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WAYFINDING DESIGN FOR RANDOMLY DEVELOPED AREAS:  
THE BELTLINE CASE STUDY

by

JOSHUA BUTLER

Under the direction of Liz Throop

ABSTRACT

Wayfinding Design for Randomly Developed Areas: The Beltline Case Study proposes a wayfinding signage program for the new public transit project in Atlanta known as the Beltline. This program unites the Beltline with other transit options within Atlanta, such as MARTA, to form a comprehensive transit system. This program will be known as The Atlanta Unified Transit Program. My proposed signage program includes map kiosks, information posts and signs promoting the various levels of transit offered in Atlanta as well as information about the areas surrounded by public transit. The signage examples created for my thesis are prototypes that could later be applied to any location within the area serviced by public transit.

INDEX WORDS: Atlanta, Beltline, Public transit, Visual communication, Signs and symbol, Signage, Wayfinding, Information design

WAYFINDING DESIGN FOR RANDOMLY DEVELOPED AREAS:  
THE BELTLINE CASE STUDY

by

JOSHUA BUTLER

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Fine Arts  
in the College of Arts and Sciences  
Georgia State University

2006

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2006



WAYFINDING DESIGN FOR RANDOMLY DEVELOPED AREAS:  
THE BELTLINE CASE STUDY

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## 1. Thesis Introduction

### *Thesis Project Summary*

#### *Wayfinding Design for Randomly Developed Areas: The Beltline Case Study*

proposes a wayfinding signage program for the new public transit project in Atlanta known as the Beltline. This program unites the Beltline with other transit options within Atlanta, such as MARTA, to form a comprehensive transit system. This program will be known as *The Atlanta Unified Transit Program*. My proposed signage program includes map kiosks, information posts and signs promoting the various levels of transit offered in Atlanta as well as information about the areas surrounded by public transit. The signage examples created for my thesis are prototypes that could later be applied to any location within the area serviced by public transit.

First, I propose a mapping system composed of three maps. The cornerstone of the project is the 'Thirty Minute Map', which is located on vertical information kiosks around the city, and provides a comprehensive map that represents an area within thirty minutes' walking distance of the kiosk. (Appendices 2 and 6) These kiosks will be positioned in strategic areas that will help pedestrians and transit riders to navigate through their immediate area and locate buses and transit stations and other destinations. Two other supportive maps will also be used to inform the users of the many tiers of transportation: one, a macro-view of all of Atlanta's public train and tram lines, (Appendix 11) and the other, a micro-detailed map of the area around the kiosk within a

five minute walking radius. (Appendix 13) All three maps represent spatial information,<sup>1</sup> which will help the user understand the geographic space in which he or she resides.

Two other signage elements will be used, both providing sequential information.<sup>2</sup> The first sign is the bus-stop sign, which gives detailed information about bus arrival times and destinations, (Appendix 14) but it also provides a small map that will help direct pedestrians in their desired directions. The final sign is the directional sign, which will have destinations listed on panels with arrows that point in the direction of the listed destination. (Appendix 17) Typically, these directional signs work sequentially as one directional sign will lead to another and then on to the final destination.

### *Thesis Project Intention*

The intent of my thesis is to show how wayfinding, or information design, in general, can provide the missing link that ties all of Atlanta's transit options together. The goal is to use the Beltline as the foundation in which to develop a wayfinding signage program to better help travelers navigate through central Atlanta using a variety of pedestrian and public transit options. My thesis addresses problems associated with bringing a new transit option into a city that has developed 'randomly' over the years (in lieu of smart urban planning), and has no history of a central authority that implements any kind of unified travel system. This thesis is intended to showcase how a properly conceived wayfinding system can coordinate seemingly unrelated travel options (walking, buses, MARTA, the Beltline and driving) and make them work as a more unified system.

During the Sixth Annual Asian Design Conference, Ryoza Takeyama described a public transit debacle that is similar to the one currently affecting Atlanta. The debacle he described is the outcome of a lack of continuity between public transit options. Some problems affecting continuity within a transit system that he mentions are: different means of transportation (buses or trains), different operational companies and different media in which information is obtained.<sup>3</sup> Atlanta's transit options appear to be fragmented to users because of this lack of continuity, not to mention the separate transit systems: therefore the total range of travel is not communicated, and the perception of limited service is increased. Takeyama concluded that the problems associated with continuity could be eliminated with information design through such interventions as standardization, simplification, repetition and distinction.<sup>4</sup> If these four concepts are applied to the design of the wayfinding program for a transit system, then the continuity of the system will be enhanced, therefore improving the public's view that the system will provide potential riders with sufficient travel options.

My thesis addresses these issues by creating a distinctive brand that will be presented at all possible locations where transit users will be. Branding will be prominent and all information will be reduced to its essentials. When a wayfinding program is introduced, it can define a hierarchy for a multi-tiered public transit system (one which consists of paths, buses, trains, etc.) and achieves seamless movement from one component of the system to another. This branding and wayfinding proposal is to be administered by the Beltline, but will be an overarching program that will connect all of Atlanta's transit options under the guise of *The Atlanta Unified Transit Program*.

## 2. Theoretical Concepts of Wayfinding

In order to understand more about this public transit project, it is important to know about some of the fundamental concepts of wayfinding. Romedi Passini has been a pioneer in the theory of wayfinding for over a decade, and his work aims at breaking down the ideas of wayfinding into its essential concepts. Passini says that “Wayfinding refers to the cognitive and behavioral abilities associated with purposefully reaching a designed physical destination.”<sup>5</sup> He then elaborates that wayfinding, in terms of problem solving, involves “three major processes: (1) decision making and the development of a plan of action to reach a destination; (2) decision execution, transforming the plan into behavior at the appropriate place(s) along a route; and (3) perception and cognition (information processing), providing the necessary information to make and execute decisions.”<sup>6</sup> According to Passini, people need to be able to make and execute decisions to navigate their way through a geographic space, and to do this, they need the appropriate information to enable them to make and execute those decisions. The questions for designers of a wayfinding system are ‘what information is needed?’ and ‘where should we put that information?’<sup>7</sup>

In order to determine which information to provide a user, it is important to determine what types of decisions a user will make. Once that is solved, the point where a user will make his or her decision must be determined. Passini believes that, “principle wayfinding decisions can be established by considering the following user tasks: (1) going from each access point to the destination zone and back; (2) going from one



destination zone to another; and (3) circulating within the destination zone.<sup>8</sup> By studying these tasks in a geographic space, one in which a wayfinding system will be developed, the designer will be able to determine the decisions a user will need to make and execute within that space. Once these decisions are determined, the designer can provide the content for the wayfinding system. Very often, the content relates to a series of decisions and tasks, and that is referred to as a “decision plan”, which would be a hierarchically structured set of actions. Decision plans are often used to break down a trip into its essential components, or segments. Once those segments are determined, a user can decide what is the right action to make at each point along the trip.<sup>9</sup>

David Canter, in his article, “Wayfinding and signposting: penance or prosthesis?,”<sup>10</sup> provides a basic understanding of how some users of wayfinding see their problems. First, the user will want to know, “*where I am.*” Secondly, the user will want to know, “*where there is.*” The user will construct his or her decision plan in relation to these two points. For the user to learn the subsequent information to move between these two points, a cognitive map of the geographic space must be rendered. This is often done with a visual representation of the local area. A basic element to successful wayfinding is seeing the connections between places. A very popular visual representation of a geographic space is a ‘You Are Here’ map. A ‘You Are Here’ map can be a map of urban streets or the floor plan of a building. The goal is to enable the user to determine where he or she is and to locate information about the space in which he or she navigates. The information provided by a ‘You Are Here’ map is of a spatial nature, not sequential, and can suit the needs of a variety of users at any point in their journey. This map

enables the user to see where things are in relation to his or her location. The user is then able to orient his or her position within the geographic space, and subsequently formulate a decision plan. The ‘You Are Here’ map is the basis for the ‘Thirty Minute Map’ that I have created.

Kevin Lynch’s research in his influential 1960’s book, *The Image of the City*, describes a ‘public image’, which is a mental representation of an environmental space, as is the cognitive map. Lynch uses the term ‘public image’ as a way to define the various elements that a person employs to construct his or her cognitive map.<sup>11</sup> Three of these elements are directly important for this thesis: first is the ‘node’, second is the ‘path’ and third is the ‘landmark’. The node is a junction, a convergence of paths or a break in a path. The path is a line or channel along which a user moves, such as a street, sidewalk or transit line. A city often is arranged around these paths.<sup>12</sup> Sometimes a node can be the focus of an area.<sup>13</sup> The landmark is a point-reference or defined physical object that can be singled out from a host of other possible objects. A landmark can be a building, monument or any other definable object.<sup>14</sup>

### *Spatial Planning and Environmental Communication*

Passini cites two processes when developing a wayfinding system: first, the organization of geographic space into units and the creation of a circulation system that connects the spatial units, and second, environmental communication in the form of signs and maps.<sup>15</sup> Spatial planning is the identification and distinction of destinations or zones within a geographic space and then the organization of those destinations into

hierarchically structured spatial units<sup>16</sup>. The circulation system is the order in which these spatial units connect to each other, otherwise known as the 'organizational principle'. Passini identifies three organizational principles: one based on geometric form, one based on geometric law, and one based on a random organization.<sup>17</sup>

An organizational principle based on geometric form would be an arrangement of places or destinations into architectural shapes, such as a T or L-shape. This organizational principle is the easiest to communicate to a user, and communication of the organizational principle is essential to effective wayfinding. The user must have some understanding of the spatial planning and the circulation system in order to form a useful cognitive map. The organizational principle can also be slightly more elusive than geometric form by being arranged around a geometric law, such as symmetry. While this is not as visually obvious, the spatial planning of the destinations should follow a strict pattern that will lead to a user's perception of an arrangement according to a geometric law.

Some spatial organizations can also have a circulation system that is randomly arranged. Often, the randomness is hard to communicate or understand by a user. This often confuses the user and other devices must be employed for orientation. This can be done by using visual elements on a map to reference features such as Lynch's landmarks. These landmarks, and other distinctive architectural features, provide the user with recognizable items that can assist with orientation.

