FLEET AVENUE PLANNING AND DESIGN STUDY EXECUTIVE SUMMARY REPORT

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DOCUMENTS AS SEPARATE ATTACHMENTS

Subsurface Investigation Report, Fleet Avenue Planning and Design Study, Prepared by Applied Construction Technologies, Inc. (ACT)

Phase I Environmental Site Assessment, Fleet Avenue, Independence Road to 65th Street, prepared by Floyd Browne Group (formerly Environmental Design Group)

Preliminary Engineering Drawing Set

Pulbic Meeting Survey and Responses

FLEET AVENUE PLANNING AND DESIGN STUDY • 06.2006

Project Purpose and Background

The purpose of this project is to study and address the traffic and transportation issues that pose serious obstacles to the revitalization efforts in the Fleet Avenue portion of the Slavic Village Neighborhood.

The City of Cleveland Planning
Commission (CPC) and Slavic Village
Development (SVD) have partnered to organize this project for this Cleveland neighborhood.

The project results in preliminary design and engineering drawings that propose a roadway and streetscape design that will accommodate existing and projected automobile, truck, bicycle, and pedestrian traffic in a balanced, aesthetically pleasing, efficient way through a variety of design tools including the implementation of traffic calming measures. Following this study, funds will be sought for the next phase of the project that will include final design, engineering, and construction drawings

Fleet Avenue is a prototype for what ails many of Cleveland's aging retail districts. Once the marketplace for the neighborhood, the primary role of the street has shifted over time to serving as a pathway for commuter traffic. An interchange with Interstate 77 near the westerly end of the study area helped create and perpetuate this condition. Although vibrant businesses remain, several businesses have closed or relocated over the years, leaving behind marginal stores and vacant storefronts. Fleet has lost much of its appeal as an environment that is inviting for strolling and shopping.

Recent developments near the study area will result in additional traffic on the street including automobile and, potentially, bicycle and pedestrian traffic. These developments include the construction of a new headquarters building for Third Federal Savings and Loan on Broadway Avenue to the east, the construction of The First Tee nine-hole golf course in Washington Park to the west, the designation/ construction of the Ohio and Erie Canalway Scenic Byway, the Towpath Trail, and the Cleveland Metroparks' Ohio and Erie Canalway Reservation -- also to the west. In addition, reconstruction of the Fleet Avenue Bridge across Interstate 77 was completed in 2005 and includes 10'wide sidewalks on either side of the bridge that were designed to allow conversion to a 5' sidewalk and a 5' bike lane on either side of the bridge. With these additions and attractions,

the time is ripe for the development of multi-modal linkages to them from Fleet Avenue and the Slavic Village neighborhood and for those passing through the area.

The project is funded by a
Transportation and Community and
System Preservation Pilot Program
(TCSP) grant from the Federal
Highway Administration (FHWA).
The CPC has undertaken this effort
in conjunction with the SVD, the
community development corporation
for the area.

Study Area

The study area for the Fleet
Avenue Planning and Design Study
includes the Right-of Way area
along Fleet Avenue in the Slavic
Village Neighborhood of Cleveland
extending from Independence Road
on the west to the intersection of E.
65th Street on the east. The study
area is approximately .66 miles
(3,500 feet) in length comprising
approximately ten blocks along Fleet
Avenue.

Methodology

The City Planning Commission (CPC) provided oversight of the project in conjunction with Slavic Village Development, the nonprofit community and economic development organization for the neighborhood. As partners in the project, they each provided representatives who directed the study and coordinated project matters with an Advisory Committee and acted as part of the Design Team along with the Consultant Team. The Advisory Committee was made up of representatives of the City, the State, the local community, and other disciplines thought to be helpful to the design process.

schmidtcopelandparkerstevens was chosen as the prime consultant, collaborating with Floyd Browne Group (formerly Environmental Design Group), DLZ Ohio, Applied Construction Technologies (ACT), and Studio Graphique to form a consultant team that provided expertise in the disciplines of landscape architecture, planning, civil engineering, traffic engineering, surveying, and geotechnical analysis. The team's combined expertise created detailed analysis and design solutions for Fleet Avenue, integrating pedestrian, bicycle, and vehicular transportation modes into the complex mix of existing commercial and residential uses along the streetscape.

The Consultant Team, the Design Team, and the Advisory Team met often throughout the process to review data and findings, discuss design ideas, and plan the direction of the project. Advisory Committee meetings were organized to review milestones throughout the design process and when feedback and expertise was required.

Slavic Village Development, in conjunction with the rest of the Design Team, organized a public meeting where existing condition data and analysis was shared along with the preferred alternatives that best fit the project requirements. The public meeting included local residents and business owners along Fleet Avenue and the surrounding community.

In response to the City's Request for Proposal, the Consultant outlined the following tasks to gather information, analyze the data, develop design studies, and, finally, provide solutions to the streetscape system along Fleet Avenue:

- Review existing project area documentation.
- Collect and analyze existing conditions data, including a visual site assessment and photographic documentation of the study area.
- Produce a site survey to be used to document existing conditions and to be used for developing the final drawings.

- Document environmental conditions through an Environmental Assessment Report.
- Gather and evaluate Geotechnical data from the study area.
- Review and analyze existing traffic data.
- Review and evaluate the streetscape cross-section alternative designs outlined in the Scope of Work.
- Propose additional alternative streetscape cross-section designs including new or combinations of alternatives outlined in the Scope of Work.
- Refine the streetscape crosssection alternatives and select a preferred alternative that is determined to provide adequate facilities for pedestrian, bicycle, and vehicular traffic and that provides a safe and visually pleasing environment. This refinement will be through a series of meetings with the Design Team, the Advisory Committee, and community feedback.
- Develop a detailed cost estimate for the preferred alternative.
- Prepare final Preliminary
 Engineering Drawings along with a Final Report.

Project Scope

The Fleet Avenue Planning and Design Study project focused on the improvement of a section of Fleet Avenue as a Slavic Village gateway. The physical characteristics of the Fleet Avenue right-of-way from Independence Road to E. 65th Street were studied in detail to design a logical and buildable design for the streetscape that included transportation enhancements. In addition, the design is required to provide for the enhancement of pedestrian and bicycle mobility while maintaining adequate vehicular access through the neighborhood and to establishments along the street in accordance with ODOT and City of Cleveland engineering, traffic engineering, and streetscape standards.

The first step in the project process was to study several alternative design solutions, evaluating their pros and cons, with the resulting final solution to be thoroughly studied and developed into preliminary engineering drawings and illustrative graphics that convey the design.

The Consultant team was presented four alternative designs in the Scope of Work that illustrated concepts for redevelopment of the 80-foot Fleet Avenue right-of-way cross-section. The four alternatives were developed in previous studies and discussions by the CPC, SVD, and interaction with the community. In addition, the Consultant was asked to consider additional alternatives that arose from studying the initial four alternatives.

Once all alternatives were considered, the Consultant, along with the rest of the Design Team and with input from the Advisory Committee, determined two Alternative street cross-sections that were presented to the Community for feedback. This process led to the final preferred alternative Fleet Avenue cross-section that was then used as the blueprint for developing a streetscape design for Fleet Avenue. The final products of this design process include preliminary engineering drawings and graphics to illustrate the design along with this report that outlines the process. Final approval of the project was through a process of review with the City of Cleveland's Mayor's Streetscape Advisory Committee and the City Planning Commission.

Supplemental documents that are considered part of this study and that are separate from this summary report include the following:

- Subsurface Investigation Report, Fleet Avenue Planning & Design Study, prepared by Applied Construction Technologies, Inc. (ACT).
- Phase I Environmental Site
 Assessment, Fleet Avenue,
 Independence Road to 65th
 Street, prepared by Floyd Browne
 Group (formerly Environmental
 Design Group, EDG).
- Preliminary Engineering Drawing set.

Additional support documents to this report are listed in the Appendix at the end of this report and as separate supplemental documents to this report in the Table of Contents.

Historical Background

The Fleet Avenue neighborhood developed between the original City of Cleveland (what we now call "downtown") and the equally-old town of Newburgh (which centered around Broadway and Miles). The future Fleet neighborhood was still farmland at this time and Fleet did not yet exist. The Newburgh Rolling Mill, established in 1856, led to some development in the Union-Aetna area east of Broadway.

up with homes for those who worked at the expanding mills and other industries and businesses to the east and west and Fleet had structures on about half of the lots. Six years later the neighborhood was roughly two-thirds filled, and by 1912 nearly all of the lots had been built upon. The neighborhood was overwhelmingly composed of frame, vernacular-style houses.

The Fleet neighborhood became home to many Polish immigrants (east of East 55th) and Czech immigrants



By the mid-1870s, streets had been laid out and the lots platted in the Fleet neighborhood. Fleet Avenue was known as "Fifth Avenue" at that time and extended only between present-day East 71st and East 48th and was not a through-street as it is today.

Although the area generally developed slowly, by 1892 the Fleet neighborhood was in the middle of a boom. Sub-divisions began to fill (west of East 55th). It became the center of Cleveland's Polish community, and Polish churches and social organizations were established here. The Poles established St. Stanislaus Parish in 1873, and built the impressive existing church in 1891. The Czechs were a smaller group in the area, but also established their own organizations and church. St. John Nepomucene was established in 1902 and the existing church was constructed in 1919. Both parishes

remain an important presence in the neighborhood today.

