent audiences (2009, p. 205).

According to Sherman, such change-based strategies do not imply increased regulation. Instead, they acknowledge that contemporary cities are developing at a pace that outstrips the ability of policy-makers to manage growth at the macro-scale (2009, p.180). Rather than lament this shift, Sherman re-frames it as an opportunity. He finds inspiration in the principles of game theory, for example, while trying to understand the motivations of individual actors in complex systems. Surveying the complex contemporary city, Sherman recommends a loose organizational structure to maximize options for future urban actors. For Sherman, the city operates best when it straddles the line between control and disorder (2009, p. 205).

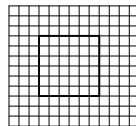
In this regard, Sherman and his cityLab collaborator Dana Cuff draw heavily on the theoretical framework of landscape urbanism. In the past fifteen years, the landscape discourse has thoroughly discredited the form-driven, static conception of the city that was historically held by many architects and planners. In its place, landscape urbanists such as James Corner, Charles Waldheim, and Alan Berger offer a systems-based approach that recommends strategic interventions into the ecological, formal and programmatic development of the city. In doing so, landscape urbanism has challenged architects and planners alike to take a more critical position with regard to the temporal nature of urban form.

Taken together, the work of Conzen, Vance, Luke, Tachieva, Sherman, Cuff, Corner, Waldheim and Berger provides the conceptual foundation necessary to understand the relationship between form and change in the city. Despite the theoretical diversity of these models, each exerts a desire to engage urbanism as a dynamic, change-driven phenomenon. The next section examines two historical attempts to formalize such aspirations.

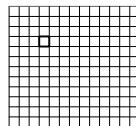
4 Formalizing Change



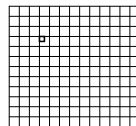
Grid = 1 Square Mile



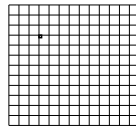
Township = 6 Square Miles



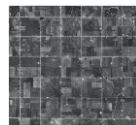
Lot = 1 Square Mile = 640 Acres



Half Lot = 1/2 Square Miles = 160 Acres



Quarter Lot = 1/4 Square Miles = 40 Acres



Rectangular Survey from Aerial View

FIG. 1: The Rectangular Survey of the United States

It is difficult to talk about change in the capitalist city without first addressing the issue of land speculation. For it is land speculation, above all else, that has historically driven urban development in the United States. Not surprisingly, two of the most ambitious attempts to control the process of land development resulted from the attempts of policy-makers to control negative externalities associated with real estate exchange: The 1785 Rectangular Survey of the United States (*Fig. 1*) and The Commissioner's Plan of 1811 for Manhattan Island. In both cases, planners successfully utilized geometry in an attempt to tame the landscape of capitalist exchange. The Land Ordinance of 1785 represents an early attempt to rationalize the physical structure of the land speculation process. In 1785 the Continental Congress decided to sell its land holdings northwest of the Ohio in an attempt to retire its massive debt from the Revolutionary War. Up to that point, land in and around New England was being bundled and sold in six-mile-square townships. Within these increments, however, no attempt was made to rationalize or standardize development practices. Instead, decisions were made solely in response to local topographic conditions. The concept of a one-mile square standard family farm, conceived of on purely economic terms with no regard given to natural characteristics, did not yet exist (Ballon, 2012, p.52).

This all changed when Congress instructed geographer Thomas Hutchins to travel to the nexus of the Pennsylvania border and the Ohio River. His instructions were to strike a westward line along which to project a range of townships. Once established, each township would be divided into thirty-six lots (Ballon, 2012, p.52). The lots would eventually be sub-divided into half-lots, and the half-lots into quarter lots. The quarter lot, of course, remains a familiar concept, as it comprises the standard unit of residential development in the U.S. today.