A 'You Are Here' map is often used to help communicate the organizational principle because the difficulty of comprehension among users is very common. Passini

believes that proper architectural design should be able to communicate the spatial planning and circulation system by making transition points, paths, and other circulation features obvious to the user. But this, however, is generally not the case, and ‘environmental communication’ is required to fill in the missing information.<sup>18</sup>

Therefore, environmental communication that can explain the spatial planning and the circulation system of geographic space is often necessary for a user to form a decision plan that will enable him or her to arrive at his or her desired destination.

Not only are confusing architectural features culprits for difficulty in wayfinding, the spatial planning and circulation system often changes, due to a reevaluation of the needs of a geographic space. This means that new environmental communication is often required to reinterpret the space for the redesigned spatial organization and circulation system. The dynamic changes of a geographic space over time requires that additional architectural and environmental design be employed simultaneously to assist with the wayfinding needs of a user.

The role of environmental communication in wayfinding is to provide cues that will alert a user of possible decision points that fall between or along the segments of a trip.<sup>19</sup> The information contained at these decision points should allow the user to make proper decisions that will allow them to arrive at his or her destination.

### **3. Applications of Wayfinding Theory for Solutions to the Beltline**

I have defined a set of goals a user might need to accomplish in the geographic space served by the Beltline. These tasks can be as simple as walking to the nearest shopping district, but can be as difficult as finding and boarding another unrelated transit system. The challenge for the Beltline, in terms of wayfinding, is to formulate a plan that deals with many transit options over a relatively large area. From the standpoint of a user's perception of feasibility, the wayfinding program should provide the essential information the user will need to arrive at whichever destination he or she chooses. The reality of the Beltline, as a limited form of transit, suggests that many potential users will question whether the Beltline is a viable alternative to the car, which it might not be on its own merits. The Beltline will have to join with the MARTA train and bus systems to greatly extend the scope of public transit in order to meet the needs of many commuters. The user will seek out information that will help him or her determine whether this integrated transit system can provide a convenient alternative to traffic-congested roads. The role of the designer in communicating the feasibility of this system is absolutely crucial. Without effective graphic communication of the wayfinding program, the transit system could be perceived as a useless logistical nightmare and subsequently dismissed by potential users.

*On Navigation through Randomly Developed Areas*

Determining the spatial planning and a circulation system of a setting is crucial for the development of the wayfinding program. This involves creating a dynamic informational system that will allow commuters to walk from their homes to a transit point, board a segment of the transit system, make as many transitions as necessary, and then to leave another transit point and walk to their destination (i.e. travel that happens in segments). The challenge to the designer of the wayfinding system of *The Atlanta Unified Transit Program* is to represent the various systems as one seamlessly integrated transportation option – in other words, to link the Beltline tramline to pedestrian paths and to the MARTA bus and train system with a wayfinding program.

Designing a wayfinding program for Atlanta's various transit systems is quite different from designing a program for a building or any other confined setting. Whereas a confined setting will generally conform to an organizational principle based on geometric shape or law, the enormous size and scope of this transit system (especially the fact that it has many components) results in an organizational principle that is based on a 'random' organization'. The infinite number of goals a user might need to accomplish over the entire transit system prevents any application of geometric order when conceiving a spatial plan or circulation system. Basically, navigation through multiple transit systems, in addition to city paths, is a lot different than navigating through a museum. Spatial planning and the creation of a circulation system are more possible to devise in a confined space. This wayfinding program mainly focuses on user navigation through a randomly organized geographic space, with a concentration on small areas

(represented by the 'Thirty Minute Map') within central Atlanta. There are two areas where the user will navigate; first, through the public transit system; then, through pedestrian pathways. One can argue that there is an organizational principle that is based on a loop surrounding two crossing paths, referring to the Beltline tramline surrounding the two MARTA train lines. (Appendix 21) This would lead to analysis of the wayfinding program being organized according to geometric law, but the amount of travel or navigation occurring within the Beltline loop minimizes any orientation associated with the geometric positioning of the tram and train lines. A large part of the user's journey will occur away from public transit, and happen along pedestrian pathways. Another problem with viewing the organizational principle, as a geometric law, is that it assumes that there will be four convenient connection points where the Beltline meets the MARTA trains. This is problematic because the geographic spaces that naturally lend themselves to be settings for transit stations, both for the Beltline and the MARTA, do not occur in the most convenient spaces. (Appendix 21) This is because public transit in Atlanta has occurred randomly, in various stages, and the fact that the trams and trains do not have a conjoined station at every single physical crossing point. This suggests that the notion of a greater public transit system that is planned with an organizational principle based on geometric law is probably incorrect.

The conclusion of this study is that it is better to treat this wayfinding program as if it were based on the random organizational principle, which assumes that an organizational principle cannot be effectively communicated to a user. In this case, alternative devices need to be employed to help the user orient him or herself within the

geographic space, and then to formulate a decision plan to navigate through the space.

This is a perfect example of the usefulness of the ‘Thirty Minute Map’ because it shows a comprehensive view of the local area, and can inform a transit user of all possible transit connection points, in lieu of any kind of perceivable order.

In a setting that lacks any discernable organization, Passini suggests that a user can still form a cognitive map.<sup>20</sup> To form the cognitive map, the user will seek out various types of landmarks that function as nodes, or points where paths meet. Users are able to form cognitive maps from paths that are arranged randomly, as long as the paths can be linked to the landmarks. Even in a space where there is an obvious organizational principle based on geometric shape or law, users still tend to seek out landmarks as their primary source for orientation. The landmark, in terms of wayfinding, can mean a lot of things. Lynch describes the landmark as a “simply defined physical object: building, sign, store, or mountain.”<sup>21</sup>

Considering that a landmark can be such a useful device for allowing users to orient themselves within a randomly developed space, the wayfinding program for *The Atlanta Unified Transit Program* will employ orientation maps as a primary tool for users to locate various landmarks within the immediate geographic space. These orientation maps are also known as ‘Thirty Minute Maps’. These maps will enable the user to see how the local area is arranged, how the paths meet with landmarks, what transit options are immediately available, how those transit options connect, what the geographic area is like and where users are in relation to the geographic space. It is crucial for the user to see how the various transit options connect because the promotion of an integrated transit



system within Atlanta is critical for the long-term feasibility and support of the system.

A map consisting of the whole of central Atlanta would contain so much information that the user would find it to be overwhelming, and subsequently useless. This ‘Thirty Minute Map’ will be part of a set of three maps; the other two maps being a comprehensive public transit system map and a micro-detailed local map. The hierarchy of the maps will be in this order: the public transit map (macro view), the ‘thirty minute’ map (local view) and then the micro-detailed map (micro view). The ‘Thirty Minute Map’ will contain most of the information a typical user will need to form his or her decision plan within the local area of his or her destination. The public transit map will give the user information on how to navigate around the whole of Atlanta, before the user arrives at the area represented by a ‘thirty minute’ map. The micro-detailed map is primarily supplemental information about the area immediately surrounding the kiosk containing the ‘thirty minute’ map, or the user’s immediate area. This micro-detailed map is intended to provide a user with particular information about an area to help with orientation. The micro-detailed map is slightly more detailed than the ‘thirty minute’ map, but deals with a much smaller area.

The public transit map will only be located at the Beltline and MARTA train stations. The ‘thirty minute’ maps will be at the stations, but will also be at other strategic locations, or nodes, around the local area. These ‘thirty minute’ maps will be displayed on information kiosks. The strategic locations of the kiosks will be planned to form a loose circulation system around the randomly developed local area. (Appendix 22) This circulation system will help people navigate between different transit stations, locate

major tourist sites, and find major shopping areas. The kiosks will serve as another 'landmark' where paths will meet, and this landmark-path relationship will be the foundation for the circulation system.

### *Segments Between Landmarks*

As the kiosks serve as landmarks, or nodes, in which paths meet, attention must also be paid to the segments between these nodes. While a user is moving between two nodes, supplemental information might be required to finish the trip. The necessity for supplemental information might be the result of an ill-formed cognitive map (with missing information or an ambiguous layout) or even the general intimidation a person might feel in an unfamiliar setting. The wayfinding program must assume that users might form weak decision plans or have unexpected problems along the segment of a trip. To reduce problems along the way, environmental communication, in the form of signs, can be employed to provide users with any pertinent information that could be missing.

Two forms of segmental signage will be used to provide information along segments between nodes. First, 'directional' signs will be used to direct users to landmarks and other pertinent places within their immediate area. Directional signs are helpful because they enable users to re-evaluate their decision plans once the journey has begun. Directional signs can also alert users to other landmarks or places they might not have been searching for, but are still considered useful. The second type of sign will be a 'bus-stop signpost'. This signpost has two functions: first, to connect the bus system with

the tram and train systems, and second, to provide supplemental information for a user moving along a segment of a trip. The bus-stop signpost's function as a connector of transit systems is the more important of the two. The signpost incorporates the graphical branding that is applied to the rest of *The Atlanta Unified Transit Program* in order to communicate the integration of the MARTA and the Beltline as a joint public transit system. The signpost will also provide information as to which buses come to the bus-stop, the timetable for the arrival of the buses, and the route along which the buses travel. While MARTA does not currently provide this information, it is the goal of *The Atlanta Unified Transit Program* to provide any information that will increase the reliability of the joint public transit system. The signpost also has a small map that is intended to provide supplemental information along the segment of a trip. The small map should help reaffirm or build upon a user's cognitive map or assist with general orientation within the local area.

#### 4. Design Interventions for the Beltline

##### *The 'Thirty Minute Map'*

The 'Thirty Minute Map' is a version of the 'You Are Here' map. There are essentially three functions that the Thirty Minute Map serves: (1) first, the map provides general information for pedestrians who exit a Beltline or MARTA station about the local area that is within walking distance, (2) second, the map is a device that assists with orientation and enables the user to form a 'public image' or cognitive map of the local area and (3) third, the map will show the user all other public transit options within the local area. (Appendix 2)

The Thirty Minute Map is intended for people who walk and use public transit and need comprehensive information about the local area. The idea of this map is to communicate the accessibility and ease of travel with the joint Beltline-Marta transit system. This idea is brought to fruition by providing Atlantans with detailed information about the areas served by the Beltline and the MARTA. The goal of the map is to provide all the information a user may need to form his or her decision plan and to show users how easily one can travel with public transit.