Fleet never developed a commercial district that provided a regional draw. This was because Cleveland's third-largest shopping district, East 55th and Broadway, was close by. Instead, neighborhoodoriented business were the mainstay of the Fleet neighborhood. Food-related stores were especially prominent -- grocery stores, meat markets, and bakeries -- along with such businesses as neighborhood motion picture theaters, taverns, and clothes, furniture, and hardware stores. Within the neighborhood, most of these businesses were located on Broadway or Fleet. A number of ethnic-oriented. food-related stores are still found in the neighborhood today.

By the late 1930s streetcars were the main mode of public transportation and serviced the neighborhood, although only on selected streets. The cars ran along Fleet Avenue only between East 49th and East 65th streets. At East 49th the lines turned north while at East 65th they turned south to Lansing. Broadway was also served by streetcar lines. The result of this streetcar pattern was that commercial development tended to occur where the lines ran and the building pattern along Fleet is good evidence of this.

Two events caused Fleet to change from a neighborhood-oriented street to a city thoroughfare. Before 1922, Fleet's eastern limit was East 71st Street. Between that date and 1937, it was extended eastward to Broadway. At the opposite end of Fleet, and parallel to East 49th Street, the Willow Freeway was constructed after World War II had ended. This predecessor of I-77 was designed with an entrance and exit at Fleet. Fleet had now become an important traffic route.

Most City neighborhoods experienced a decline after World War II as residents moved out to the suburbs. The Fleet neighborhood, however, managed to maintain many of the features of a pre-war neighborhood such as stores and services along with an intact residential neighborhood. It is also one of the few neighborhoods that has retained an ethnic presence from the days when East European immigrants filled the City.

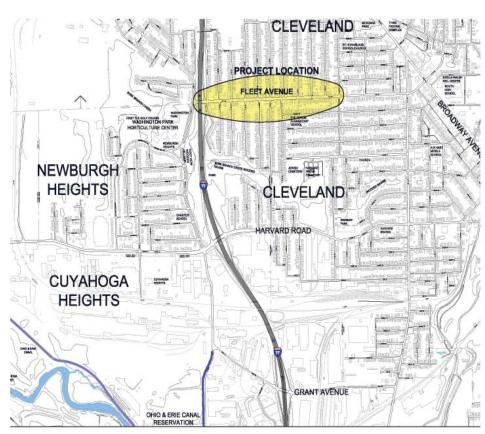
In the late 1970s and early 1980s an effort was made to give the neighborhood a distinctive look. A number of buildings, especially along Fleet, were altered with a style, "Hylander," found in southeastern Poland. In more recent years, individual business and property owners, along with neighborhood development corporations, have spurred redevelopment of the area.

Existing Conditions and Data Gathering

The Study Area of Fleet Avenue includes the right-of way area along Fleet Avenue in the Slavic Village Neighborhood of Cleveland. The communities of Newburgh Heights and Cuyahoga Heights are nearby. The Study Area extends from Independence Road on the west to the intersection of E. 65th Street on the east and is approximately ten blocks in length along Fleet Avenue.

The architectural character of Fleet Avenue within the study area is

varied, with a mix of one and twostory commercial buildings and older
homes converted to commercial
property. Many of the businesses
have second-floor apartments.
Intermingled with the commercial
properties are two-story single-family
homes. Commercial business are
varied and include retail stores,
carryouts, restaurants, funeral homes,
travel agencies, insurance offices,
a gas station, and car repair shops
located on old gas station lots. Fleet
Avenue is surrounded by residential



Project Area Map





neighborhoods on the north and south along intersecting side streets.

Many buildings are well cared for and recently updated while others are in poor condition with vacant store fronts. Curb cuts (driveways) dominate the streetscape often numbering upwards of eight to ten curb cuts per block on one side of the street. Several businesses have more than one driveway into the property including driveways off of side streets. The lack of rear alleys increases traffic in and out of the driveways

along Fleet Avenue. Many driveways are narrow and exit between two buildings that are located close to the sidewalk, creating blind spots for drivers and dangerous conditions for passing pedestrians.

The lack of parallel side streets increases traffic on Fleet Avenue. And long north-south blocks along Fleet Avenue contribute to speeding, which leads to added danger for pedestrians and vehicular traffic alike.

Although several buildings and lots are vacant or in poor condition, many structures have been well cared for or recently renovated. In addition, the varied architecture styles have provided unique opportunities for adaptive reuse of old buildings while adding to an interesting and appealing streetscape.



The sidewalk areas along the Fleet Avenue streetscape are, in many areas, narrow and cluttered with utility poles, a variety of signs, fire hydrants, and tree planters.

Many of the streetscape elements,



such as signage, lack continuity in design and are in various states of disrepair. Raised concrete tree planters, while large and imposing barriers along the sidewalks, are too small to support proper tree growth; therefore, many of the trees are dead or dying and contribute to the unkempt look of the streetscape. The narrow and cluttered sidewalks do not welcome pedestrian interaction, strolling, window shopping or provide adequate space for outdoor seating areas – all of the pedestrian functions that create a unique and vibrant streetscape.

The existing right-of-way (R.O.W.) on Fleet Avenue is 80' in width. Within this R.O.W., the curb-to-curb street dimension is 56' wide and includes two traffic lanes -- one in each direction, a central turn lane, with parking on both sides of the street in many locations throughout the study area. The remaining 26' R.O.W. dimension is divided between both sides of the street between the back of the curb to the R.O.W. line. This area consists of concrete sidewalk with tree lawns in some areas. One exception to the 80' wide clear R.O. W from building face to building face is the north side of the block between F. 55th Street and F. 57th Street. The face of the buildings on the north side of the street are set five feet into the



Typical Fleet Avenue Streetscape Section - Existing Conditions

R.O.W. and, therefore, reduces the streetscape cross-section width by five feet as shown in the illustration.

It should be noted that in 2004 the Fleet Avenue cross-section included parking on both sides of the street and two traffic lanes in each direction. The street was restriped at that time to eliminate two traffic lanes (one in each direction) and add a center turn lane. The overall width of the right-of-way and the curb-to-curb dimension of the street remained the same after restriping and resulted in extra-wide traffic lanes. Most local residents, business owners, and representatives from the local Development Corporation agree that the street restriping and addition of the center turn lane was a welcome change that has resulted in better traffic flow on the street. At the same time, the extra-wide traffic lanes result in excessive traffic speed. Although we still see cars passing other cars in the center turn lane or parking lanes, generally speaking, the re-striping has

resulted in reducing the overall traffic speeds.

The existing conditions of the Fleet Avenue described and illustrated above provided the starting point for the analysis of the proposed alternative street cross-section designs for the new streetscape detailed in the scope of work. As the existing cross-section illustrates, the right-of-way dimension, which remains the same for the proposed streetscape improvements, was the guiding factor for what could be included in this new street crosssection. The following sections will illustrate the proposed alternatives for the new streetscape design, outline the process for identification of the preferred alternative street cross-section, and detail the final streetscape cross-section design. In addition, the elements to be included in the design and documented in the preliminary engineering drawings will be described below.

Alternative Analysis

The streetscape cross-section alternatives outlined in the scope of work proposed many of the desired elements to be included in the redevelopment of Fleet Avenue. The list of desired roadway and streetscape elements being considered in the analysis of the cross-section alternatives include:

- The overall roadway crosssection including travel lanes, intersections, parking lanes, and a type of median;
- A bicycle path or lanes;
- Sidewalk paving and amenity strip from the back of curb to the building facades;
- Planting and planters;
- Lighting;
- Amenity package including benches, trash receptacles, and bike racks;
- Public art and image-building elements.

To guide the analysis of the alternative cross-sections for Fleet Avenue, the Design Team developed the following design criteria and constraints to be referenced throughout the process:

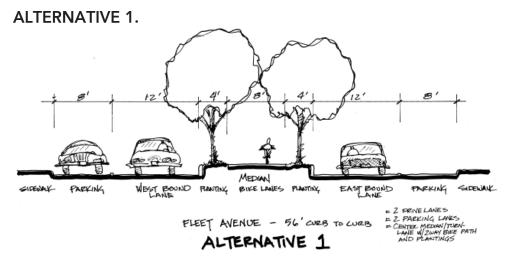
- Meets ASHTO / ODOT / City Standards for street / streetscape development
- Minimizes the effect on parking

- Minimizes the effect on commercial deliveries
- Does not inhibit truck and bus movements
- Works within roadway capacity (based on existing data)
- Incorporates regional traffic signal system
- Incorporates bike path/route
- Includes median/streetscape enhancements
- Enhances pedestrian environment
- Develops character-building potential

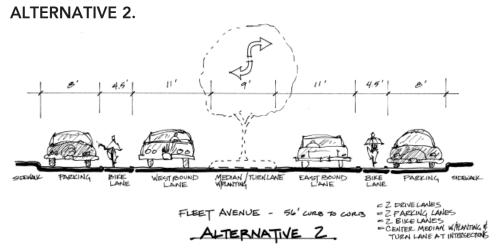
The initial analysis of the four alternatives proposed in the scope of work led the Consultant and the Design Team to develop a fifth cross-section alternative. The five cross-section alternatives were studied and analyzed by the Design Team with input from the Advisory Committee.

One main limiting factor for determining the elements to be included in the streetscape cross-section is the street right-of-way dimension. As noted in the existing conditions section, the R.O.W. dimension in nearly every block along the Fleet Avenue study area is 80 feet from building face to building face. The following illustrations of the five alternative cross-sections outline the elements that were thought to fit

within the Fleet Avenue right-of-way, along with brief explanation of the elements shown:



This alternative includes two travel lanes, two parking lanes, and a center turn lane/median that contains a two-way bike path and trees. The curb-to-curb dimension considered to be required is 56 feet. This alternative was developed in the 2000 Fleet Avenue Street Enhancement Study by Pennoni Associates of Ohio, Inc.