The positive impact of the Rectangular Survey on the regulation of real estate sales is difficult to overstate. The successful history of land speculation in the U.S. is due in no small part to the geometric regularity and predictability of land parcel sizes. In this regard the Land Ordinance of 1785 succeeded in rationalizing a market that might otherwise have been plagued by leftover lots and awkward adjacencies.

The Commissioner's Plan of 1811 for Manhattan Island provides another telling demonstration of the power that geometry holds to tame the uncertainties of a fickle real estate Market. Prior to 1811, landowners in New York City still described legal boundaries using the unique physical details of site such as fences, creeks, stones and roads (Ballon, 2012, p.87).

The introduction of the grid completely revolutionized the legal and conceptual understanding of land in Manhattan. Land was re-born as real estate; a commodity that could be bought, sold and re-packaged for economic gain. This transformation diminished the importance of locale while catalyzing speculation and development to the extent that, by the mid-nineteenth century, real estate assumed a position equal to finance and commerce as a principal source of

wealth on the island (Ballon, 2012, p.87).

It was the grid's unrelenting devotion to geometry that lent the concept its immense formal and conceptual power. The grid was ultimately successful because of its ability to satisfy the desire of real estate speculators for absolute predictability. The grid exhibited value beyond pure economics, however. Perhaps the greatest virtue of the grid involved its ability to generate private value while guaranteeing a well-proportioned and predictable venue for public life. These concepts--geometric regularity, absolute predictability, and the ability to balance public and private interests--were critical in their ability to formalize the process of land speculation in the late eighteenth and early nineteenth centuries.

This type of geometric clarity and economic predictability is needed again in 2013. Many of the negative externalities associated with uncoordinated commercial big box developments--underutilized and vacant structures, redundant parking, and ineffective storm-water management to name a few--can be attributed to a fundamental mismatch between the financial lifecycles of buildings and the surrounding urban landscape. One way to re-align these lifecycles is by increasing the regularity and predictability of the development process. As we have seen in the two previous examples, one way to accomplish this goal is by rationalizing the landscape of speculation and exchange.

5 Scenarios for Change

This design research aims to understand, predict and re-propose the morphological transformation associated with Walmart Supercenters outside of San Antonio, Texas. San Antonio is a city of 1.3 million, located in south-central Texas just 130 miles from the Mexican border. The city lies at the center of a larger Metropolitan Statistical Area called San Antonio-New Braunfels, home to 2.23 million residents. San Antonio also anchors the southern leg of a critical emerging mega-region in the U.S.: the Texas Triangle, which consists of San Antonio, Dallas and Houston ("Megaregions," 2013).

In the past several decades, San Antonio has emerged as one of the fastest growing cities in North America. Between the years 2000 and 2010, the city experienced a growth rate exceeding 25% (Kotkin and Cox, 2011). Interestingly, the type of growth that San Antonio experiences is decidedly suburban in nature: a recent study ranked the city as one of the most sprawling in the United States ("San Antonio among top cities for urban sprawl," 2005).

San Antonio currently has 14 Walmart retail locations. All are Supercenters and therefore share the following parameters: at least one 170,000-200,000 square feet big box building; development sizes ranging between 15 and 40 acres; multiple retail partners—i.e. “out” buildings—with footprints between 5,000 and 150,000 square feet; and parking ratios of at least 4.5 spaces per 1000 gross square feet of building area.

The Walmart Supercenter on South Colorado Street outside of Lockhart, Texas represents the most typical development pattern for the mega-retailer: the exurban greenfield (*Fig. 2*).