The inclusion of several information 'layers', as mentioned by Paul Mijksenaar,<sup>22</sup> should provide a user with the knowledge he or she may need. Common information layers are: streets, tourist sites, buildings, urban features, parks and public transit stations. The following information will be provided in this program of wayfinding: streets and walking paths, transit stations (Beltline and MARTA), transit lines, bus lines, urban

density (residential to predominately commercial), parks and recreational areas, prominent buildings, cultural centers, tourist sites, shopping centers, and parking lots. A thin line exists between too much and not enough information on maps. But the limiting of the area to a thirty minute walk will give the user only the information that is directly relevant for his or her immediate journey.

A 'Thirty Minute Map' is a communicator of comprehensive information, rather than sequential information. Helping people navigate through large urban environments is almost impossible with sequential information. Sequential information is useful in settings such as museums, but rarely does a person in an urban setting arrive at a point where he or she can make purposeful use out of sequential information. In urban settings, the need to form a cognitive map outweighs the usefulness of incremental directions that lead a user to a destination. The list of goals a person might need to accomplish in an urban setting is nearly infinite; therefore, a wayfinding program based on navigation through urban areas should focus on signage that can provide comprehensive information in the form of maps, rather than sequential directions.

This is not to say that information of a sequential nature should not be included in the wayfinding program. The Thirty Minute Maps will be located not only at stations, but will also be located at strategic points around the local area referred to by the maps. This strategic positioning of the map kiosks will be to form an artificial circulation system that will help the users navigate around the area. In between the map kiosks, directional signage will be used to help the user arrive at the next kiosk along the circulation system. Directional signage can be also useful for users who enter the local

area from some point other than a Beltline or MARTA transit station. The Thirty Minute Map kiosks can serve as nodes or links between paths, and the directional signage provides information that leads to the nodes.

Other considerations for the Thirty Minute Map are the orientation framing of the map. Orientation refers to the directional rotation of the map along the points of a compass. It is often argued that a 'You Are Here' map should be rotated so that the direction of the map reflects the direction in which the user is standing.<sup>23</sup> For example, if a user is facing south, then the top of the map will be south, and the bottom will be north. I dispute this notion because any rotation of the map where north is pointed in any other direction but north, for example, will create a distortion of Lynch's 'public image' and obstruct the formation of a consistent cognitive map. To resolve this issue, the map kiosks will be installed so that they will face north whenever possible. A small micro-detailed map that is located on the kiosk will be rotated in order to reflect the direction in which the user is standing.

The framing of the Thirty Minute Map refers to selecting the portion of the map that will be presented on the map kiosk. The map selection will represent a diagonal area in which the average pedestrian should take thirty minutes to walk. The 'You Are Here' indicator will not be in the middle, as it is in some maps. The map will be framed in relation to the circulation system and with representation of the settings that are relevant to the location of the user. This means that each map kiosk will probably have a slightly different portion of the map displayed. These framed portions will come from one large master map that will contain all of the geographic information of the areas covered by the

Beltline wayfinding program. As a prototype, I have illustrated one portion of the master map, in lieu of the full master map, to represent a ‘Thirty Minute Map’. (Appendix 2)

### *Trip Segment Posts and Directional Signage*

The trip segment posts and directional signage serve as the sequentially informative component of the Beltline wayfinding program. Although this program focuses heavily on assisting users with the development of a cognitive map and providing comprehensive information at one setting, the use of sequential information has its value. As was stated before, sequential information provides content that will lead a user along a linear path until he or she arrives at a node, or a transit station or map kiosk. The wayfinding program must assume that a user can enter the local area from any possible point. If a person enters from a point other than a transit station, there is a chance that he or she will need information that will lead to some kind of referential point or node. Once the user has arrived at the node they can plan the rest of the journey. There are two forms of sequential information that this project will employ: bus-stop signposts and directional signs.

The bus-stop signposts will be placed at or around MARTA bus-stops. These signposts give general information about bus arrivals and destinations and provide a small map to assist with orientation for the user. These signposts are similar to the Thirty Minute Map because they help with the development of a cognitive map and also provide supplemental information for the user. The map on the bus-stop signpost is smaller and much more streamlined than the Thirty Minute Map, but is intended to give the user a

small amount of information until he or she arrives at an informational kiosk and can acquire more information. So the information provided by this signpost is targeted at people who are moving along a segment of a trip and are searching for information that will enable them to get to the next point. The bus-stop signpost also provides users with information about MARTA bus services, which is currently absent.<sup>24</sup> People tend to avoid things they do not understand, and without any information on what buses are arriving, when they are arriving, and where they go, a person has no reason to use the MARTA bus system. Beltline intends to provide the absent information for the buses and to design the signage under *The Atlanta Unified Transit Program* branding scheme. The idea is to present the user with a distinctive and unified system of travel, and with the branding scheme applied to the bus-stop signposts, people will associate the buses with the comprehensive *The Atlanta Unified Transit Program*, and subsequently be more inclined to ride the buses. (Appendix 14)

The directional signs are a more straightforward example of signage. The function of the directional sign is to gesture to the user the whereabouts of various places within the local area. The directional sign communicates with the following items: arrows, symbols and textual descriptions. Often, each of these items is included to guide the user in the right direction. The most common example of a directional sign is the green street sign that is located on every road intersection in America. (Appendix 17)



*The Public Transit Map and the Micro-Detailed Local Map*

The Thirty Minute Map represents the setting where the user walks, but a map is needed to represent the public transit system. The ‘Public Transit Map’ is the representation that joins the public transit systems, or the trains and trams. The Public Transit Map can also be viewed as a unified whole that represents the area covered by the fragmented Thirty Minute Maps. In a typical journey, a pedestrian will walk from his or her home to board a transit line, then exit the transit system, and then walk to his or her final destination. The user’s map usage would normally follow this pattern: a Thirty Minute Map, a Public Transit Map, and then another Thirty Minute Map. The Public Transit Map will be simple, as the limits to the transit system’s scope. A graphical box (on a Public Transit Map positioned outside of station) will represent the location of the user and the location of the Thirty Minute Map in relation to the whole of Atlanta.

(Appendix 11)

The Micro-Detailed Local Map will only be presented on Thirty Minute Map kiosks. The information provided by this map will only be supplementary to a Thirty Minute Map, but with more detail. The Micro-Detailed Map is basically an enlarged portion of the Thirty Minute Map. The Thirty Minute Map simplifies certain features of the local area, such as conforming the roads to the same width, but the Micro-Detailed Maps, for example, represents the true widths of roads and display information that a Thirty Minute Map might not, such as driveways and detailed parking lots. (Appendix

13)

### *Use of Pictograms and Fonts*

Pictograms in wayfinding provide a succinct non-verbal form of communication. Peter Wildbur elaborates, “Pictograms have one essential value when carefully designed and applied which is that they bypass language barriers.”<sup>25</sup> This is especially important for tourists, immigrants and native Atlantans with low-literacy skills. The use of public transit is very common among tourists, in particular, and pictograms make it easier for them to find their way. The pictograms assist users who have a problem comprehending the verbal forms of communication, such as titles and descriptions.

In the 1970s, the American Institute of Graphic Arts (AIGA) conducted an extensive study on pictograms for the United States Department of Transportation. The focus of the study was to develop pictograms to be used in transit stations and airports. Through numerous focus group studies, the design team narrowed down the pictogram set to what some considers being the perfect set of transportation icons.<sup>26</sup> The design of the pictograms is highly legible, and is often referred to as the ‘Helvetica’ of pictograms. The study uses an international standard for pictograms so that travelers in a foreign land can have recognizable tools to find their way. Even if one disputes this view that these icons are perfect, they are used all over the world and people of many cultures recognize them. I have adopted this standard of pictograms to honor the AIGA’s vision of cross-national communication. This is possible because these pictograms are public domain; therefore, they can be used by anyone without penalty of copyright infringement.

(Appendix 20)

In addition to non-verbal communication, the wayfinding program will also use verbal references, such as place names and textual directions. Although pictograms are able to transcend language difference, users still rely on textual directions more often than symbols. (Wildbur 1989)

The type choice for the Beltline is a font family designed by Adrian Frutiger called Humanist 777. It is a humanist sans-serif font that is modern and highly legible. It comes in several weights and styles, and provides enough variations for the branding scheme and wayfinding requirements. Overall, it is not as rigid of a font as Helvetica, yet still appears to be modern and inviting; and it also carries a serif variation for large bodies of text in. The versatility of this font is very desirable. (Appendix 19)

### *Branding Theme*

The branding of *The Atlanta Unified Transit Program* reflects the Beltline's devotion to sustainable development and its three foundation pillars: greenspace, transportation and economic development. These concepts fall into the spectrum of eco-friendly new-urbanism, and the organic color of green has been chosen to dominate the color scheme. Five 4-color process colors have been selected: Pantone 301 (a dark green), 300 (a medium green), 302 (a bright green complement to 301), 309 (a bright yellowish-green) and 290 (a light bluish-green). These colors were selected to create a bridge between the organic and the modern. A preference for the modern, referencing the modern look of many cities, such as Berlin, is infused with organic green colors and curved shapes to form an abstract visual style that presents a welcome change of the

contemporary American city. This branding scheme can suggest a natural flow of development (which is organic), like plant growth, being regulated by logical urban planning (which is modern and organized). An additional graphic element will be added to create a layering effect to represent the complexity of organic development. That graphic style will be a pixilated (block of squares) gradient of two of the above-mentioned greens. This is to represent the modern façade gaining control over the random pattern of organic growth (or new-urbanism moderating natural development). The pixilated gradient also represents a weave, which symbolizes the ‘weaving in’ of a new transit program into the larger Atlanta transit infrastructure. (Appendix 19)

In the spirit of the organic theme, only an off-white color should be used, in lieu of white. This is intended to give a subdued contrast to a corporate bright white. A 4-color process tan will also be used in the branding scheme to enhance this idea. This tan color is Pantone 1-9. Printing all company collateral on uncoated paper also would display a natural quality. The signs, however, might not be able to meet these preconditions, as organic fibers cannot withstand the elements. The last component to the branding scheme is to use a curved shape in at least one side of the company collateral or signs. This is to soften the harsh edges of modernist design.