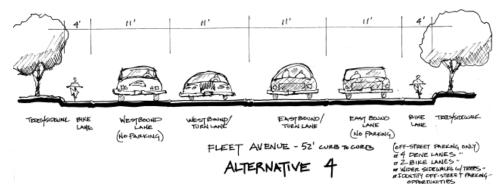


This alternative includes five lanes (including a center turn lane with or without a median) with on-street parking allowed in off-peak periods and bike accommodations. The curb to curb dimension considered to be required is 56 feet.

ALTERNATIVE 3. WANT BIKE WEST BOUND WEST BOUND TUPN LANE EAST BOUND BIKE WANT LANE (NO PARKING) FLEET AVENUE - 65 CORB TO CORB ALTERNATIVE 3 GET STREET FARKING DAY E 4 DENNE LANE C ETTER THREE LANE E 7 BISE LANE C ETTER THREE LANE C STREET FARKING DAY E 4 DENNE LANE C STREET FARKING DAY E 7 DENNE LANE C STREET FARKING DAY C STREET FARKING DAY E 7 DENNE LANE C STREET FARKING DAY C STREET FAR

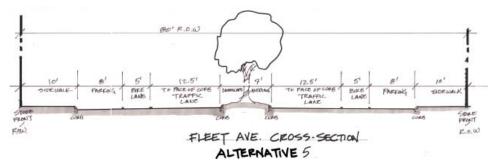
This alternative includes four lanes and a center turn lane/median with two 4-foot-wide bike lanes along the curb lines, narrower sidewalks, and no on-street parking. The curb-to-curb dimension considered to be required is 65 feet. If this alternative is chosen as the final concept, the Consultant would need to identify off-street parking alternatives.

ALTERNATIVE 4.



This alternative includes four lanes, two bike lanes, no on-street parking, and wider sidewalks with trees. The curb-to-curb dimension considered to be required is 52 feet. If this alternative is chosen as the final concept, the Consultant would need to identify off-street parking alternatives.

ALTERNATIVE 5.



This alternative was developed by the Consultant after review of the initial four alternative designs taking into account what it perceived to be the positive and negative aspects of each. It includes two traffic lanes, two bike lanes, on-street parking on both sides of the road, and a center landscaped median that functioned as a turn lane as it neared each intersection. The curb-to-curb dimension considered to be required is 58 feet.

After careful review and analysis of the above streetscape cross-section alternatives by the Design Team along with reviews with the Advisory Committee, it became apparent that they could be synthesized into two alternatives that represent all of the desired elements for the proposed Fleet Avenue streetscape crosssection. The following is a brief outline of the two alternatives that required further study and review by the Design Team and the Advisory Committee and then presented to the community for its input to determine the preferred alternative cross section to be taken to final design.

Preferred Street-Section Alternative Process and Selection

The process of developing the preferred street-section alternative began with the review of the four alternatives presented in the scope of work. After reviewing these alternatives, a fifth alternative was developed that integrated many of the positives of the other four alternatives including parking located next to the curb, bike lanes between the parking lanes and the street traffic lanes, and a planted median that transitioned to a turn lane at intersections.

Further discussion by the Design Team and the Advisory Committee led to the development of two Fleet Avenue streetscape cross-section alternatives that represent the best elements of all of the proposed alternatives. The two alternatives were then presented to the community at a public meeting to gain feedback. This synthesis of the five alternatives into two alternative cross-sections included elimination of several concepts illustrated in the five alternative designs. The following brief discussion outlines the analysis of the alternatives and the decisions that resulted.

The center-median bike lane concept in Alternative 1 was eliminated due to the insufficient width available in the street R.O.W. to allow for the

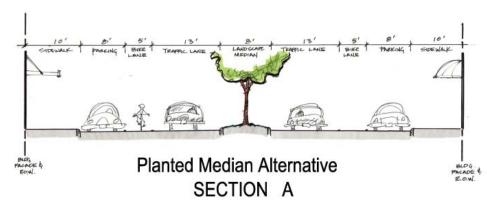
trail width and clearance space required by AASHTO standards and due to safety concerns. The restriction of the right-of-way dimension limited the space available for the required 10' twoway bike lane width and adjacent two-to-three foot safety zone on either side of the path. The lack of space was especially apparent where the center median with bike lane transitioned to a center turn lane near intersections. There were safety concerns where the center median bike lane met intersections and with conflicts between turning cars and bicyclists.

Alternatives 3 and 4 were eliminated for several reasons. The plans eliminated on-street parking while space for off-street parking is limited in this area. The two concepts had four lanes of traffic, which would promote vehicular access through the area without benefits of traffic-calming measures. The four-lane street would function as a collector street and would not promote stopping and shopping. A variation of these alternatives had the two outside lanes as parking lanes, but a conflict would arise from the location of bike lanes between the parking lanes and the

curbs. Bicyclists would approach intersections hidden by parked cars from motorists approaching intersections or turning onto side streets.

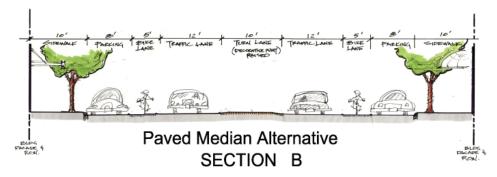
Alternative 2 and 5 were chosen to be further developed and to be analyzed for the best solution. These alternatives were refined by the Design Team to become Planted Median Section A and Paved Median Section B. The following graphic representations of the alternatives were presented to the community at a public meeting for review and feedback. An explanation follows each of the two alternative streetscape cross-sections that outlines the elements illustrated and discusses the pros and cons of each.

PLANTED MEDIAN SECTION A.



Planted Median Alternative A includes a tree-lined median that runs the length of the project site, broken only by side street intersections where this central median transitions to a turn lane. Positive aspects of this alternative include the strong sense of place this concept would impart to the Fleet Avenue streetscape, the aesthetic quality of the tree-lined median would provide the street, and the fact that locating the trees on a center island would open up views to businesses lining the street. The major negative aspect to this concept is that left turns would be difficult in many areas and totally eliminated at many locations. Those concerned about this concept felt that it would negatively affect access to businesses and residences alike by making access to driveways difficult. Those who favored the idea expressed interest in the immediate impression that this tree-lined median would leave on visitors to the street.

PAVED MEDIAN SECTION B.



Paved Median Alternative B eliminates the center planted median and replaces it with a decorative pavement center turn lane. The decorative pavement would be integrally colored concrete with a brick or stone type pattern stamped into the curing concrete. The median would function as a turn lane, providing left turn access to businesses and residences along Fleet Avenue. The colored and patterned concrete median would provide a decorative element to Fleet Avenue, breaking up the existing wide expanse of asphalt roadway. Elimination of the planted median shown in Section A would mean that street trees would be located along the curb-side of the sidewalks along Fleet Avenue. Narrow sidewalk areas and the possibility that the trees would block nearby storefronts led to investigation of alternative plant bed designs and locations in the final plan.

PREFERRED ALTERNATIVE

The two alternatives, Section A and Section B, were further studied by the Design Team and the Advisory Committee and presented to the community at a public meeting. The graphic representations of the alternatives were presented along with an explanation of the process that led to the selection of these alternative designs. Open discussions followed the presentation and a survey form was distributed to the community for further feedback. The survey and responses can be found

in the Appendix at the end of this report. Response to the alternatives from the community was varied.

Many attendees favored the planted median for the immediate visual impact that it would have on the Fleet Avenue streetscape. However, because Fleet does not have a rear/side alley system, concern was expressed that the presence of curb cuts every 20 feet or so would restrict access to business and residences.

The paved median concept
Section B was favored by some
because it maintained left turns all
along Fleet Avenue. In the end, the
ability to make left turns along Fleet
Avenue was the deciding factor in the
selection of the Paved Median Section
B as the preferred alternative that
would direct the design of the Fleet
Avenue streetscape redevelopment.

Additional design ideas were presented at the community meeting for streetscape design elements that could be integrated into either alternative streetscape cross-section. These streetscape design detail ideas were developed by the Design Team with feedback from the Advisory committee. The streetscape design details included:

INTERSECTION BUMPOUTS

extend curb edges to the edge of the bike lanes. They create safer street crossing environments for pedestrians by decreasing the distance of the street crossing. They act as passive traffic calming measures by reducing long, unimpeded views down the street as well as discouraging passing on the right via parking and bike lanes. Bump-outs provide curbside bus stop locations along the street that prevent the elimination of parking spaces for bus stops and the need for buses to move in and out of traffic. Finally, bumpouts provide additional streetscape amenity areas for

benches, bike racks and street tree planting space and create protected parking bay areas.

COLORED AND STAMPED
 PATTERNED CONCRETE areas
 throughout the streetscape,
 including parking bays,
 intersection bumpout areas, and
 sidewalks.

