WORKS BOTH WAYS

Business and leisure on Auckland’s waterfront

THE AUTOMATED WILD
Machine intelligence in ecology

THE BELTLINE
An asymmetrical start in Atlanta

LOGISTICAL GROUNDS
The commercial determines the spatial
ATLANTA’S BELTLINE, PICKING UP SPEED, DEMONSTRATES THE MANY POSSIBILITIES—AND A FUNDAMENTAL RISK—OF CATALYST INFRASTRUCTURE.

BY JONATHAN LERNER
A figure eight on its side is the symbol for infinity. A simple loop isn’t usually freighted with such meaning but is similarly endless. The loop called an ouroboros also represents the infinite—though ominously; it’s a snake eating its own tail. Atlanta’s BeltLine is a loop, 22 miles of old rail corridor encircling the city center and touching 45 neighborhoods. In what has been called the country’s biggest urban infrastructure undertaking, its reinvention has inspired endless visions of possibility. The project’s intentions, surprisingly various, are not infinite, but there sure are a lot of them. Simple the BeltLine is not—nor is it free of danger.

OPPOSITE
Atlantans thronged to the first section of BeltLine trail.
The BeltLine is a trail and a transit system. It’s a park, but it also incorporates renovations of existing parks and the creation of new ones. It is green infrastructure for stormwater management and landscape connectivity. It is a stimulus for urban farming, an arboretum, an arts and events venue, and a focus for public health initiatives. When a second major section of the trail opens this summer, while the transit and many other pieces remain in planning, the BeltLine won’t be one third complete. But its first sizable segment is already hugely popular. It has incubated fashionable places to eat and shop and become a magnet for urbane aspirations. The BeltLine is meant to revitalize dead industrial spaces and left-out communities with new businesses, construction, and employment. It incorporates jobs training, homeownership support, and affordable housing. At the same time, the BeltLine is spurring gentrification and displacement, which is its biggest challenge.

Before everything else, the BeltLine was a vision for a transit- and park-poor city segregated by race and class. That idea is the belief, or the hope, that long-standing barriers can be bridged—not least the fenced-off, kudzu-choked railways that slash through the city fabric, a linear dumping ground for old refrigerators and homeless people. The BeltLine exemplifies the notion that infrastructure done right can remake a place and heal its culture. It is an inspiration and a model. It is also a ginormous public works project. So it isn’t perfect.

It was first proposed, conceptually, as a thesis by Ryan Gravel, who in 1999 was earning a master’s degree in architecture and planning at Georgia Tech. The idea was simple: Take these
mostly disused freight lines, fill in the few gaps, and reactivate them with a light rail loop. This would stimulate circulation, interaction, infill, and the return of population to the old “intown” neighborhoods. Later, Gravel and a few supporters expanded the concept to include a trail on the corridor, and this scenario—a transit line and a trail—appealed to people. Not that its embrace was automatic; the early boosters spent several years taking it to the neighborhoods. The BeltLine became a real project because people got it and then insisted on it.

Ellen Dunham-Jones, who has taught at Georgia Tech since 2001 and directs its urban studies program, says, “The city wasn’t producing anything of joy. Here was something that neighborhoods could see as an asset. The fact that it’s a loop, and not just a line, is so important, literally binding neighborhoods together.” By 2004, feasibility studies were under way. In 2005, the early grassroots effort was folded into the
new city-sponsored Atlanta BeltLine Partnership, which was charged with raising private-sector support and public engagement. A BeltLine-focused redevelopment plan and a tax allocation (or tax-increment financing) district to pay for it were both approved. In 2006, the nonprofit Atlanta BeltLine, Inc. (ABI) was established to build it.

The array of programs and related projects the BeltLine has come to encompass was implicit, if not detailed, in Gravel’s original thesis. It’s less that the scope has expanded than that the potentials have been abundantly expressed. Last year, in his book Where We Want to Live: Reclaiming Infrastructure for a New Generation of Cities, Gravel used the project as a touchstone in arguing for “catalyst infrastructure.” That usually describes projects meant to have economic impacts. Gravel means that but more. He argues that transforming the culture and life of a place should be a major project’s explicit purpose.