## 5. The Approach of this Thesis

### *Making Order Out of Chaos*

Atlanta is a perfect setting for the study of the integration of a wayfinding program for cities that have taken on a variety public transit proposals. The term, ‘randomly developed area’, refers to those areas that have developed according to market-based forces in lieu of any sustainable or logical urban planning. The name, “randomly developed area,” implies Passini’s third organizational principle: ‘a random organization.’ I use this term to describe the market-based or capitalistic style of development that is common in many American cities. This style of development occurs when some entity develops a block of land with the sole purpose of creating a personal or individual financial goal, often without much consideration for the area in which it happens. Without any consideration about what happens developmentally within a city, the resulting development over time becomes functionally malformed with limited room for new advancements or reconfigurations. Individual property rights, in general, exacerbate this problem, which results in market-based development eliminating logical urban planning. Most American cities share this problem, and Atlanta is a prime example. Rutheiser explains that Atlanta was “developed as an “accidental city” with what can generally be described as “a laissez-faire approach to planning.”<sup>27</sup> Rutheiser describes an environment where there were virtually no limits for development by independent entrepreneurs during most of Atlanta’s history.<sup>28</sup> Aside from the planning of a loose street grid in the nineteenth century, Atlanta has seen most of its development

come randomly through commercial trends and cultural pressures.<sup>29</sup> Probably the most significant development came during the ‘white flight’ out of Atlanta into the suburbs during the 1960s. Sparked by desegregation, the ‘white flight’ spawned the suburban and exurban culture that currently dominates Atlanta development, and this development is the cause of the traffic and transportation woes that plague Atlanta. The movement of most of Atlanta’s population to the outskirts of the city reduced the population density within the city center, but also expanded the metropolitan region immensely. This is important because it eroded the feasibility of public transportation for two reasons: first, public transit cannot provide a cost-effective option for a community with a lower-density population,<sup>30</sup> because the high cost of production for a transit system will not allow the city to reap any gains because of the low ridership, and second, the ‘white flight’ generated a new segregation between poor intown residents and wealthy suburbanites would have been threatened by a public transit system that enabled the poor intown residents to move around the whole city more freely. This segregation was thought to keep crime low in suburban neighborhoods, but its real consequence was the exacerbation of the traffic crisis in Atlanta.

A traffic crisis is felt in Atlanta as population expansions, urban sprawl and car culture make commuting unbearable. Atlanta drivers spent over 67 hours being stuck in extreme traffic congestion in 2004.<sup>31</sup> According to the Atlanta Journal-Constitution newspaper, two million new residents are expected to join Atlanta’s population by 2030, which will cause the air quality and traffic congestion to be even worse.<sup>32</sup> This realization is motivating the regional government and independent developers to rethink

the strategy of sprawl and to promote and develop housing and commercial districts within the center of the city. This relocation to the center, in itself, will not reduce the traffic crisis in Atlanta, but it will, however, dramatically increase the population density within the city center. The higher density within the city center will make public transit more feasible because it will produce a higher possible ridership, and more income generation, as many of the new intown residents will switch from cars to public transit, assuming that a feasible public transit system exists. The problem with developing a feasible public transit system in Atlanta is that there are only a few inconsistent precedents for it. Random development within cities often causes structural problems that can make planned development projects nearly impossible to realize. The developer of the public transit system has to work around any possible structural problems and force a system into an imperfect environment. Once the developer has solved all necessary problems to physically integrate the transit system into the random city environment, consideration must be given to the reality that any transit system produced in a randomly developed area will probably be difficult to communicate to a potential user. The charge of the designer of a wayfinding program is to enable the user to understand and function within the public transit system. In other words, the designer should make order out of what appears to be chaos.

#### *Ad hoc Application of Wayfinding Design*

The designers of a public transit system and the wayfinding program that supports it have to improvise with the urban development already in place. Very often, a

comprehensive transit system is the combination of several smaller transit systems working together. In the case of the Beltline, a new tramline will meet with the existing MARTA buses and trains to expand the scope of public transit in Atlanta. One can assume that public transportation will be initiated in a step-by-step method as growth begins to make traffic and pollution intolerable. This step-by-step approach would probably reflect the classic American market-based approach to development. Rather than being created with a unified plan, smaller transit initiatives will be slowly introduced into Atlanta to relieve traffic congestion when possible, step-by-step. Both local government and privately funded sources will create these initiatives, with the possibility of little federal intervention.

Communicating with users will be complicated because a wayfinding program will have to make several disparate transit systems connect with each other. My wayfinding program serves as a bridge between the disparate transit systems, providing users with seamless information that will enable them to travel between the systems with as much ease as possible. The step-by-step development of a transit system indicates that new components appear over time, as needed or as affordable. Often these components will even be completed under different operational bureaucracies. If different companies operate different components of a unified transit system, the wayfinding program is even further compromised because each company will have its own branding scheme and informational system.<sup>33</sup> A unified approach to branding and wayfinding design is obviously the best possible solution to creating a seamless wayfinding program that will enable users to navigate through the entire transit system. However desirable it is to



apply a blanket wayfinding program to every component within a system, one must assume that each operational bureaucracy will have a vested interest in maintaining its branding scheme and informational system and be unwilling to accept a new unified branding scheme.

I find the benefit of producing a thesis such as this one is that it provides a ‘lowest common denominator’ approach to designing for market-based public transit systems. This thesis assumes that a primary transit system (in this case, MARTA) will provide the initial foundation of the public transit system, but will be unwilling to participate in a new branding scheme and wayfinding program, and will probably have an insufficient information system. Therefore, consideration must be given to the possibility that there may be no wayfinding program available for the initial transit system, and even if a wayfinding program existed, it would not support the introduction of a secondary system such as the Beltline. When a new component to a transit system is introduced, an opportunity to reinvent the identity of the entire system presents itself. This is mostly a positive opportunity as a refresh of the transit identity can be an essential component to the revitalization of the perception of relevance for the transit system. MARTA, for example, has supplied Atlanta with basic public transit since the early 1970’s, but has failed in gaining substantial ridership. Reasons for this include (1) a limited travel scope, (2) poor wayfinding maps, (3) inadequate signage, (4) low frequency of trains and buses, (5) racism, and (6) low population density. Currently, the MARTA is poorly perceived by most Atlantans.<sup>34</sup> Because of poor information provided by the MARTA, most Atlantans do not know how to use the bus system, and the train system only provides a

limited service that is inaccessible to most of the city. Recently, MARTA has shown no visible attempt to provide essential information that would enable users to better understand how the MARTA system works. For example, the MARTA bus-stop posts rarely show which buses arrive, and when they do, they still do not display arrival times nor do they display destinations. Why would a potential user want to take public transit if they do not know where it goes, when it will arrive, or how it works? In short, MARTA has failed to provide the essential information that makes public transit function; and any future component should want to address these problems so that a full transit system can be offered to Atlantans.

A new component of a public transit system, such as the Beltline, will want to make all possible use out of the existing system. The new component will want to present itself as a seamless partner with the existing system because it probably does not, on its own merits, serve most users' needs. It will work with the existing system to provide public transit that will feasibly serve the needs of the citizenry. The basic approach to bridging the transit systems is to develop a branding scheme and a wayfinding program that represents the entire public transit system. This is the goal of *The Atlanta Unified Transit Program*. There are three conditions a designer must consider when deciding on the appearance of the brand and wayfinding system: first, will the existing system want all components to adapt its graphical style, second, will the existing system want to adapt the new component's graphic style, or third, will each component of the system want to retain its own identity.

This thesis assumes that each component of Atlanta's public transit system will retain its own brand. This may seem problematic because the retention of several brands will distort the seamless appearance of the comprehensive transit system, but efforts can be made to overcome this obstacle. If no attempt to form a blanket graphical style for all components of the transit system is made, the new component (i.e. the Beltline) must assume the task of providing a dominant branding and wayfinding program that will overarch the existing transit component's (i.e. the MARTA) brand and informational system. This is not hard, in this case, because MARTA's brand is only visible at its stations, and even though it is represented, the architecture of the stations generally overshadows the brand. With the pedestrian/mass transit-focused wayfinding program I recommend, the branding and wayfinding scheme under *The Atlanta Unified Transit Program* will be very visible for potential users of public transit at any location. *The Atlanta Unified Transit Program* will be at virtually every point where a user might need it, including MARTA stations and bus-stops. The freestanding informational kiosk that will be located at MARTA stations, for example, will minimize the moderately visible MARTA brand. A freestanding kiosk that is designed fundamentally according to a strict brand is more noticeable, in terms of brand recognition, than a massive overpowering architectural structure that is decorated with small and vaguely branded signs. This branding and wayfinding program will provide most solutions that a public transit user might need to navigate through the public transit system. In short, my proposal for *The Atlanta Unified Transit Program* assumes an overarching role in providing all wayfinding information for every aspect of the Atlanta public transit system.

## 6. Conclusion

Large American cities are facing tough choices about how to best deal with their acute transportation crises. Whether because of traffic congestion, the threat of global warming or the effects of carbon monoxide-based air pollution, many American cities will be introducing transit proposals that will provide alternatives to what is essentially a transportation infrastructure that only provides support for cars. With reasons that encourage public transit relating not only to political awareness, but also to convenience, the number and range of Americans that will support public transit is dramatically increasing.