Proposed Fleet Avenue Streetscape Design Solution



PROPOSED FLEET AVENUE CROSS-SECTION

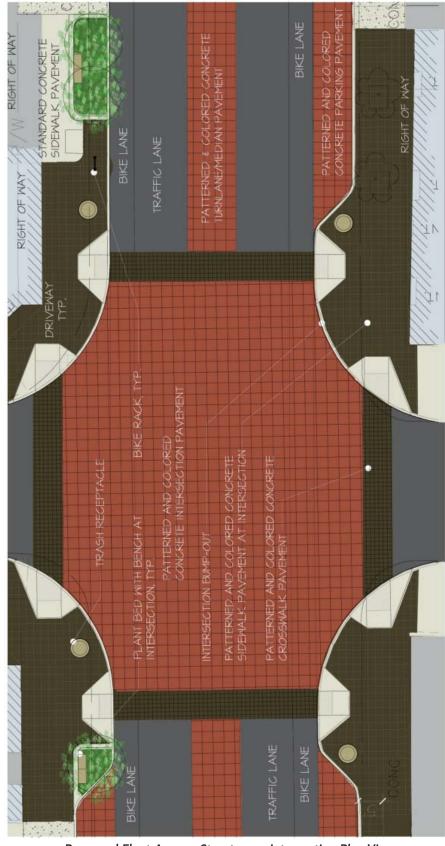
The final preferred alternative streetscape cross-section design that was developed into the Preliminary Engineering drawings has a center paved median with patterned and colored concrete pavement, bumpouts at intersections, recessed parking areas with patterned and colored concrete pavement, patterned and colored concrete crosswalks, patterned and colored concrete in the center of two intersections along the project area, and additional bumpouts located strategically along the project streetscape to provide areas for planting that will provide larger planting beds for trees and other plants. Sidewalks along the street will have a five-foot wide area from the back of the curbs, detailed with pattern-stamped and integrallycolored concrete pavement. [See the 'Typical Fleet Avenue Streetscape

Cross-Section and Typical Mid-Block Fleet Avenue Streetscape Plan View' that follows.

Though intersection configurations vary widely along Fleet Avenue, the typical Fleet Avenue Intersection layout illustrated here provides a glimpse of proposed elements to be found at most intersections. Planting areas are provided where space allows. These areas will be planted with ornamental trees and shrubs and perennial flowers. Benches will be located in the plant bed areas with trash receptacles nearby. Pattern-stamped and integrally-colored concrete pavement will be expanded at intersections to create an aesthetically pleasing pedestrian environment at the corners. The sidewalk areas at intersections, widened by the bumpouts, will provide ideal locations for outdoor seating opportunities. The following illustration shows a proposed typical intersection layout.



Proposed Fleet Avenue Mid-Block Streetscape Plan View



Proposed Fleet Avenue Streetscape Intersection Plan View

PAVEMENT RECOMMENDATIONS

The present age and condition of the street pavement along Fleet Avenue within the project was reviewed by the Consultant Team and the City of Cleveland Engineering Department and was determined to warrant full depth replacement. In addition, the proposed street crosssection will widen the existing street and parking pavement area by a total of two feet to accommodate the proposed traffic, parking, and bike lanes. This added pavement will be divided evenly between the two sides of the street as measured from the street centerline and will result in total replacement of curbs along the entire length of the project area. Existing utility pole locations will shift to maintain the required two-foot clearance from the curb line. Sidewalk redevelopment in the project area will include replacement and redesign from E. 49th Street to E. 65th Street on Fleet Avenue.

There are a multitude of curbcuts along the Fleet Avenue streetscape providing access into and out of alleys, commercial parking lots, and residential driveways. Several redundant curb-cuts are recommended for removal or reduction in size. These are located at commercial properties that have multiple or extremely wide driveways. A few of the curb-cuts to be removed or modified were constructed when the sites had prior use with more traffic. One curb-cut was located too close to an intersection and another at a now vacant site that could be accessed from a side street. Generally, removal of the curb-cuts either enhances the streetscape environment by providing increased parking or street tree planting space or eliminates traffic conflicts and, therefore, creates a safer street.

The proposed cross-section on

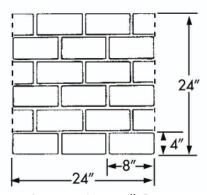
Fleet Avenue illustrates the differences in pavement surfaces on the street and the sidewalk areas. The street pavement surface will have asphaltic concrete traffic lanes and a pattern-stamped and integrallycolored Portland cement concrete median and parking bay areas. Crosswalks will also be patternstamped and integrally-colored Portland cement concrete, as will the center of the intersections at E. 53rd and E. 55th Streets. Sidewalks will have Portland cement concrete surfaces with pattern-stamping and integral-coloring in the pavement five feet from the back of the street curb. This pattern-stamped and colored detail on the sidewalks will be expanded at bumpout areas at intersections. [See the 'Proposed Fleet Avenue Streetscape intersection Plan View' illustration.

As noted, a variety of areas along the Fleet Avenue streetscape will have patterned-stamped and integrallycolored concrete surfaces. The concrete coloring will be integrally mixed with the concrete to provide a color that is continuous throughout the entire poured surface. Stamped pattern forms will be designed to have a surface texture as well as an overall pattern such as running bond brick or stone. The surface texture of the pattern stamp will be accentuated by using a release agent on the stamp with a color that matches yet contrasts with the main pavement color. This added texture will provide an added depth and interest to the patternedstamped surface.

Pattern-stamp companies for concrete surfaces such as Bomanite Designs, Inc., can provide additional information on colors and stamp patterns and installation, and should be referenced when funding allows for the Fleet Avenue streetscape design to move into the final design and construction phase.

The concrete colors and patterns will vary by the locations within the street cross-section. Generally, pedestrian areas including the cross-walks and the decorative pavement areas of the sidewalks will have the same concrete color. The pedestrian crosswalks, though, will have a

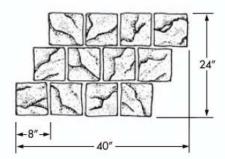
different pattern stamp than the sidewalk areas. The crosswalk pattern will be a running bond brick pattern,



Concrete Crosswalk Pattern RUNNING BOND BRICK PATTERN

while the sidewalk areas will have an 8x8 running bond stone pattern. The following example from the Bomanite company shows an example of what the running bond brick and stone patterns might look like.

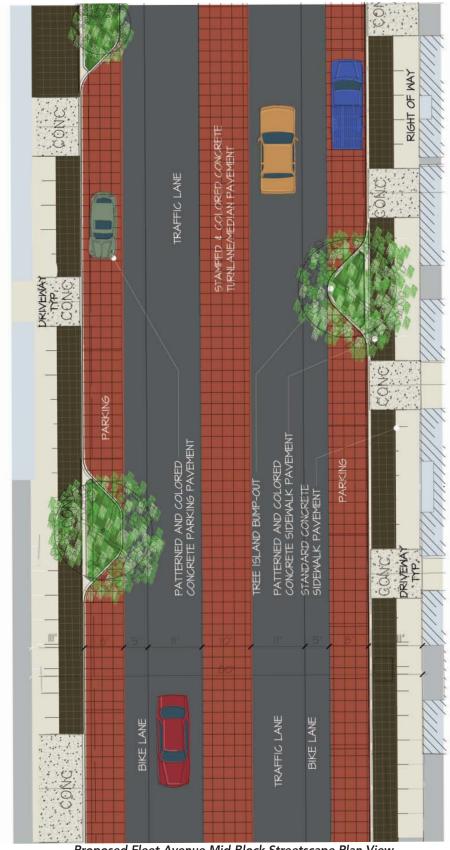
The vehicular areas of the streetscape with decorative pavement will have the same pavement color and pattern stamp. Note that the final color choice should contrast



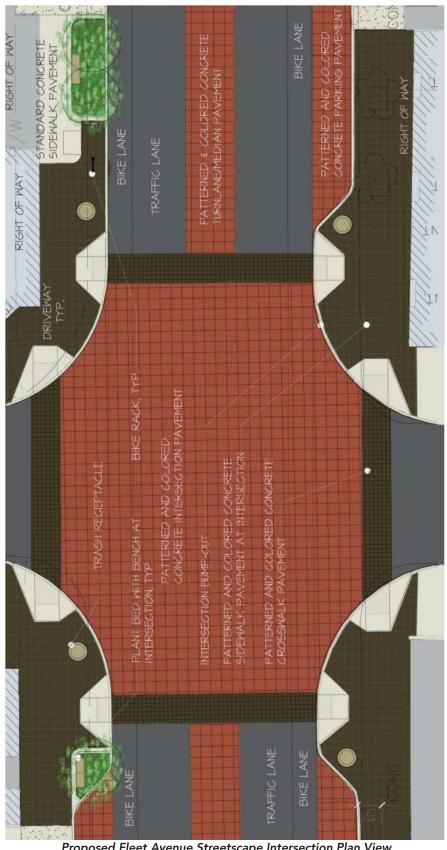
Concrete Sidewalk Pattern - 8x8 Units RUNNING BOND STONE PATTERN

well with the pedestrian pavement colors. It should be noted that both the vehicular and pedestrian decorative pavement colors should contrast well with adjacent asphalt and standard sidewalk concrete color. The decorative vehicular pavement includes the center median/turn lane, the center of intersections at E. 53rd and E 55th Streets, and the parking bay areas that line both sides of the street between the bump-out

areas. The planted median at E. 49th Street will have pattern-stamped and colored concrete angled sides. The color and pattern will match the sidewalk decorative pavement areas except that the stone stamp pattern should be a smaller 4x4 unit size due to the smaller area of pavement. The final color and pattern stamp form selection should be based on test pours or existing site examples by the chosen manufacturer.