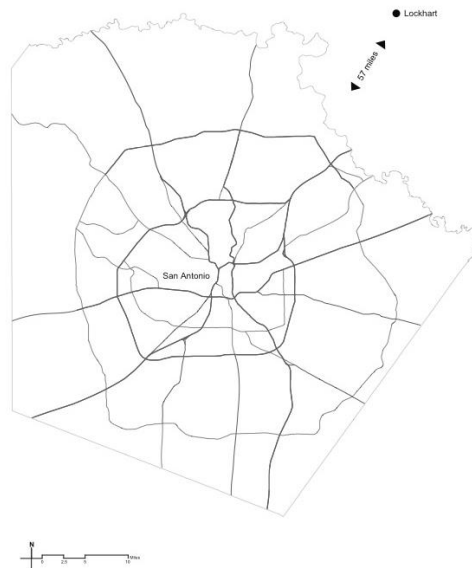


FIG. 2: Relationship of Walmart Supercenter case-study to San Antonio, Texas

Completed in 2012, the structure sits on a 22-acre lot 57 miles from the historical center of San Antonio. Lockhart is a town of 12,821 that lies just off of the I-35 Corridor, halfway between San Antonio and another Texas boomtown, Austin. Lockhart is located within the emerging Texas Triangle mega-region and therefore positioned for sustained growth.

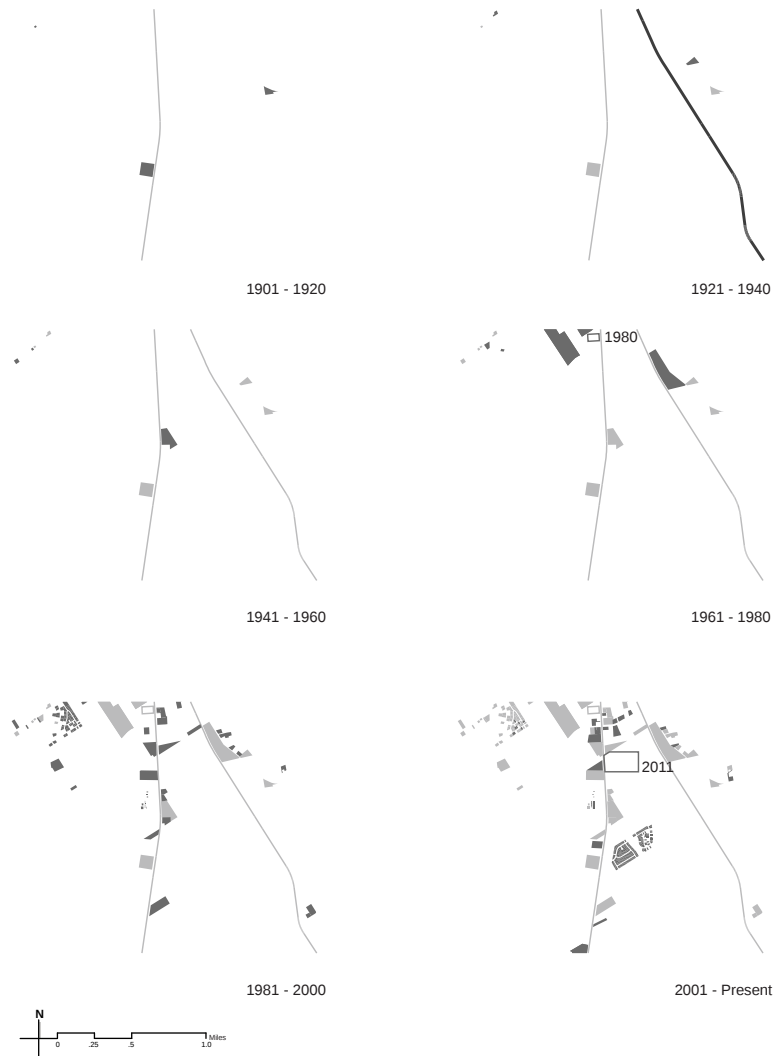


FIG. 3: Development sequence for exurban Walmart Supercenter development

The South Colorado has room to expand in all directions. The first commercial development began in the 1980s with the opening of a 50,000 square foot Walmart retail outlet (*Fig. 3*). This outlet did not spur adjacent development, however, and remained isolated on the perimeter of Lockhart. Wal-mart recently closed the store

and replaced it with a larger Supercenter, located less than a half-mile to the south on South Colorado Street.