This thesis provides a prototype for designing wayfinding programs in contemporary American cities. In lieu of logical urban planning, most American cities have developed according to capitalistic principles, with random development, which result in an organic, but uncontrollable sprawl. This thesis promotes new-urbanism planning into what is essentially unrestricted capitalistic development. As new public transit initiatives are created, a new signage and informational system can be developed to impose a logical system for navigating through all of a city's various mismatched pedestrian paths and transit systems. With large map kiosks, a city's residents can form a 'public image' so that they may gain knowledge of the city that they might not have while driving. The goal is to empower the commuters within American cities with the information that will allow them to make the choice whether or not to abandon their cars in favor of eco-friendly sustainable public transportation. The beauty of this system is

that it does not necessarily require any socialist-style planning to work. The program can still function under capitalist developmental model, albeit with some coordinated group of loosely networked developers. My program also suggests that a small entity can make order out of a system with or without the help of large bureaucratic organizations (i.e. the Beltline producing an overarching wayfinding program for all of Atlanta). Certain proposals, such as the one I have suggested for the Beltline, can inspire ordinary citizens to take on proposals that they think will make their lives better and their environment more livable. My Beltline proposal, or *The Atlanta Unified Transit Program*, can be applied to many other American cities that are currently considering adopting public transit.

## Notes

<sup>1</sup> Information for wayfinding will either be of a spatial nature or of a sequential nature. Information of a spatial nature generally provides a user with an overall picture of a situation. The common function of spatial information is to enable the user to develop a ‘cognitive map’, or a mental picture of the geographic area. Maps and other diagrams usually provide spatial information. Romedi Passini, “Information Design: An Old Hag in Fashionable Clothes,” *Information Design*, ed. Richard Jacobson (Cambridge, MA: MIT, 1999) 89-91.

<sup>2</sup> Sequential information provides tasks or knowledge in a linear order that will allow users to go from one point to another. This is often used in places where a cognitive map is difficult to form. Passini 89-91.

<sup>3</sup> Ryozo Takeyama, “Standardization of the Information Design in Public Transportation Facilities,” 6<sup>th</sup> Annual Asian Design Conference, Tsukuba International Congress Center, 15 Oct. 2003, 2-3.

<sup>4</sup> Takeyama 3-5.

<sup>5</sup> Romedi Passini, “Information Design: An Old Hag in Fashionable Clothes,” *Information Design*, ed. Richard Jacobson (Cambridge, MA: MIT, 1999) 88.

<sup>6</sup> Passini 88.

<sup>7</sup> Passini 89-91.

<sup>8</sup> Passini 90.

<sup>9</sup> United States, Transportation Research Board, *TCRP Report 12: Guidelines for Transit Facility Signing and Graphics* (Alexandria, VA: National Academy, 1996) 4.

<sup>10</sup> David Canter, “Wayfinding and Signposting: Penance or Prosthesis?” *Information Design: The Design and Evaluation of Signs and Printed Material*, eds. Ronald Easterby and Harm Zwaga (Bath, UK: John Wiley & Sons, 1984) 249-251.

<sup>11</sup> Kevin Lynch, *The Image of the City* (Cambridge, MA: Harvard, 1960) 46.

<sup>12</sup> Lynch 46.

<sup>13</sup> Lynch 46.

<sup>14</sup> Lynch 46.

<sup>15</sup> Romedi Passini, “Wayfinding: Backbone of Graphic Support Systems,” *Visual Information for Everyday Use: Design and Research Perspectives*, eds. Harm J. G. Zwaga, et al. (Philadelphia: Taylor & Francis, 1999) 245.

<sup>16</sup> Referred to ‘spatial organization’ by Passini 1999, but also referred to as ‘spatial planning’ by the Transportation Research Board Executive Committee 1996.

<sup>17</sup> Passini 247.

<sup>18</sup> Passini 248.

<sup>19</sup> United States 11.

<sup>20</sup> Passini 247.

<sup>21</sup> Kevin Lynch, *The Image of the City* (Cambridge, MA: Harvard, 1960) 48.

<sup>22</sup> Mijksenaar 214.

<sup>23</sup> O'Neill has argued that "You Are Here" maps should be orientated so that the top of the map should show what is in front of the user, for example. Michael J. O'Neill, "Theory and research in design of 'You Are Here' maps," *Visual Information for Everyday Use: Design and Research Perspectives*, eds. Harm J. G. Zwaga, et al. (Philadelphia: Taylor & Francis, 1999) 232.

<sup>24</sup> The MARTA bus system is a very important component of Atlanta's transit system because it has a vast travel scope, even surpassing the MARTA trains and Beltline trams.

<sup>25</sup> Peter Wildbur, *Information Graphics: A Survey of Typographic, Diagrammatic and Cartographic Communication*, (New York: Van Nostrand Reinhold, 1989) 21.

<sup>26</sup> Wildbur 26-28.

<sup>27</sup> Charles Rutheiser, *Imagineering Atlanta* (USA: Verso, 1996) 139.

<sup>28</sup> Rutheiser 144.

<sup>29</sup> Rutheiser 139.

<sup>30</sup> The term density is taken from *Sustainable Cities*. Joel Woodhull, "How Alternative Forms of Development Can Reduce Traffic Congestion," *Sustainable Cities*, ed. Bob Walter, et al. (Los Angeles: Eco-Home Media, 1992) 170-171.

<sup>31</sup> David Pendered, "Another day, a new vision." *Atlanta Journal-Constitution* 11 Sept. 2005:  
<[http://www.ajc.com/sunday/content/epaper/editions/sunday/metro\\_34326dfb71fa21611052.html](http://www.ajc.com/sunday/content/epaper/editions/sunday/metro_34326dfb71fa21611052.html)>.



<sup>32</sup> Pendered

<[http://www.ajc.com/sunday/content/epaper/editions/sunday/metro\\_34326dfb71fa21611052.html](http://www.ajc.com/sunday/content/epaper/editions/sunday/metro_34326dfb71fa21611052.html)>.

<sup>33</sup> I use the term ‘information system’ here to define information design that might not be comprehensive enough to provide sufficient information for a user.

<sup>34</sup> Many local weekly magazines criticize MARTA’s service and represent the negative views held by Atlanta’s citizenry. The negative views are common knowledge. *Creative Loafing* (a free weekly Atlanta magazine) represents much of the criticism of MARTA. For an example of the many negative MARTA articles represented in the *Creative Loafing*, see: Michael Wall, “Waiting for a Ride: The racial reality behind MARTA’s downward spiral,” *Creative Loafing* 20 Apr. 2006: 32-36.

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## **Appendix 1. General Information about the Beltline**

The Atlanta Beltline is a set of railroad tracks that encircle the heart of in-town Atlanta. The tracks were known, since the early twentieth century, as the Beltline, a twenty-two mile set of commercial railroad tracks. These tracks are currently being converted into a tramline with adjacent parks and paths for further pedestrian travel. There are three pillars in which the Beltline is founded: transportation, greenspace and economic development. The Beltline promotes in-town living by providing easy travel around the city and creating commercial and residential districts in which to promote urban life. These districts will bring more intown residents, therefore increasing the ridership of public transit within Atlanta.

The Beltline is the first public transit project being introduced into intown Atlanta since MARTA, and Atlanta has been historically, car-oriented. Known for vast suburbs and unpredictable development and growth, Atlanta has not seen the logical urban planning that encourages the development of a unified vast public transit system despite its large size of more than four-million inhabitants. This is not to say that there are no public transit options. The largest option is MARTA, which is a system of two rail-lines and over a hundred bus lines. The two rail-lines meet perpendicularly and, naturally, do not access most of Atlanta. The buses are infrequent and most people do not know where they go. The new transit option, the Beltline, would be a tramline that would encircle in-town Atlanta, therefore providing a crucial new line that would join with MARTA to give Atlantans a more substantial public transit option.