Proposed Fleet Avenue Mid-Block Streetscape Plan View

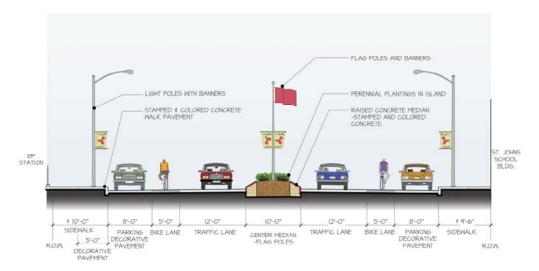


Proposed Fleet Avenue Streetscape Intersection Plan View

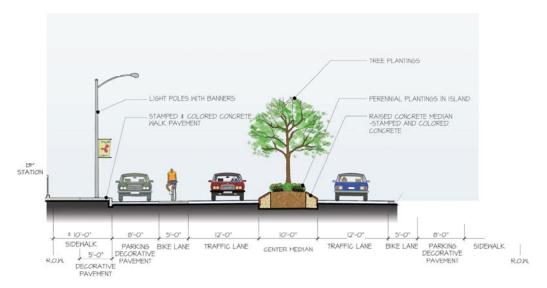
PROPOSED PLANTED MEDIAN - E. 49TH STREET TO E. 50TH STREET

The planted median will be located in a one block section along the project area between E. 49th Street and E. 50th Street. The median will create a strong sense of identity for the Fleet Avenue community as entered from the I-77 corridor. Two median design concepts are proposed. One concept has flag

poles with banners located along the length of the medians. This reflects the existing flag poles located along the nearby existing Fleet Avenue bridge across I-77. The second concept proposes a tree-lined median along the length of the block. [See the illustrations below.]

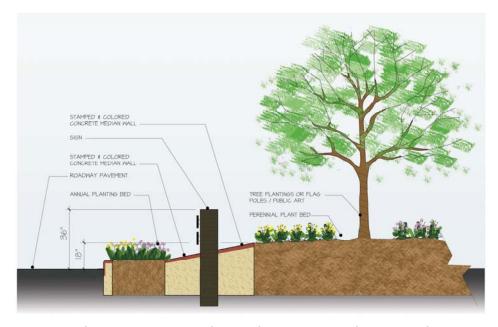


Typical Fleet Avenue Cross-Section - E. 49th Street to E. 50th Street
Flag Pole Island Concept



Typical Fleet Avenue Cross-Section - E. 49th Street to E. 50th Street
Tree Island Concept

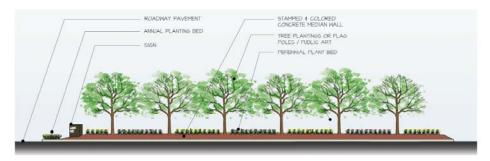
Both concepts propose lower shrub, perennial, and annual plantings along the length of the median. In addition, the west end of the median provides an opportunity for a Slavic Village entry identity element such as the sign illustrated below or a public art piece. Additional identity concepts for the proposed Fleet Avenue streetscape are discussed in the Streetscape Identity section found later in this document.



Median Section - West End - E. 49th Street to E. 50th Street Median

The raised median is designed with the planted surface 18 inches above the street grade for added protection of the plants. The sides of the median planter will be pattern-

stamped and integrally-colored concrete. The pattern and color of this surface will match the 6x6 textured stone pattern used on the decorative paved sidewalk areas.



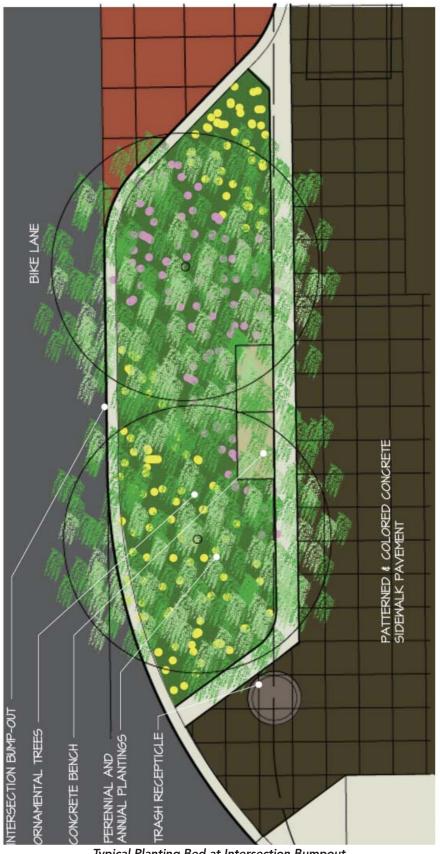
Median South Elevation - E. 49th Street to E. 50th Street Median

PLANTER AND PLANTING RECOMMENDATIONS

Plantings are crucial to a streetscape design for both aesthetic and environmental reasons. As trees along the streetscape mature, they tend to soften the distant views along the street, slowing traffic by reducing the perceived street width. The reduced viewing distance along the street also tends to draw the eye to nearby business establishments. Trees and other plants and planting beds help to reduce the heat island effect found in many urban areas. The large areas of pavement and roof areas absorb and retain heat from the sunlight and radiate this heat back to the streetscape, often creating environments that are hotter than the daytime temperature. By providing shade and heat-absorbing

qualities, plants and planting beds act to counter-balance this effect on the streetscape. At the same time there are many qualities of the streetscape that create difficult environments for the growth and survival of plants. The same heat island effect from the absorption of the sun's rays by the pavement surfaces that the trees help counteract, works to burn plant leaves, over-heating and drying out the root systems and inhibiting growth. Winter-time road salt has a detrimental effect on many plants.

There are several solutions that we recommend implementing into the Fleet Avenue Streetscape to help counteract the difficult growing conditions found in the streetscape



Typical Planting Bed at Intersection Bumpout

environment. Irrigation provides adequate water to encourage healthy plant growth; and consistent watering can lessen the heat-island effect on plants by creating a cooler environment. Irrigation along with proper drainage in planting beds, helps to wash away some of the salt and pollutant buildup in the plant bed soils. Plant selection is another way to counter-balance the difficult growing conditions found in the streetscape environment. Choosing plants that resist urban conditions, including exhaust fumes, over-heating, and road salt will provide plants with a better chance of survival. Creating raised planters will help protect plants from road salt. Increasing the plant bed size will provide a larger growing environment. The above guidelines were followed in the selection of the recommended planting list for the Fleet Avenue streetscape and designing the plant beds.

PLANT SUGGESTIONS INCLUDE:

Large shade trees to be located in the mid-block tree planting bed islands:

- Glen Leven Linden, Tilia Cordata 'Glen Leven'
- Hedge Maple, Acer campestre
- Thornless Honey Locust, Gleditsia triacanthus 'inermis'

Ornamental trees for intersection bumpout plant beds:

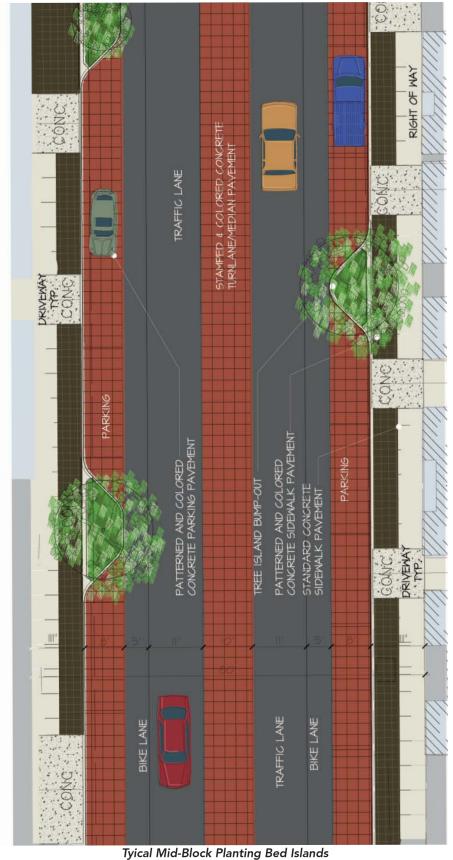
- Korean Mountain Ash, Corbus alnifolia
- Japanese Tree Lilac, Syringa reticulate 'Summer Snow'
- Pyrus calleryana 'Whitehouse', Whitehouse Pear
- White Fringe Tree, Chionanthus virginicus
- Autumn Brilliance Serviceberry, Amelanchier x grandiflora 'Autumn Brilliance'

Small Shrubs:

- Shore Juniper, Juniperus conferta
- Creeping Juniper, Juniperus horisontalis
- Rugosa Rose, Rosa rugosa
- Dwarf Winged Euonymous, Euonymous alatus alatus

Perennial Plantings:

- Johnson's Blue Geranium, Geranium x 'Johnson's Blue'
- Stella d' Oro Daylilly, Hemerocalis Stella d' Oro
- Blackeyed Susan, Rudbeckia 'Goldstrum'



SITE AMENITIES

Site amenities along the streetscape provide the finishing touches that add functional yet aesthetic elements to the landscape. The harmonization of the amenities imparts to the streetscape a sense of design coordination and continuity that enhances the identity and uniqueness of Fleet Avenue. Site furnishings should include the standard "furniture" found along a well-designed street, such as trash receptacles and benches, but also should coordinate the colors with light poles, traffic signal mast arms, and signage found throughout the streetscape. The following examples show design ideas for many of these elements while the Streetscape Identity section that follows, provides color palette suggestions, graphic examples, and signage ideas that add the finishing touches to the streetscape.

Benches

Seating opportunities should be provided at intersections throughout the Fleet Avenue streetscape.