“When we’re working on infrastructure, it’s easy to forget that the physical design of our waterfront, transit line, or sewer is not our only objective. Our primary goal is more basic—to create opportunities for people to lead the kind of lives that they want.”

In many ways the BeltLine is already prompting the sort of shifts Gravel hoped for. Dunham-Jones lives a few blocks from a completed section of trail, which she can follow practically to the door of Trader Joe’s a mile and a half away. On weekends there are “crowds and crowds of people,” she said on a recent
Friday. “I’m going to go get my groceries today, because if I try to ride my bike there on the weekend, all these people are giving me dirty looks.” Many people, apparently, are unfamiliar with the etiquette of a shared-use path. “But no one anticipated how beloved it would be, to be able to walk without stopping for cars.” She referenced Hannah Arendt’s idea of public space as where a society appears to itself. “This constant Easter parade—it’s a phenomenal place for Atlantans to see each other.” That is powerful for a city where seeing each other has not been valued or easy, given populations separated by economics and ethnicity, and a sprawling urban form where even intown neighborhoods mostly comprise single-family houses, and daily life is overwhelmingly dependent on cars; appearing to one another through the windshield was not what Arendt meant.

Generally speaking, the neighborhoods along the west and south of the BeltLine are African American, ranging from middle class to low-income. The first bit of trail opened there in 2008, but it’s an anomaly: half a mile of wide sidewalk and some landscape work along White Street, which is broad and lined on one side by tidy bungalows and on the other by vacant warehouses. (The rail corridor, behind those, is too narrow there to accommodate both people and transit.) The first piece within the corridor—perceptually, the first real piece, the one Dunham-Jones frequents—opened in 2012 on the whiter, more affluent Eastside. It links the 189-acre Piedmont Park, which was recently resuscitated, with several formerly shabby neighborhoods that were, however, already experiencing redevelopment. A decade after the BeltLine was proposed,
when it seemed necessary to “create proof of the promise,” says Paul Morris, FASLA, now ABI’s president and CEO, the Eastside was targeted.

The resulting synergies have been stunning. Next to the Eastside corridor, Historic Fourth Ward Park was created on 17 acres of waste ground. Its lake, depressed between sinuous granite walls, is actually a stormwater detention basin, which saved the city $15 million on a proposed tunnel. Ending the threat of recurrent floods facilitated the adaptive reuse of an enormous adjacent former Sears, Roebuck distribution center for apartments, offices, a food hall, and shops, connected to the BeltLine by a footbridge. It’s hot: Office rents there broke the city’s $50-per-square-foot ceiling; West Elm and Williams-Sonoma are retail anchors. The new park is now surrounded by new apartment developments. Atlanta’s first skatepark was built just down the trail, and similar mixed-use infill—including another food hall a mile away—has occurred along it.

Infrared sensors counted 1.7 million visitors on the Eastside Trail last year. People don’t come just to eat, or to walk a route that’s unimpeded (except sometimes by other walkers and cyclists), or for the exercise classes and art installations. They also come because the rail corridor, essentially level as it slices across Atlanta’s piedmont terrain, offers a new and enchanting experience of both the city and the landscape: intimate passages through cuts and beneath trestles opening to long prospects of skyline and topography never before available. People also come to understand what the BeltLine is, via bus tours of the entire project area, bike tours of the trail and adjacent neighborhoods, and horticulture walking tours—about 100, last year alone—because the BeltLine is being planted and managed as an arboretum by Trees Atlanta, a nonprofit that has been working to enhance the city’s urban forest since 1985. One sunny morning this spring, four people showed up for the arboretum tour: a retired couple from suburban Stone Mountain, which was a white-flight destination half a century ago; before the disused rail corridor gathered refuse and danger.
ago, who had visited the BeltLine previously with their grandchildren; a South Asian immigrant from a distant suburb who was moving away and felt she had to see the BeltLine before she left; and a visitor from Japan who took notes.