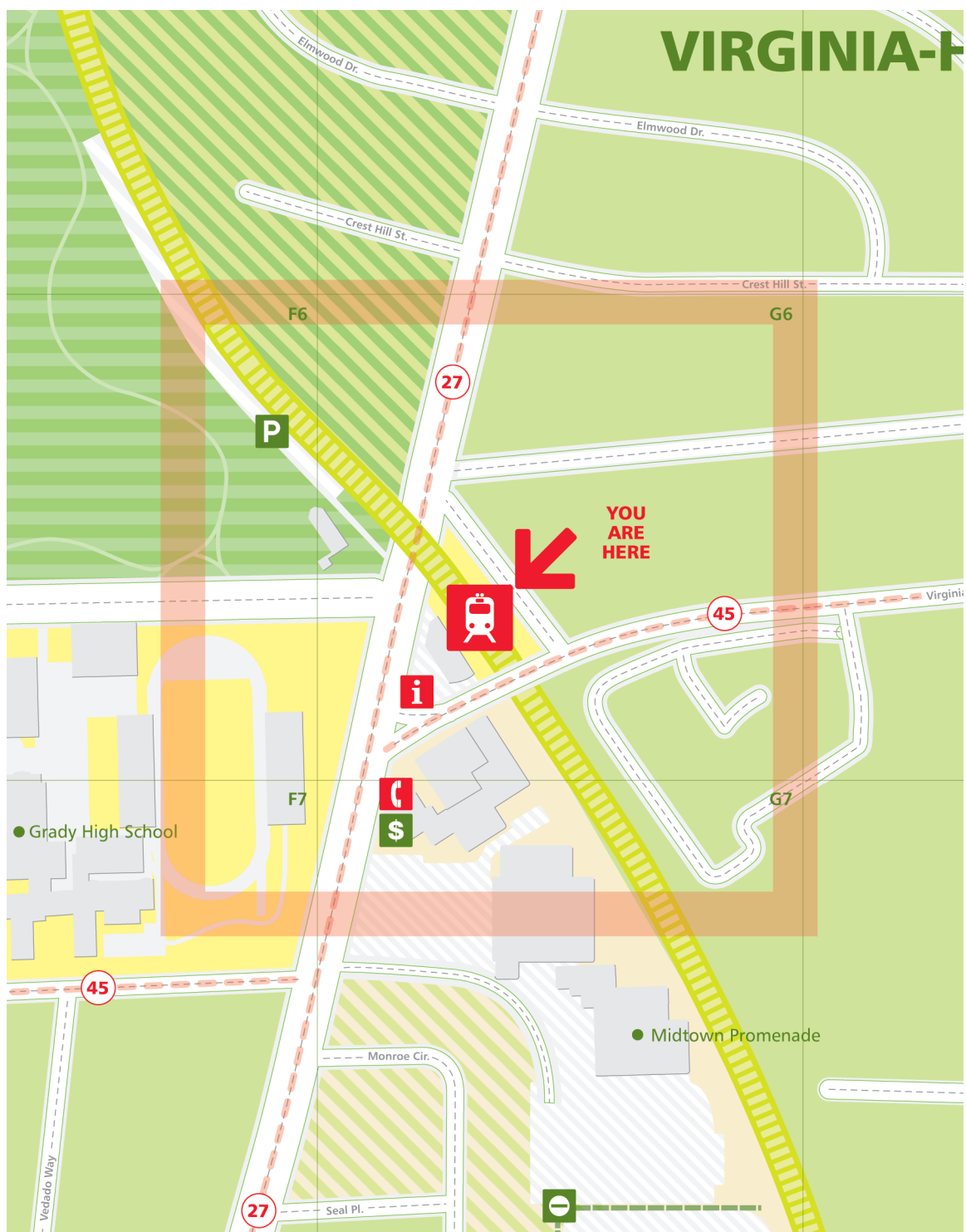
## Appendix 2. Thirty Minute Map

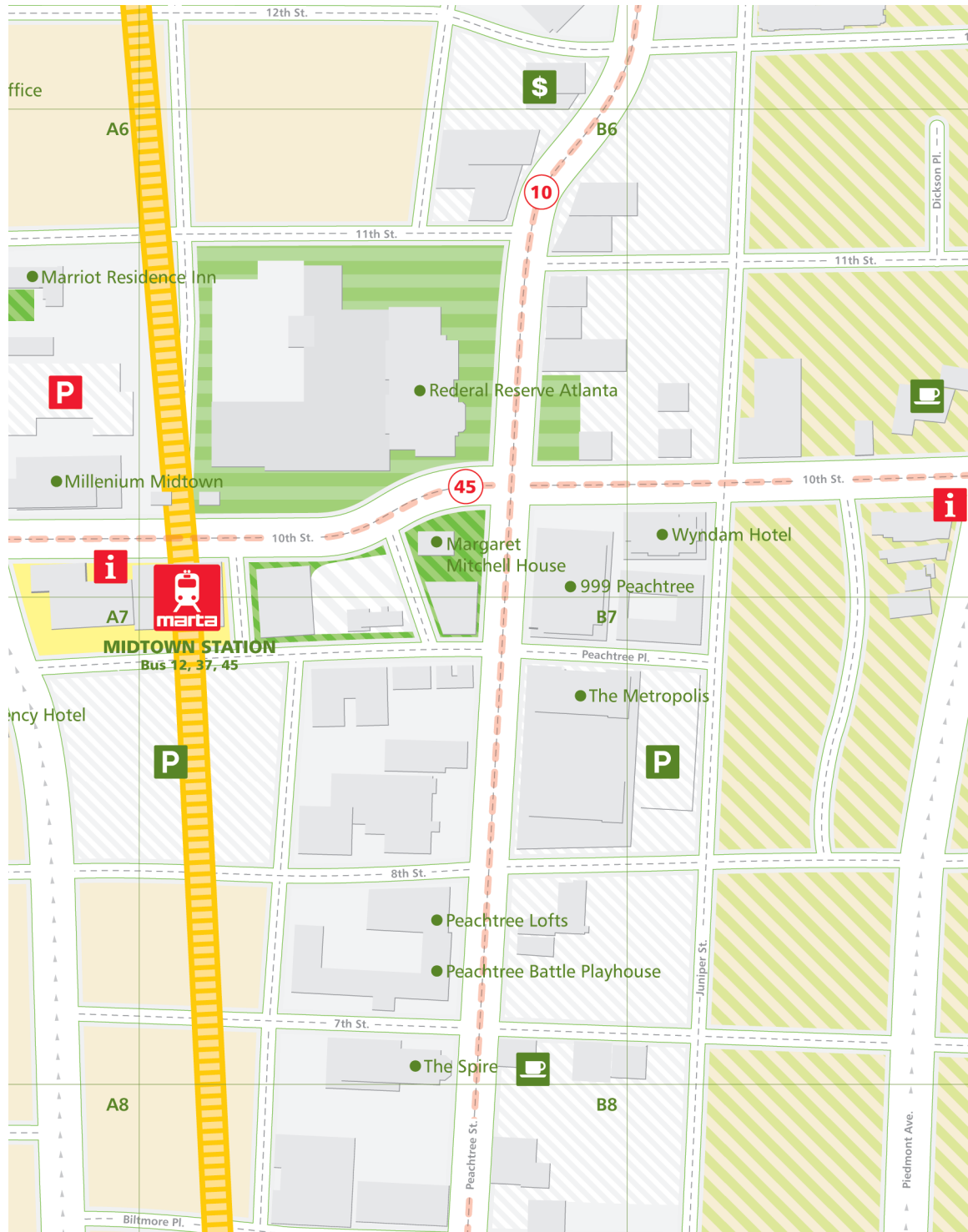


25"

width = 2', 1" x height = 2', 1"

### Appendix 3. Thirty Minute Map - View 1 (Scaled to 100%)











## Appendix 6. Thirty Minute Map Kiosk - Two-sided Informational Display



### Appendix 7. Thirty Minute Map Kiosk - Alternate Back



## Appendix 8. Thirty Minute Map Kiosk - Legend

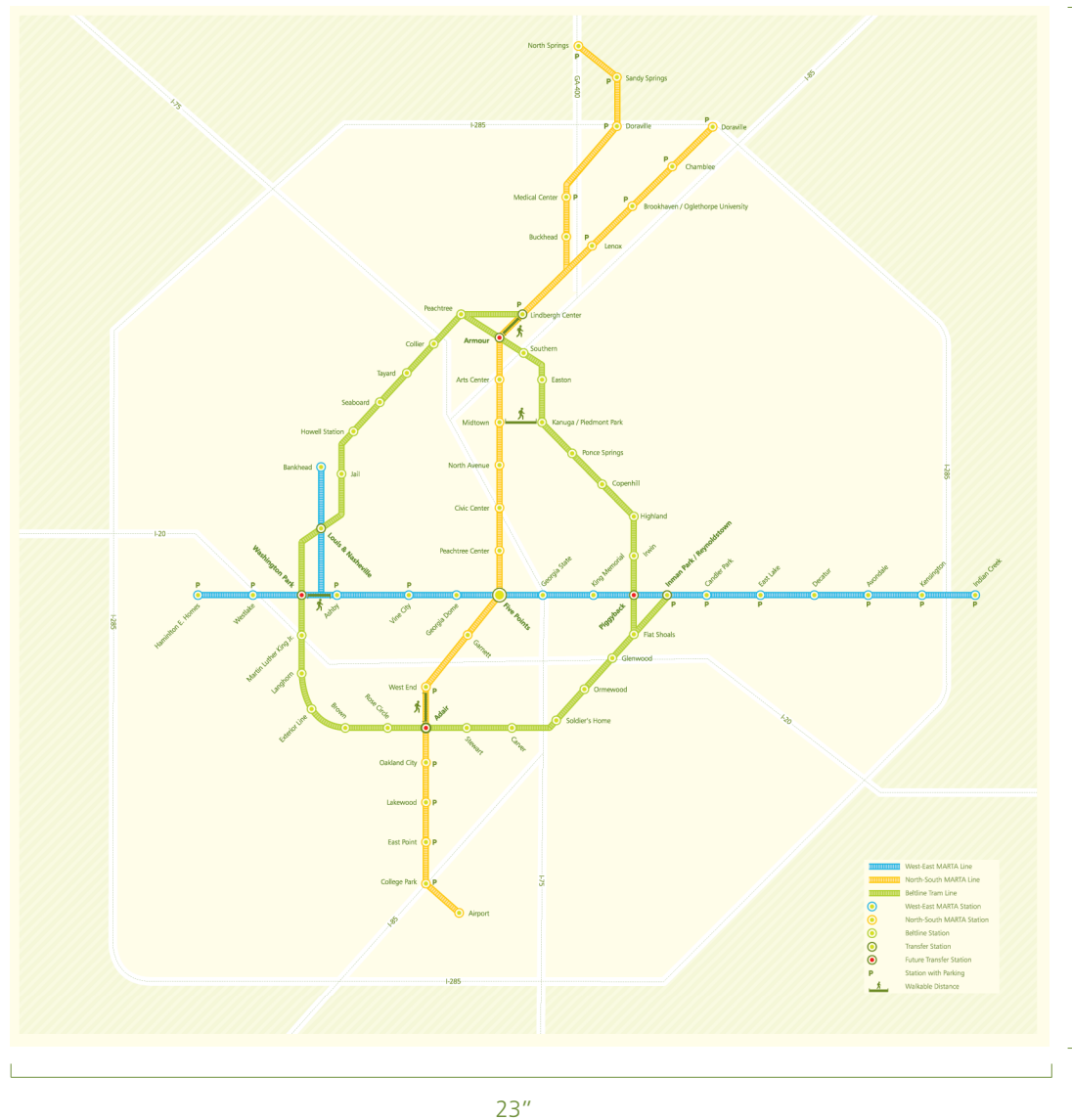
Map Legend	
	Residential and Park Mixed
	Residential and Commercial Mixed
	Parking Lot
	Major Urban Area
	Commercial Area
	Governmental Area
	Residential Area
	Under-developed Area
	Private Park Area
	Public Park Area
	Forest Area
	Large Body of Water
	Beltline Tramline
	West-East MARTA Trainline
	North-South MARTA Trainline
	Major Road
	Road
	Major One-Way Road
	One-Way Road
	Road with a Busline
	Park Road (prohibited to non-commercial)
	Park Trail
	Barrier

## Appendix 9. Thirty Minute Map Kiosk - Street Listings

Local Streets			
B8, E8	Fifth St.	E1, F2	Avery Dr.
B8	Sixth St.	D3	Barksdale Dr.
B7, D7, F7	Seventh St.	D1, E1	Beverly Rd.
A7, D7, F7	Eighth St.	B8	Biltmore Pl.
D7, E7	Ninth St.	H1	Bridal Path
A6, E6, G6	Tenth St.	H4	Brookridge Dr.
A6, D6	Eleventh St.	E6, F8	Charles Allen Dr.
A5, C5, D6	Twelfth St.	G6, H6	Cooledge Ave.
A5, D5	Thirteenth St.	H3, H4	Courtenay Dr.
A5, D5	Fourteenth St.	B5, B6	Crescent Ave.
A5, D5	Fifteenth St.	H5	Crestridge Dr.
B3	Sixteenth St.	H5, 65	Cresthill St.
A3, B2	Seventeenth St.	G1, H1	Cumberland Cir.
A2	Eighteenth St.	G1, H1	Cumberland Pl.
A2	Nineteenth St.	G1, H1	Cumberland Rd.
A8	Abercrombie Pl.	B7, B8	Cypruss St.
G4, H4	Amsterdam Ave.	C6	Dickson Pl.
H7	Adair Ave.	B1	Don Custer Dr.
D1	Ansley Dr.	H7	Drewery St.
D7, D8	Argonne St.	E7, E8	Durant Pl.
A8	Armstead Pl.	F3, G3	Dutch Valley Pl.