Benches should be sturdy enough to



Typical Bench

withstand the heavy uses that occur along public streets while conveying a strong sense of design. Concrete benches are recommended (as pictured above), that have simple, clean lines. The Fleet Avenue street name can be sand blasted into the face of the bench to provide a unique streetscape identity. Benches should be available in the public streetscape to provide a place of respite for shoppers and people waiting for buses, but not as a place to recline; therefore, it is recommended that benches be either 24 to 36 inches in length, or, longer benches should have a raised section at the mid-point of the bench surface to discourage reclining.

Bike Racks

Standard City of Cleveland bike racks should be provided at locations along the street where space allows. Bike racks should be located to retain a 6' wide clear pathway along the sidewalks with bikes in the rack.



Typical Bike Rack

Trash Receptacles

Generous and strategically placed trash receptacles along the streetscape will help to ensure a clean, litter-free environment. Locate receptacles at intersections, bus stop locations, mid-block areas and near concentration of commercial stores and shops where space is available. As with benches, trash receptacles should be sturdily constructed to withstand the heavy uses that occur along public streets and large enough for street use capacity. The style and color should be coordinated to match or complement benches and other site furniture. Concrete receptacles are available with simple, clean lines that also provide a sense of design and permanence, such as the one illustrated below.

Integration of these site amenities with the following streetscape identity ideas will provide Fleet Avenue with its own unique character.



Typical Trash Receptacle

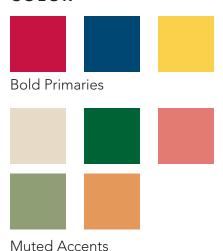
STREETSCAPE IDENTITY THROUGH SIGNAGE AND GRAPHICS

CONCEPT

This concept focuses on the tradition and culture that built Fleet Avenue, and is still prevalent today. Highly decorative, colorful and welcoming describes the use of Bohemian patterns and textures that represent the Eastern European hertiage of Slavic Village. These design elements should be carried through from entry signs into the neighborhood, on to banners, street amenities and public art.

Materials such as tile mosaics will enhance the street identity with an authenticity and flair. Colors include bold primaries which will be the focus in the program. Muted accents are used as complimentary colors allowing for the display that is necessary to represent this concept well. Typography will be traditional, clean and readable.

COLOR



PATTERN



Bohemian Colors and Patterns

TYPE

FLEET AVENUE FLEET AVENUE

FLEET AVENUE

Traditional (for Street Identity)

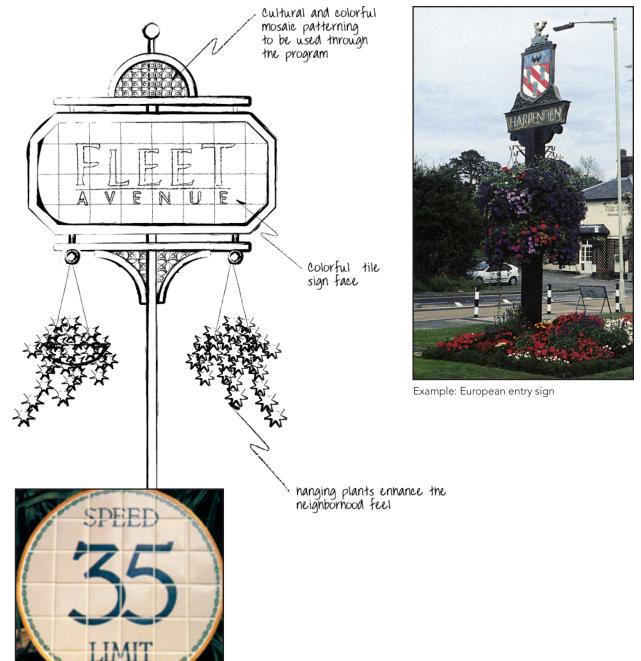
Fleet Avenue

Standard (for City Standard Signs)





Style Examples

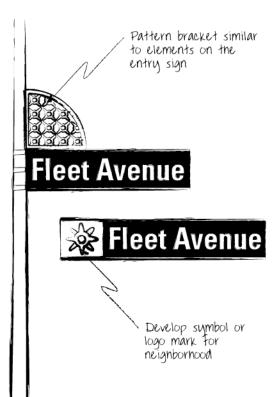


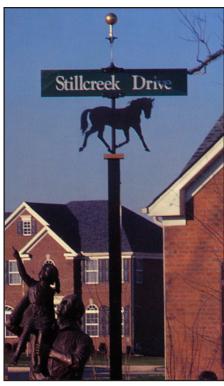
ENTRY SIGN

Example: tile sign face

Use of Bohemian patterns, colors and mosaics are an Urban Expression of the Eastern European heritage present in the history of the neighborhood.

The Entry Sign sets the mood and begins establishing the identity for the neighborhood.





Example: street sign with ornamental additions

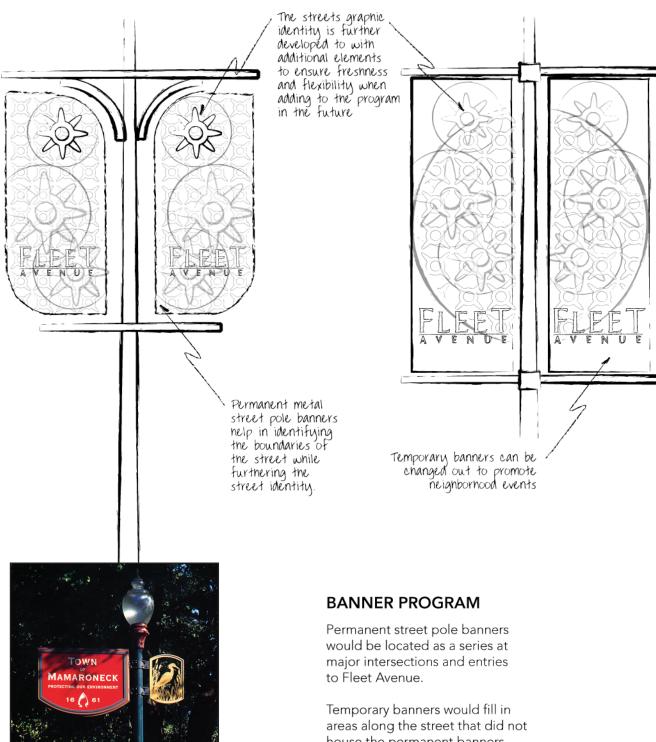


Example: Ohio City decorative bracket

STREET IDENTIFICATION SIGN

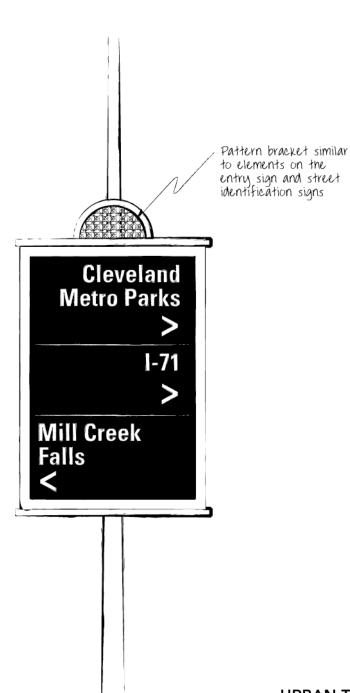
Colors and patterns continue onto other sign types.

While the standard street sign must be used- addition of a detail such as the pattern bracket, or area for a symbol/logo helps continue the neighborhood identity.



Example: permanent banner sign

house the permanent banners.

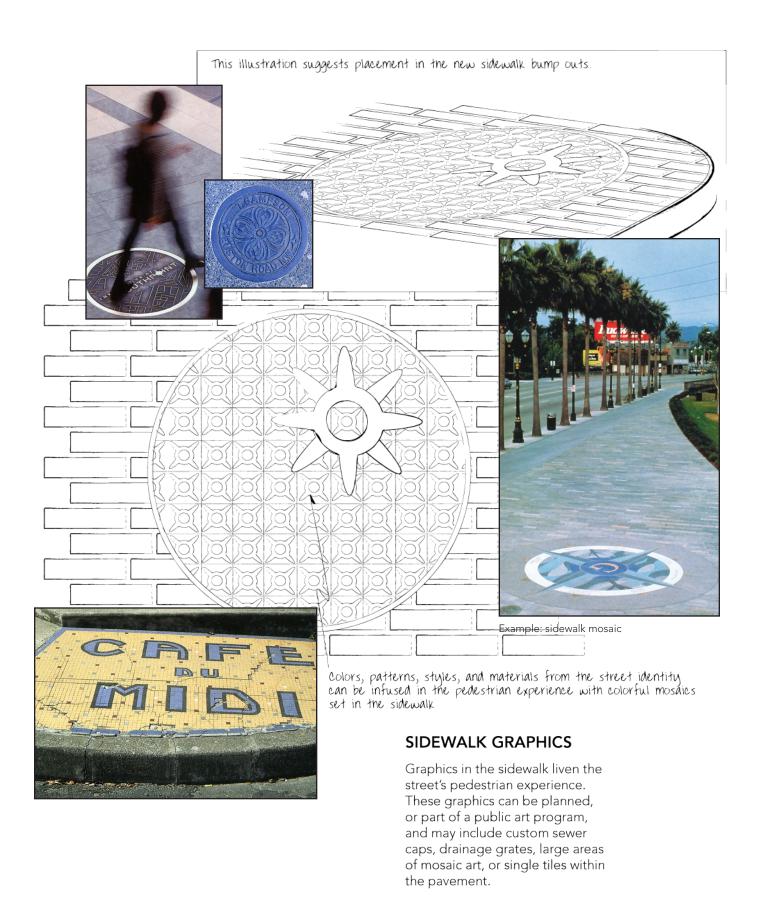




Example: directional sign with logo detail

URBAN TRAILBLAZER

Use of City Standard Trailblazer Signs with added ornamentation to further promote the neighborhood identity.