This is exactly the type of speculative real estate development that leads to negative outcomes for so many suburban communities in the U.S. Abandoned big boxes negate significant investments in local parking, roads and storm sewer infrastructure. Once the retail activity disappears, these infrastructures can fall into disrepair and devolve into suburban blight. To make matters worse, much of the infrastructure associated with Walmart Supercenters is publicly financed by local or state governments in the form of financial support for infrastructure, land and employment (Mattera and Purinton, 2004).

Now that the new Walmart Supercenter is in place on South Colorado Street, however, history suggests that additional commercial and residential development will soon materialize. The potential for development on the west side of South Colorado Street is limited by the existence of a regional airport. Therefore, the east side of the site shows the greatest promise for growth. Currently, hundreds of acres sit vacant, waiting for a market to materialize. Any doubt regarding the future of this exurban site disappeared with the construction of an additional service road on the south side of the parking lot (*Fig. 4*). This road extends beyond the rear of the big box, pointing east in anticipation of the coming suburbs.



FIG. 4: Road infrastructure to accommodate future exurban development

Returning to the original Walmart on South Colorado street for a moment: recently, a local government entity occupied the empty Walmart big box, thereby preventing a prolonged vacancy. This is not always the case, however. Currently 880 Walmart locations are for sale or lease in the U.S. (“Walmart Realty, 2012). These underutilized and vacant sites are testament to the inability of our suburban environment to deal with the cycles of change demanded by the volatile big box market. The situation suggests a fundamental misalignment between the economic demands of big box urbanism and the physical infrastructure that supports it. Simply put, the life of the infrastructure stretches well beyond the life of the typical big box structure. The discrepancy between the lifecycle of these two entities generates enormous inefficiency in the suburban environment.

In an attempt to proactively manage this discrepancy, ChangeScapes proposes an alternative development sequence for South Colorado Street. The goal is to intervene in the expected course of events, leveraging the inevitable growth associated with Walmart Supercenters while initiating a more balanced and productive growth pattern.

6 Incrementalizing Change

Big box developments and their surrounds accommodate a wide array of activities throughout the year. Some of these activities are cyclical in nature and change quite frequently: a Saturday afternoon farmer’s market during the summer months, for instance. Other programs are less amenable to change: housing is a good example of a program that doesn’t transform easily. Each of these programs displays a unique increment of change (*Fig. 5*).

An increment is an increase in quantity or amount, either fixed or variable. The term “increment” is a useful way to denote change in the capitalist city because--geographically speaking--these environments only grow and never shrink. The change increments associated with the lifecycle of commercial big box stores are defined by three factors: time, scale, and sequence.

Increment	Scale	Time	Program
1	developmental	08 hours	farmer's market
		24 hours	concert
		01 week	art festival
		01 month	rodeo
		06 months	promenade
		01 year	seasonal shopping cycle
		05 years	avg. lifespan of big box business
2	residential	10 years	begin residential construction
		20 years	accelerated mortgage cycle
		30 years	typical mortgage cycle
3	territorial	60 years	urban growth
		90 years	urban consolidation

FIG. 5: Change Increments for Walmart big box development

The increments of time associated with the planning, construction, operation and eventual abandonment of a commercial big box have a significant impact on the physical development of suburban territories. As we have seen, the relatively short lifecycle of a big box creates problematic externalities including abandoned buildings, under-utilized sites and redundant infrastructure. Given this reality, is it possible to reconsider the big box as a short-term commodity, rather than as a long-term piece of site infrastructure?

Likewise, the scale of change demanded by big box developments is currently unaccounted for in the logic of the typical suburban landscape. What is the best way to integrate a 40-acre commercial development into a residential neighborhood? Is it always necessary to isolate these parcels on arterials roads, thereby separating commercial and residential uses? Is it possible to re-conceptualize land parcels in a way that takes advantage of the formulaic demands of a developer like Wal-mart Inc.?