The arboretum’s planting concept groups native varieties into five collections meant to reflect the nature and history of the different parts of the city. A big element, representing the historic railroad edge, is an “evolving meadow regime” that can help restore the soil, Morris says, “which made sense from a designer’s and expert’s mind-set but was a little bit sketchy for the public.” To many people, for now, the arboretum just looks like saplings and weeds. Greg Levine, Trees Atlanta’s co-executive director, says, “So much is going on in the corridor, and being built, that it’s constantly getting scars, whether it be somebody trying to create an access path, or digging for fiber optics or a new development.” The original concept was more complex, with 14 “natural neighborhoods,” but “working with two major groups, ABI and the parks department,” Levine says, “there’s more compromise than a botanical garden or arboretum would be making on its own.” Despite such frustrations, “the BeltLine has given us a very visible presence, on the most popular project in the city,” he says.

The number of volunteers for Trees Atlanta has nearly doubled in recent years; it now has five staff people running an education program “which didn’t exist before the Eastside Trail was being built.”

That is hardly the only positive ramification for the greater city. Dunham-Jones points to Peachtree Corners, a master-planned 1970s suburb without a center where infill “millennial housing” is being built on an original office park campus and a trail network is being established throughout the community. “Also, there’s a bunch of food halls being proposed out in the ‘burbs,”
she says. “I see this pattern in a lot of cities. Something is able to revitalize intown, and then the suburbs start picking it up.” Atlanta itself, intown at least, has become noticeably kinder to bikes and pedestrians, with many recently installed bike racks and sharrow-marked lanes, new crossing signals, and midstreet safety islands. Although those are not elements of the BeltLine, increasing consciousness and provisions for noncar mobility have surely been fostered by it.

But to some people, the Eastside’s success provoked “anxiety around ‘Here we go again’—the city always favoring some quarters,” says Morris, “largely around race and income.” The BeltLine had committed to generating 30,000 permanent jobs and 5,600 affordable housing units by the end of its 25-year project life. “There had not been a lot of work done on those things, some as a result of the economy, some an unintended disproportionate emphasis on infrastructure elements, especially trails and parks, but not necessarily where everybody wanted them.” ABI underwent what Atlantans sometimes call a “come to Jesus,” and resolved henceforth “to be working in all parts of the BeltLine, in some form, at the same time.” Those forms might be property acquisition, or planning and design, or construction of sections of trail, along with attention to the project’s obligations in other realms such as economic and social development.

An extension of the Eastside Trail is going in now. More significantly, 2.5 miles of the Westside Trail, in the rail corridor, will open this summer. It is being built more completely, at more than twice the cost per mile, of that first Eastside piece. It has LED lighting every 90 feet, security cameras, and many fully articulated connections to nearby streets and neighborhoods; on the Eastside, to economize, lighting and cameras were forgone, and connections were less frequent. Other factors also added cost: bioswales and retention ponds, necessitated by tightened stormwater regulations; more retaining walls, given steeper terrain; and preparation for light rail, including relocation of underground fiber optic cables belonging to telecoms grandfathered in the right-of-way. The median income in this area is about $25,000 for a family of four. Many families don’t have cars. The trail touches a shopping center with the only supermarket for miles around. “Being able to ride a bike or walk the trail to go buy food is a big deal,” says Kevin Burke, ASLA, ABI’s senior landscape architect. More connectivity: The new segment’s northern terminus is a park with tennis courts, ball fields, a pool, and a junction with another paved trail that leads west through residential neighborhoods; a street connection a quarter-mile south places walkers one block from a branch library and two blocks from a public high school.
The fast, fabulous growth spurt that was accurately anticipated for the Eastside is unlikely to be replicated on the Westside soon. But more than a trail segment is coming. ABI owns a 17-acre parcel on the corridor there; economic analysis is under way to inform its mixed-use redevelopment. With $500,000 from Kaiser Permanente, the BeltLine Partnership is now evaluating proposals for grants to Westside nonprofits for projects using the trail to promote and increase physical activity. There are new enterprises moving into those empty warehouses along White Street that should energize the public realm and provide a few jobs: a pickle factory, a cheese maker, a bike-share depot, a gelato shop, and a brewery and tasting room. To the surprise of many—given the gentrifying-hipster whiff of craft beer—the brewery proposal received a wild ovation at a neighborhood meeting. And the first of several possible urban farms on ABI properties is in its third year. This summer it launched a community-supported agriculture program and a retail stand at a trail crossing that both drivers and walkers can easily reach.