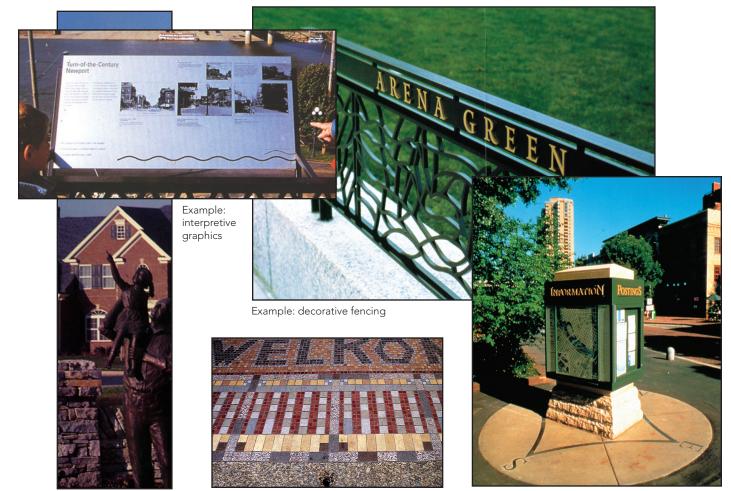
OTHER STREETSCAPE IDENTITY EXAMPLES



Example: benches with graphic or logo



Example: art benches



Example: public art

Example: sidewalk art

Example: public kiosks

STOREFRONT RENOVATION OPPORTUNITIES



We recommend that Slavic Village Development continue to be involved in the Cleveland Neighborhood Development Corporation's "Re\$tore Cleveland" Program to provide businesses opportunities to enhance their storefronts while simultaneously enhancing a sense of place on Fleet Avenue.

Bus Service

Fleet Avenue is presently served by two bus routes, No. 16 and No. 805 Slavic Village Community Circulator.

The 805 Slavic Village Community Circulator route services the Slavic Village area between Francis Avenue and E. 65th Street on the north to E. 71st Street and War Avenue on the south. This route passes along Fleet Avenue between Broadway Avenue and E. 57th Street south. A bus stop with a shelter is located on the 805 bus route on the east-bound side of Fleet Avenue just east of E. 65th Street. This shelter will remain in place. The remaining stops along the bus 805 route on Fleet Avenue are "flag-stop" locations.

Bus No. 16 services Fleet Avenue with connections between Woodland Avenue and E. 55th Street on the north to the Harvard Road area on the south, passing along Fleet Avenue between E. 55th Street and Washington Park Boulevard. Bus stop shelters on this route are located just north of Fleet Avenue on E. 55th Street. The Bus No. 16 route has "signed" stops on east- and west-bound lanes along Fleet Avenue at E. 53rd Street and E. 49th Street.

Greater Cleveland Regional Transit
Authority (RTA) representatives
have reported that their Bus Route
Performance 2004 study indicates that
the present level of service provides
Fleet Avenue the appropriate level of
service for now and for the projected
future; therefore, bus service on Fleet
is expected to remain at current
levels.

The general RTA guidelines for placement of bus shelters at a stop require a ridership of greater than 50 boarding per day at a stop. All stops on both the 805 and 16 routes on Fleet Avenue fall well below this number and so are expected to maintain the present service without additional bus shelters. The existing bus shelters on Fleet will remain including the shelter on Fleet Avenue and E. 65th Street and the bus shelters on the RTA Bus 16 route located on either side of E. 55th Street just north of Fleet Avenue just outside the project area.

Bus stops will remain at the locations listed below. Bus stops will be near-side of the intersection stops except as noted below.

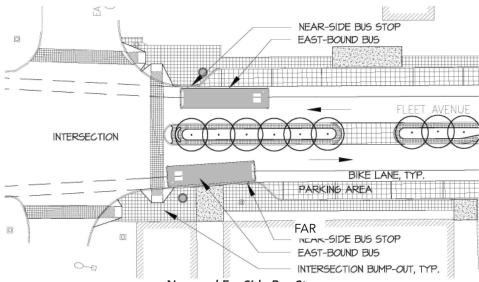
- Bus No. 16 Route Stops Signed Stops
 - » E. 53rd Street, East- and Westbound sides – Near-side stops
 - E. 49th Street, East-bound side
 Far-side stop

- E. 49th Street, West-bound side – Near side stop
- Bus No. 805 Circulator Bus Flag Stops
 - E. 57th Street, West-bound sides – Near-side stop
 - » E. 61st Street, East- and Westbound sides – Near-side stops
 - E. 65th Street, East-bound side
 Far-side stop with shelter
 - E. 65th Street, West-bound side – Near-side stop

Proposed streetscape improvements along Fleet Avenue will improve the bus service in several ways. The intersection bumpouts that will be located at every intersection along Fleet Avenue pull the existing curb line out adjacent to the bike lane. This provides a safer pedestrian intersection by decreasing the street-crossing distance. At the same time, the intersection bump-outs provide a place for buses to pull up to the

curb for customer pickup without pulling into the parking lane areas. This eliminates the need for buses to continually pull in and out of traffic, which tends to slow bus services while increasing conflicts with buses merging with traffic. Another positive aspect of bus stops at bumpouts is that they do not remove parking spaces from the streetscape. RTA representatives indicated that a relatively small five-foot long loading area is needed for bus stops at bump-out areas. Benches, trash receptacles, and lighting at bus stop locations create a more rider-friendly environment. These amenities have been added to the streetscape and at bus stop locations where space allows.

Bus stops along the Fleet Avenue streetscape at the bump-outs areas will be near-side stops located just before intersections. [See illustration.]



Near and Far Side Bus Stops

Since far-side stops (stops located past intersections) require longer bump-out areas to ensure the bus does not block the intersection, the Consultant recommends near-side stops at most locations along Fleet Avenue. The buses will pull up to the intersection bump-out curbs, crossing the bike lane temporarily. Where far-side stops are needed, adequate space needs to be provided to ensure the bus does not block the intersection or the crosswalk. RTA supports the concept of bumpout (or bulb-outs as they refer to them) for providing bus stop locations as noted in the 2004 report Transit Waiting Environment, An Ideabook for making Better Bus Stops. It states, "On streets with parking, a bump-out or 'bus-bulb' may be used to expand the stop area out to the bus's travel lane. This approach reduces the number of parking spaces removed for a bus stop, avoids delays when buses have to merge with traffic, and provides a comfortable waiting area out of the flow of pedestrians on the sidewalk. It also serves as a traffic calming measure and is particularly suitable for stops on pedestrian-oriented streets."

PARKING ANALYSIS

A parking analysis study was conducted in 2002 in the Slavic Village Fleet Avenue "Turning Fleet Avenue into a Place" Master Plan. General parking spaces were identified at that time along Fleet Avenue between E. 65th Street and E. 49th Street. The analysis included several visual walking studies of Fleet Avenue that counted parking spaces available for Fleet Avenue businesses. Both on-street parking and off-street parking lots that appeared to be commercial were counted unless they were marked for tenant parking only. The study looked at the number of available spaces that were being occupied at various times of the day. The present Fleet Avenue Planning and Design Study relied on the 2002 Study along with supplemental visual verification for existing parking data.

While the 2002 Study stated that, "71% of available off-street parking spaces on Fleet Avenue are not in use," it should be noted that the survey included a church parking lot, two funeral home lots, and medical office lots. These lots vary from being empty to overflowing, depending upon the time of day and day of the week they were surveyed. In addition, the location of these lots in relation to business parking needs and the willingness of business owners to share parking are also factors in calculating actual parking space availability on Fleet Avenue. With this in mind, it can be summarized that Fleet Avenue is at times "parking

rich," while at other times, "parking poor." It can be concluded that since most businesses rely on available onstreet parking, there are certain times of the day that customers will have trouble finding parking near theri shopping destinations.

A baseline of the number of existing on-street parking spaces was needed for the present study to be used to analyze the effects of the proposed streetscape design on parking spaces. It is anticipated that no changes to off-street parking will occur in this study. The number of available existing on-street parking spaces was determined by analyzing the site survey with regards to City of Cleveland parking space size standards of 8'x22' parallel parking space and from a visual analysis on site. The Consultant and interns working with the Slavic Village Development Corporation were involved in gathering this data. Parking space areas were noted by a visual inspection of signage. This data was overlayed onto a site plan noting no-parking locations for bus stops and typical 30' parking space setbacks from intersections per City of Cleveland standards. Since parking spaces are not marked on the street, the typical City of Cleveland standard parallel parking space length of 22' was used to evaluate the number of spaces using the site survey map.

According to this method, it was determined that the total number of existing on-street parallel parking spaces available on Fleet Avenue in the study area between E. 49th Street and E. 65th Street is 103 spaces.

The proposed design alters the existing parking count for several reasons. Bump-outs at intersections provide a safer environment for pedestrians crossing streets due to shortened lengths of cross-walks from curb to curb. Much of the space needed for the bump-outs is gained from the City of Cleveland standard 30' no-parking zone set-back area measured from each intersection. There are instances where spaces have been removed to allow longer bump-out areas at intersections. In addition, the angled curb design of intersection and mid-block bumpouts has reduced a space in some locations but allows for a safer transition from parking spaces back into traffic. In the block between E. 55th Street and E. 57th Street, the right-of-way is five feet narrower than the remaining streetscape and has resulted in the loss of eight spaces on the north side of the street.