## Appendix 11. Full System Map

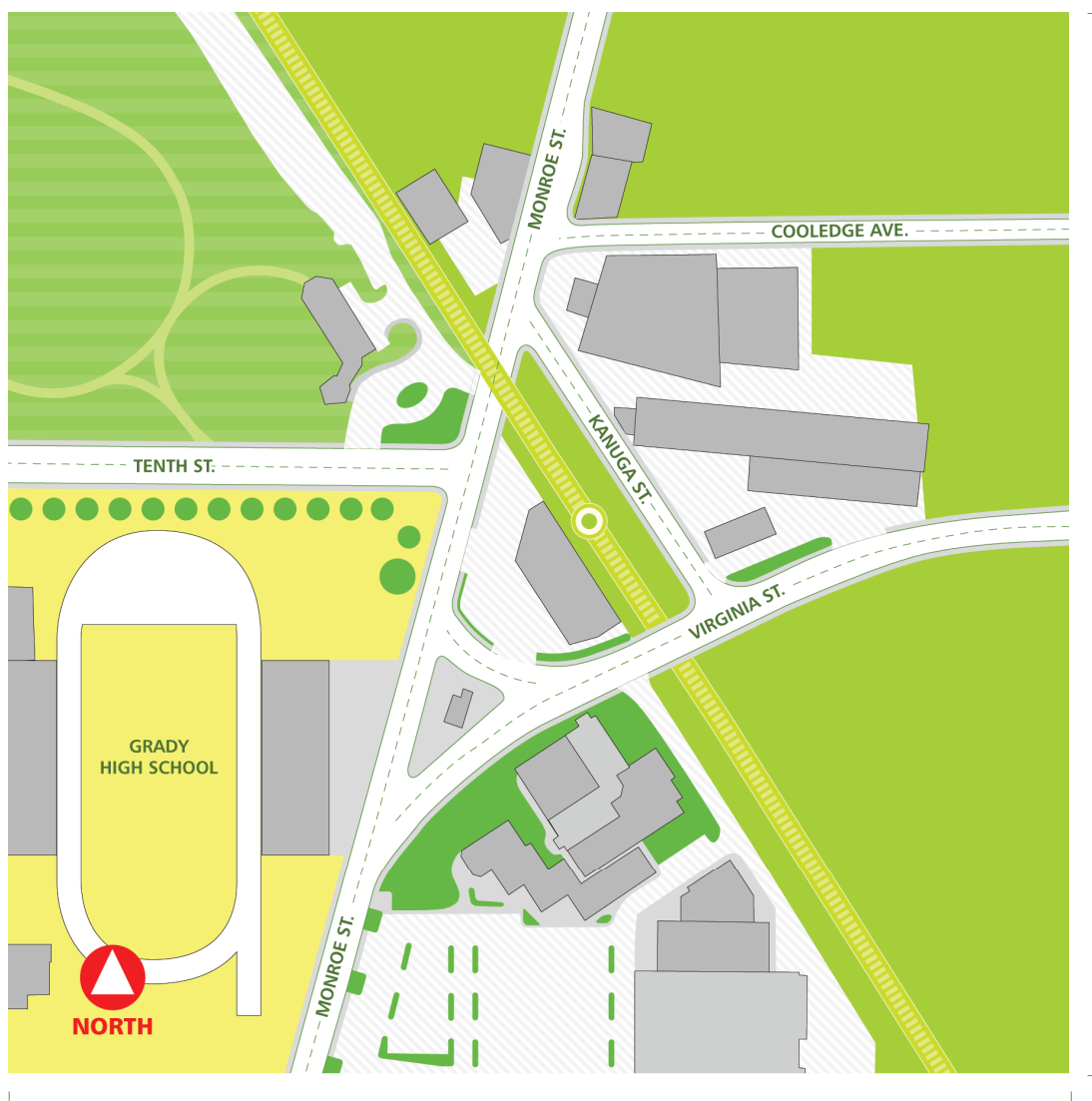


width = 23" x height = 23"

## Appendix 12. System Map - Close-up



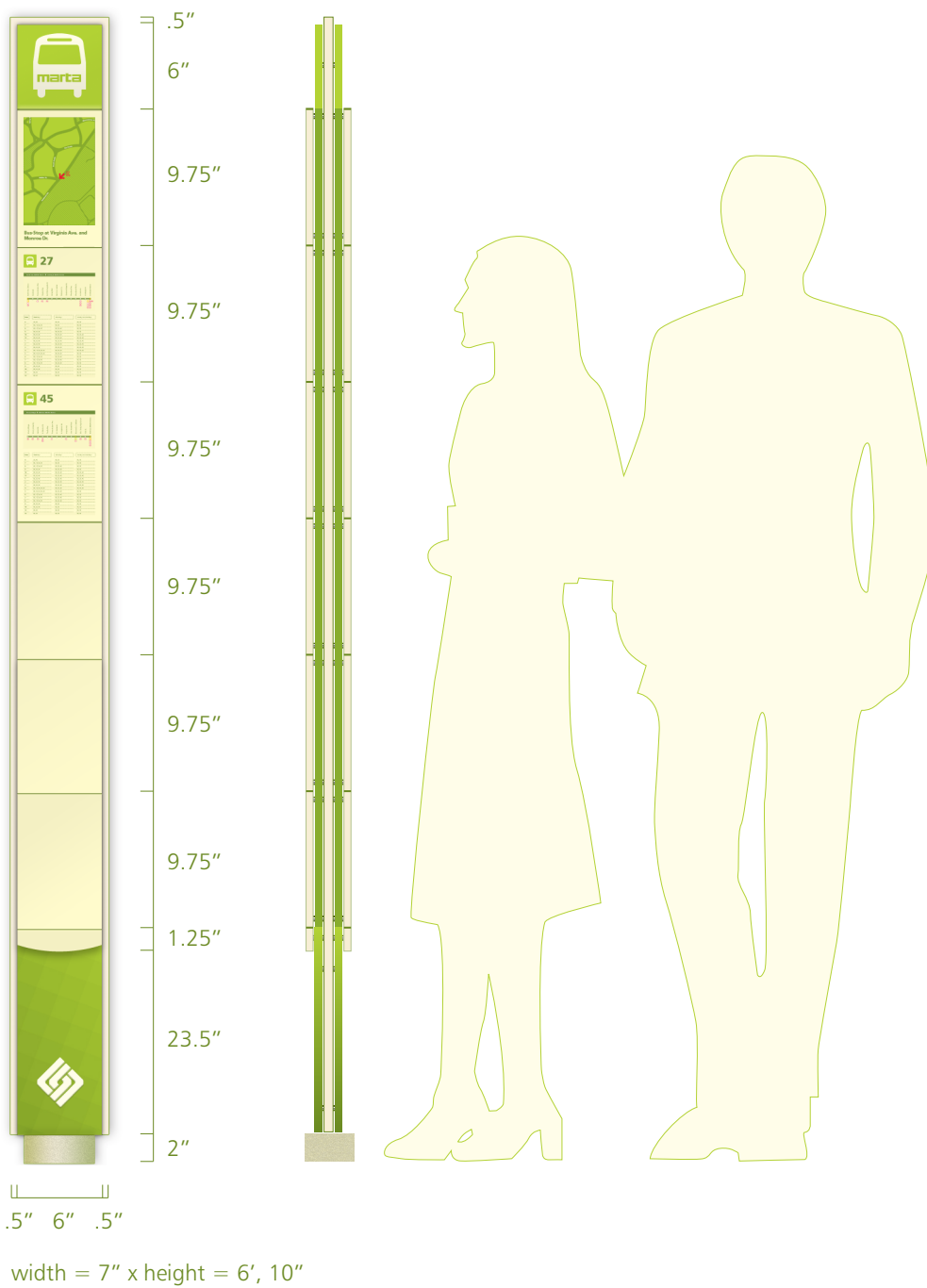
### Appendix 13. Micro-Detailed Map



6"



## Appendix 14. Bus-Stop Post



Appendix 15. Bus-Stop Informational Panel



9.75"

6"

width = 6" x height = 9.75"