To create the farm, ABI remediated and graded a 3.8-acre brownfield site, dug stormwater ponds and a well, and gave a cheap lease to farmers Andy Friedberg and Andrea Ness, who both moved to the neighborhood. Their challenges include poor soil quality, little capital, limited continuing support from ABI, and finding themselves greeted as white newcomers “right in the middle of this social-political thing,” says Friedberg, “trying to figure out how to navigate it and...
respect the old community.” Since they’ve been there, they’ve seen nearby house prices more than double. “The urban farm is a selling point for people who are moving in, the gentrifiers. ‘Walk to the farm stand!’” Ness says. “When you undertake endeavors that will fundamentally change the city, you can’t pretend you’re not responsible for that kind of stuff.”

The BeltLine never pretended that. Of money raised by the tax allocation district, 15 percent is earmarked for affordable housing. Alas, according to the Federal Reserve Bank of Atlanta, between 2010 and 2014 alone, the city as a whole lost more than 5,300 units renting for $749 or less. A Georgia Tech master’s student in city and regional planning, Matthew Bedsole, estimated that between 2008 and 2016, about 2,000 apartments within a half mile of the BeltLine disappeared from the market in one- to three-story buildings, a typology generally correlating with affordability. Some may have been replaced; some may not have been affordable. Still, ABI’s promise must be reckoned against this context of an increased housing deficit.

Booming real estate and displacement of longtime residents are economic forces hardly limited to Atlanta or the BeltLine’s redevelopment area. Rob Brawner, the executive director of the BeltLine Partnership, says that ABI’s 5,600-unit commitment isn’t enough to solve the whole housing problem. But “that was groundbreaking, that a project would even contemplate having any accountability for affordable housing,” he says. “It’s the responsibility of a city, if it’s going to make billions of dollars of investment in infrastructure, to, in parallel, put in place policies and resources and programs to ensure that those investments accrue benefit to the full range of incomes.” Statements like this are forthcoming now, it seems, from everybody working on the BeltLine; this year’s first ABI quarterly public meeting departed from its usual progress-update format to include a panel discussion on the housing
problem. If this represents a redoubling of commitment, it may have been sparked by the resignations last September from the partnership board of Nathaniel Smith, founder of the nonprofit Partnership for Southern Equity, and Ryan Gravel. They wrote a joint letter asserting that the project had “lost a conduit for the grassroots, sometimes rabble-rousing voice of the people who had given it life in the first place,” and expressing the fear that it could worsen rather than help resolve inequality. Smith points out that during the recession it would have been possible to acquire property next to the corridor for housing at very good values. He suggests that the project’s priorities have been misaligned, and that mission creep is a factor. “I would never go so far as to say that it was done on purpose. But I would say that it’s difficult for everyday people to have a chance to put their arms around what the BeltLine is doing to the city when you have so many things associated with it, and not a focus on how you measure success,” he says. “It shouldn’t be about whether you had a lantern parade or how many yoga classes. Folks can get caught up in the marketing aspects and not necessarily the substantive aspects, or at least the things that many of the community stakeholders are concerned about.”