Finally, consider the importance of sequence in the development of commercial big box projects. What should come first: the big box or the adjacent residential fabric? As the commercial landscape transforms to meet the volatile demands of the retail market, what is the appropriate level of impact on the surrounding suburban fabric? The following exercise re-conceives the change increments associated with commercial big box developments in an effort to create a new site hierarchy.

7 Increment 1

Increment 1 defines the change sequences that occur within the space of the Walmart Supercenter development (*Fig. 6*). The time period for this increment ranges from the eight hours required to hold a Saturday farmer's market, to the five years necessary to host the initial iteration of a big box development (Christensen, 2004).

A three-part zoning strategy is employed in order to facilitate the widely diverging lifecycles associated with each programmatic element.

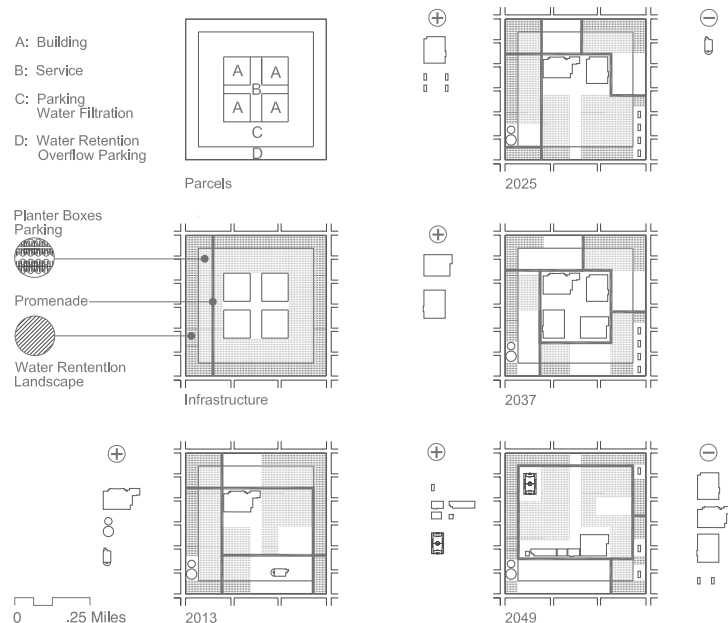


FIG. 6: Increment 1: Proposed change sequence for Walmart Supercenter development

7.1 Zone A: Building

Zone A accommodates the buildings. It is sized to receive four standard 180,000 square foot big boxes with a shared service area in back. Zone A generates the financial profit for the development and is therefore most vulnerable to the economic volatility associated with big box retail. For this reason, the retailers manage this zone. Developers therefore have every opportunity to renovate, raze, relocate, or rebuild big boxes in response to shifting economic conditions.

This revised zoning arrangement frees developers from the obligation to provide critical site infrastructures, including parking and storm water management. Such infrastructure instead resides within an expanded public right-of-way (see Zone B and C) and is managed by the municipal authority. This arrangement seems perfectly reasonable given that much of this infrastructure is already paid for using public funds.

Big boxes relocate from the perimeter of the site to the center. Each structure faces outward towards the street, allowing for a public landscape to emerge that engages the neighborhood.

The commercial structures in Zone A are expected to last for periods of between 5 and 25 years. This time period reflects the fact that buildings are among the most malleable elements on the site. The paradoxically short life span of big box structures results from a number of physical and economic circumstances: relatively brief construction schedules, low construction costs, ease of renovation and the short economic lifecycle of big box retail.

7.2 Zone B: Service

Zone B delivers a shared service zone for all four of the big box parcels. The zone allows for direct access to the street and functional separation from the public space of the parking lot.

7.3 Zone C: Parking and Water Filtration

Zone C provides parking and filters storm water while occupying the middle portion of the development. This zone lies adjacent to the retail activity, meaning that it hosts the most valuable parking spaces in the development. Most of the trees in Zone C reside in planter boxes, making it the most adaptable zone as planter boxes are transferred to and from a local tree nursery to accommodate the variable parking loads associated with the seasonal shopping cycles and economic volatility.