## Appendix 16. Bus-Stop Map Panel



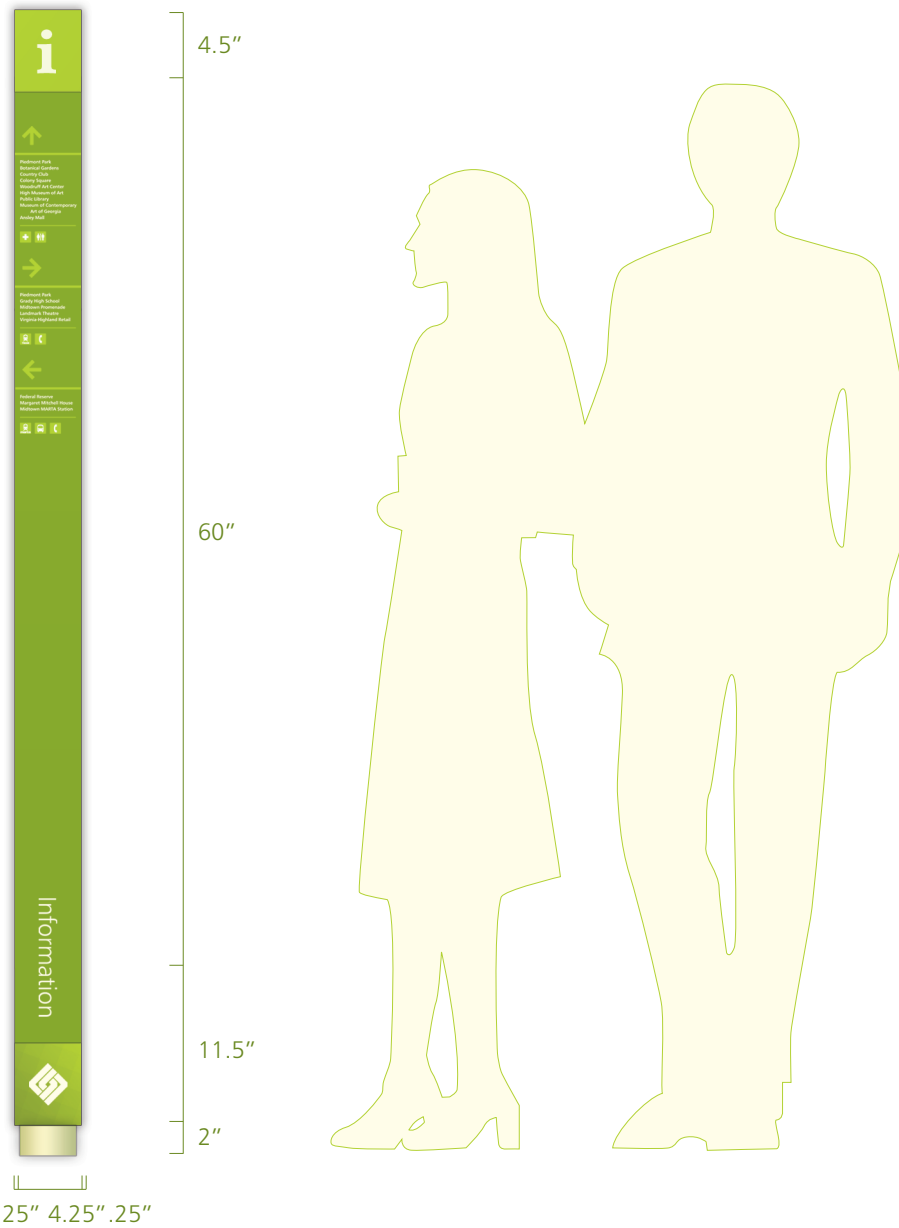
Bus-Stop at Piedmont Rd. and  
South Prado.

9.75"

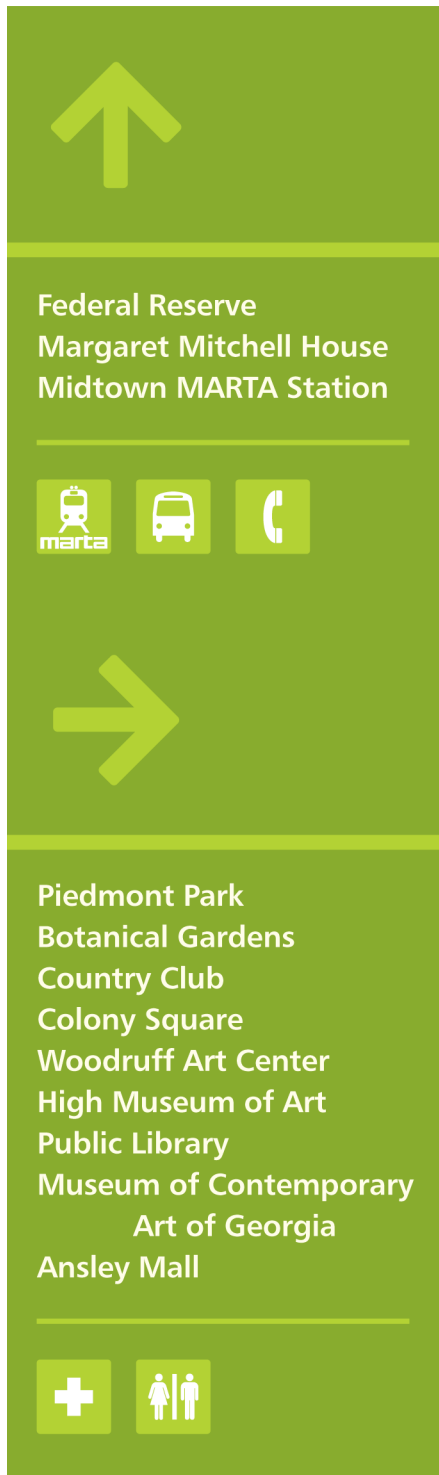
6"

width = 6" x height = 9.75"

## Appendix 17. Directional Sign - Four-sided Informational Display



## Appendix 18. Directional Sign - Close-up



## Appendix 19. Branding Scheme

### Pantone '4-Color Process' Colors

301-1	*-1	*-3	*-5	*-7
300-1	*-1	*-3	*-5	*-7
302-1	*-1	*-3	*-5	*-7
309-1	*-1	*-3	*-5	*-7
290-1	*-1	*-3	*-5	*-7

### Gradient Pattern Theme

The gradient weave, below, can be rendered with any two of the above colors.



The background color is Pantone 1-9. (4-color)

### 'Humanist' Font

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 abcdefghijklmnopqrstuvwxyz

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 abcdefghijklmnopqrstuvwxyz

**ABCDEFGHIJKLMNOPQRSTUVWXYZ**  
**abcdefghijklmnopqrstuvwxyz**

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 abcdefghijklmnopqrstuvwxyz

ABCDEFGHIJKLMNOPQRSTUVWXYZ  
 abcdefghijklmnopqrstuvwxyz

### Logo



The Atlanta Unified Transit Program

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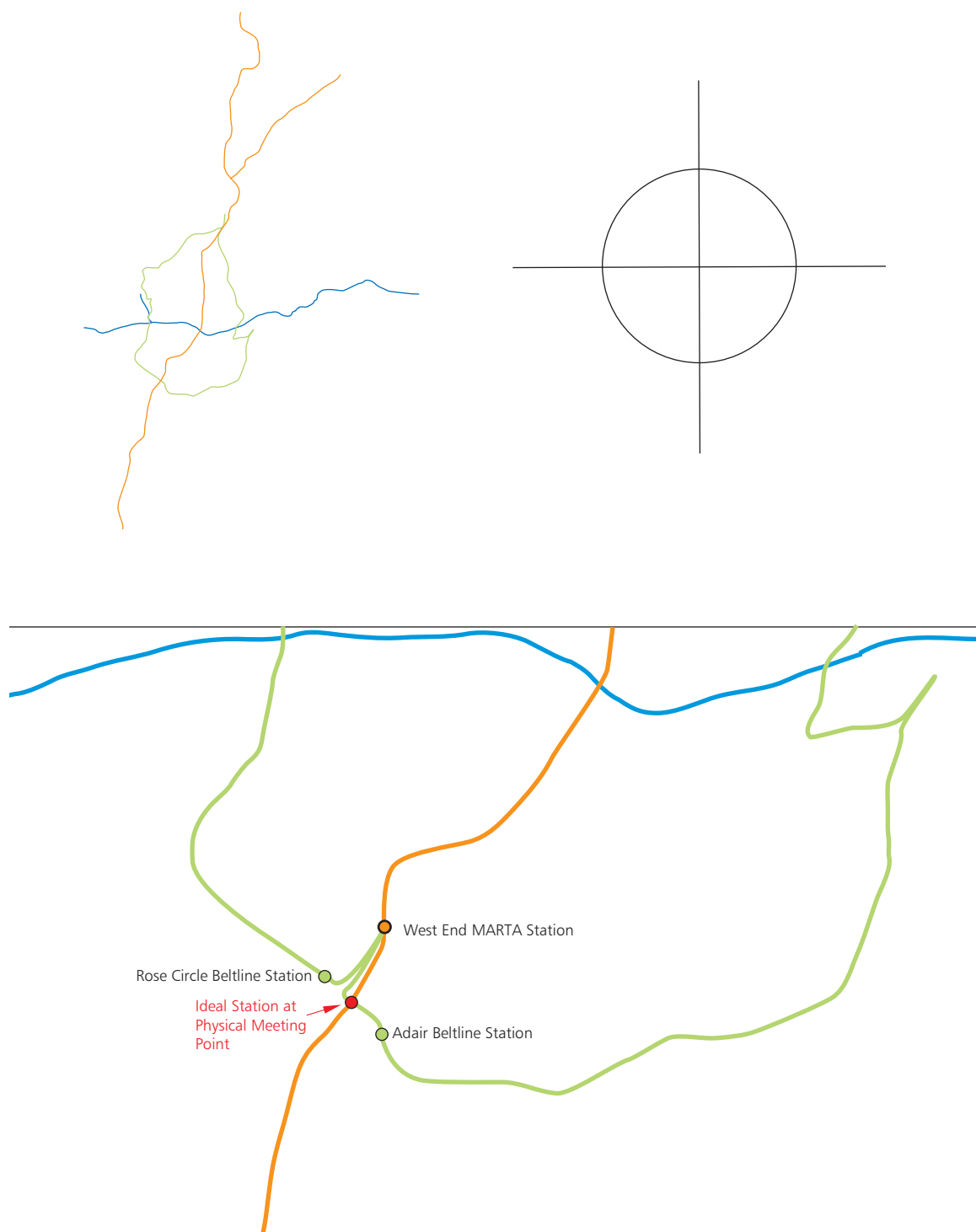
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## Appendix 20. Examples of Symbols



## Appendix 21. Considerations of Spatial Arrangement





## Appendix 22. Randomly Organized Circulation System in Midtown