Shawn Walton was studying childhood development at Morehouse College when he formed the nonprofit WeCycle Atlanta, on the Westside. Its mission has broadened from teaching bike riding, renting bikes, and building bicycle culture to include promotion of health, nutrition, and general awareness of the urban potential represented by the BeltLine. Recent posts on its
website, for example, announced that the state’s Department of Transportation had adopted a Complete Streets policy, and offered how-to advice for “converting to life without a car.” (Tip: “Cute flats.... This lifestyle change has certainly made me have to change up my wardrobe.”) WeCycle even has a program called Youth in the Yard that provides lawn-care services. “These new neighbors who are investing in the area because of the BeltLine have given the opportunity for these youth to be employed,” Walton says. “I will use every resource that comes our way.” He is one of the people the partnership has asked to review proposals for those Kaiser-funded health grants. But he criticizes the BeltLine not only as having “completely failed” in addressing affordable housing, but also as “archaic,” “check-box,” and “formulaic when it comes to community outreach.” He says, “The requirements for applying for programming funding are complicated and sometimes difficult for a grassroots group without capacity.” Still, “Even with my displeasure about how the BeltLine is going about things, I’m trying to stay very close in the process, to aid and to guide and be a voice.”

Given the glowing promise, people can have trouble grasping the hurdles and frustrations a massive initiative like this involves. Take land acquisition: Though most of the BeltLine...
loop existed, most was owned by railroads. Acquiring it has not been easy. Early on, for example, a far-sighted developer (or perhaps better put, speculator) purchased property including a 4.6-mile northeast segment of the corridor, bordering two of the most affluent intown neighborhoods, from Norfolk Southern Railway for $24.5 million. He offered to donate some for parkland in exchange for the right to build 3,000 homes, most in high-rise towers—precisely the kind of infill those neighbors wouldn’t tolerate. Much shouting and three years later, he resold the property to ABI—for $66 million. Then there is funding: A lawsuit by antitax activists, filed in 2008, plus various bureaucratic quirks in how revenue from the tax allocation district would flow to the project, delayed those payments for several years; prerecession income estimates proved unrealistically high, too. Then a 2012 referendum in the 10-county metro area, to add 1 percent to sales tax for transportation including BeltLine transit, was defeated. Last year—fully a decade after the creation of ABI—a sales-tax-increase referendum, this time presented only to the more transit-friendly voters of Fulton County, which includes Atlanta, passed. Finally, money for the light rail seems secured, and ABI is moving to phase it in.

But over that same decade, the transit plan has broadened enormously. ABI is now charged by the city with developing not only bidirectional light rail within the 22-mile rail corridor, but also five other on-street routes—in all, a 53-mile streetcar network. From a connectivity standpoint this seems sensible. But it certainly adds to ABI’s to-do list. And then, what mode? Fifteen years ago, the transit of the future seemed to be light rail, instead of heavy rail networks like the one built in Atlanta in the 1980s. ABI remains committed to light rail, but others—including the city’s planning commissioner Tim Keane—contend that bus rapid transit in dedicated lanes on city streets would be cheaper and more functional. Besides, technology evolves. “It’s crazy to make it streetcar,” says Dunham-Jones, who admits “the jury’s still out” but sees the transit future in autonomous vehicles, citing one prototype, the 12-passenger self-driving Olli, already being tried in several cities. She points out that the biggest share of the cost of operating transit is the driver. “Get rid of that, you can buy more smaller shuttles and run them more frequently.”

Transit is one of the BeltLine’s many uncertainties. Can the entire corridor even be acquired, and all the ancillary projects completed, by the target date of 2030? And as this marvelous thing makes central Atlanta a desirable place to live, will only the affluent be able to choose living there? “We have an opportunity still,” Shawn Walton insists, “to come up with a solution to some of these problems that are an ill not just for Atlanta but for the entire nation.”

JONATHAN LERNER’S MEMOIR OF THE WEATHER UNDERGROUND, SWORDS IN THE HANDS OF CHILDREN, HAS BEEN PUBLISHED BY OR BOOKS.