Zone C features an impermeable surface to maximize parking loads and bio-swales to clean run-off water before it reaches the retention area in Zone D.

7.4 Zone D: Water Retention and Overflow Parking

Zone D exists at the perimeter of the development, farthest from the retail activity. It therefore offers the least desirable parking spaces within the development. For this reason, the area is designated for water retention and features maximum

permeability. The area can also accommodate overflow parking as water levels recedes and retail activity surges. In this regard, Zone D performs as a flex-zone, alternatively supporting peak parking loads during intense shopping periods and water retention during periods of flood.

Finally, dedicated pedestrian zones—promenades—are designated throughout the site. These temporary designations provide continuous linear passage for small-scale retail and civic activity.

8 Increment 2

Increment 2 defines the change sequences that occur within the residential fabric surrounding the space of the Walmart Supercenter development. The time period for this increment maxes out at thirty years, the period of a typical home mortgage (*Fig. 7*).



FIG. 7: Increment 2: Proposed change sequence for Walmart Supercenter development and adjacent residential areas



FIG. 8: Increment 3: Proposed change sequence for territories between Lockhart, Texas and Luling, Texas

The proposed scenario begins in the year 2013 with the construction of a Walmart Supercenter development. In the year 2025, limited residential development emerges to the north. This activity begins to multiply until the year 2037, when a second big box development appears. The coming decades see a continuously transforming commercial environment and maturing residential fabric. By 2073, relatively static residential developments surround the continually transforming commercial environments.

9 Increment 3

Increment 3 defines the change sequence that occurs at the territorial scale. The typical cycle for these sequences exceeds sixty years (*Fig. 8*).

The proposed scenario remains rooted in the historical development of both Lockhart and its southern neighbor, Luling. Projecting forward from the year 2013, two Walmart Supercenters materialize: one on the site of the current development, and one just north of Luling. Thirty years out, residential fabric begins to surround the commercial landscapes while additional big box developments emerge. By 2073, no less than seven big box developments are in play and the adjacent residential fabrics begin to merge, albeit it in an unplanned and indiscriminate manner.

10 Conclusion

While the ChangeScapes scenario is highly orchestrated at the micro-scale (Increment 1), it does not involve active planning at the macro-scale (Increment 3). The territorial form of this landscape is therefore given over to a multi-nodal and uncoordinated pattern of development. This situation reflects the fragmented local political structure that persists in the U.S.—a condition that makes synchronized planning virtually impossible for towns like Lockhart and Luling. For better or worse, the development of exurban landscapes in such places will continue to emerge from the highly idiosyncratic process of land speculation as practiced by mega-developers like Wal-mart Stores Inc. Given this set of circumstances, the ChangeScapes proposal draws heavily on previous efforts to tame the landscape of capital and exchange. The 1785 Rectangular Survey of the United States and The Commissioner's Plan of 1811 for Manhattan Island both saw policy-makers successfully utilize geometry to control the negative externalities associated with unfettered land speculation.

The ChangeScapes proposal extends this tradition, seeking to leverage the cycle of growth and decline associated with Walmart Supercenters in order to physically transform suburban territories in the U.S. The design research makes the claim that most of the problematic externalities associated with commercial big box developments emerge from an unresolved disparity between the financial lifecycles of big box buildings and their supporting infrastructure. The proposal aims to re-align these lifecycles by accommodating the divergent change increments required by various programs.

This work does not suggest that designers should abandon urban processes to economic requirements and capital markets; rather, it seeks to empower decision-makers by giving them the tools to critically and proactively engage the change processes that drive the growth associated with big box development. Increasingly, the management of urban processes appears to offer designers the best opportunity to strategically impact growth in suburban territories. With this in mind, this design research makes the claim that contemporary urbanism isn't the design of form; it's the design of change.

Credits:

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