The number of on-street parallel parking spaces with the proposed streetscape design is 82 spaces. This is a reduction of 21 spaces throughout the ten-block project area. The

Consultant recommends that the SVD continue to pursue the purchase of vacant lots throughout the project area to provide the opportunity of creating additional off-street parking as the need arises.

TRAFFIC ENGINEERING

The existing traffic data for the Fleet Avenue area was collected in two separate 24-hour monitoring periods: one in 2003 and one in 2005. In 2003, the monitoring for east and westbound traffic occurred on the Fleet Avenue Bridge over I-77 and at Fleet Avenue at E. 55th Street. In 2005, monitoring occurred at Fleet AVenue and E. 59th and E. 65th Streets. The summary of the study result totals are listed in the table below. [See separate Appendix document for traffic count details.]

Date	Location on Fleet Ave.	Total Traf- fic Counts
2003	East of Washington Park Blvd. on I-77 Bridge. Eastbound and westbound traffic.	13,060
2003	West of E. 55th St.	15,279
2005	West of E. 59th St.	13,321
2005	East of E. 59th St.	12,456
2005	West of E. 65th St.	12,509
2005	East of E. 65th St.	9,827
	Traffic Study Summar	v

A traffic impact study should be conducted in the next phase of the project to collect the updated information unless the City of Cleveland is satisfied using growth rates to determine traffic rates.

It is our recommendation that a detailed traffic study be conducted to determine alignment, width, and cross sections of all lanes and cross walks at the critical intersections. Additional traffic analysis data will be required to determine the final alignment. According to the City of Cleveland Traffic Engineering Department, the two most important factors will be analysis of the signal operation at E. 49th Street and I-77 ramp, and the truck turning template at this intersection. This analysis will assist in determining the need for turn lanes at this intersection and will provide information on the center median length that will ensure clear turning for cars and trucks. The analysis will also take into account the transition from four lanes on the bridge to the two traffic lanes East of 49th Street to minimize the severity of lane shifts through the intersection. For the area east of 50th Street, Cleveland Traffic Engineering supports the cross-section of one through-lane in each direction and a center two-way turn lane; however, they warn that if federal or state funding is provided for the detailed design of the project, those agencies may require a detailed traffic and signal warrant study. Raised median size and location

east of East 49th Street will also be determined by this study, which should include a sight distance study. If further information is required at other locations, the scope should be expanded.

It is also our recommendation that a signal warrant study be performed where existing signals are located to determine the necessity of the signalized intersection.

UTILITIES

The proposed Fleet Avenue cross-section eliminates two feet of street/parking bay pavement along the length of the project area and, therefore, requires relocation of the curb lines and replacement of the curbs. This will result in the relocation or adjustment of many surface utilities along the streetscape. All utility manholes and valves within the right-of-way will need to be adjusted to reflect the proposed finish grade. This includes water, storm, sanitary, gas, electric, and telephone located either in the sidewalk or roadway. The redevelopment of the street and the implementation of the bump-outs will shift the storm drainage flow to the outside edge of the bike lanes and, therefore, require the relocation of curb drains. A storm water analysis should be completed in the next phase to determine location of inlet

structures and pipe sizes. Storm sewers will be positioned to receive storm water collected in the gutter shown on the cross sections. Most will be City of Cleveland curb inlets with bicycle-safe sinusoidal grates, while those that cannot be positioned against the proposed bump-out curbs will be catch basins with similar castings. The structures will connect to existing manholes before entering the City's main system.

The relocation of the existing curb lines will require signage, power, light, and signal poles, mailboxes, and fire hydrants to be relocated per City of Cleveland standards for lateral location in relation to the new curb lines. Fire hydrants should be relocated nearer the new bump-out curbs to maximize pedestrian sidewalk space.

The estimate associated with this report considers all overhead lines to remain overhead facilities. At the time of final design and construction drawings, the City may want to re-evaluate locating all overhead electric, cable, and telephone lines underground during construction if the budget allows.

The proposed Fleet Avenue redevelopment proposes full-depth pavement replacement and,

therefore, we recommend that all utilities are evaluated by associated utility companies and departments to determine if replacement or repair is needed. This should include the evaluation of the condition of the combined sewer main running the length of Fleet Avenue roadway by the Water Pollution Department.

Conceptual Cost Opinion: Fleet Avenue Streetscape Improvements

TEM	DESCRIPTION	QTY.	UNIT	UNIT COST		TOTAL COST
1	Site Preparation/Demolition					
	a. Remove Pavement	24,200	SY	25.00	\$	605,000.00
	b. Remove Railroad Tracks & Ties	5,450	SY	25.00		136,250.00
	c. Remove Concrete Sidewalk/Drives	92,115	SF	.50		46,057.50
	d. Remove Concrete Curb	8,315	LF	5.00		41,575.00
	e. Saw Cut Existing Pavement	5,500	LF	5.00		27,500.00
	f. Undercut Subgrade & Subbase	10,000	CY	7.50		75,000.00
	g. Construction Fencing	10,000	LF	3.00		30,000.00
	h. Hazard Waste Disposal	1	ALLOW	100,000.00		100,000.00
	subtotal				\$1	,061,382.50
2	Erosion Control					
	a. Miscellaneous Erosion Control					
	Measures	1	LS	25,000.00	\$	25,000.00
	subtotal				\$	25,000.00
3	Storm Sewer					
	a. 6" Underdrainage	15,580	LF	10.00	\$	155,800.00
	b. 6" Connection to Existing System	22	EA	100.00		2,200.00
	c. New Catch Basins	46	EA	3,000.00		138,000.00
	d. 12" Pipe	5,000	LF	35.00		175,000.00
	e. 12" Connection to Existing System	20	EA	500.00		10,000.00
	f. Remove Existing Manhole	13	EA	500.00		6,500.00
	g. Manhole	13	EA	5,000.00		65,000.00
	h. Plug Abandoned Storm Lines	880	LF	5.00		4,400.00
	i. Additional Force Account Work	1	ALLOW	100,000.00	_	100,000.00
	subtotal				\$	656,900.00
4	Sanitary Sewer					
	a. Manhole Adjust to Grade	13	EA	1,250.00	\$	16,250.00
	b. 8" Pipe	300	LF	35.00		10,500.00
	c. Additional Force Account Work	1	ALLOW	100,000.00	_	100,000.00
	subtotal				\$	126,750.00
5	Water					
	a. Remove Fire Hydrant	11	EA	4,500.00	\$	49,500.00
	b. Replace Existing Fire Hydrant	11	EA	4,500.00		49,500.00
	c. Adjust Valve, Meter, or Curb Box	81	EA	235.00		19,035.00
	d. Adjust Manhole	41	EA	600.00		24,600.00
	e. Replace Service Connection	10	EA	1,250.00		12,500.00
	f. Additional Force Account Work	1	LS	100,000.00	_	100,000.00
	subtotal				\$	255,135.00
6	Gas	00	5 4	025.00	*	04 450 00
	a. Adjust Valve Box	90	EA	235.00	\$	21,150.00
	b. Additional Force ACcount Work	1	LS	20,000.00	_	20,000.00
	subtotal				\$	41,150.00
7	Pavement	25	Γ.	E00.00	ď	12 500 00
	a. Reset Monument Boxes	25	EA	500.00	\$	12,500.00
	b. Subgrade Compaction	24,185	SY	1.00		24,185.00
	c. Aggregate Base 304	5,375	CY	45.00		241,875.00
	d. 9" Concrete e. 1-1/4" Asphalt Surface Cource	217,665 840	SF CY	6.00 85.00		1,305,990.00 71,400.00
	e. 1-1/4 Aspiral Surface Cource	040	Cī	65.00		71,400.00

ITEM	DESCRIPTION	QTY.	UNIT	UNIT COST	
	f. 1-3/4" Asphalt Intermediate Course	1,180	CY	78.00	92,040.00
	g. Tack Coat	2,418.5	GAL	1.00	2,418.50
	h. Geogrid	36,266	SY	3.50	126,931.00
	i. Concrete Curb & Gutter	8,315	LF	25.00	207,875.00
	j. Crosswalk Paving (8"t)(Color Texture)	16,610	SF	10.00	166,100.00
	k. Pavement Marking	7,700	LF	.50	3,850.00
	I. Turn Arrow	16	EA	50.00	800.00
	m. 8" Planter Curb at Islands Cut-Outs	2,500	LF	25.00	62,500.00
	n. 30" Island Curb	310	LF	100.00	31,000.00
	o. Stamped & Colored Concrete (12"t)	19,314	SF	15.00	289,710.00
	subtotal				\$2,639,174.50
8	Site Furnishings				
	a. Trash Receptacles	36	EA	500.00	\$ 18,000.00
	b. Benches	36	EA	1,000.00	36,000.00
	c. Kiosks	12	EA	7,500.00	90,000.00
	d. Bus Stop Shelter	5	EA	25,000	125,000.00
	e. Signage/Wayfinding	1	ALLOW	100,000.00	100,000.00
	f. Artwork	1	ALLOW	100,000.00	100,000.00
	g. Decorative Planters	1	ALLOW	50,000.00	50,000.00
	subtotal				\$ 519,000.00
9	Landscape				
	a. Ornamental Trees	78	EA	500.00	39,000.00
	b. Topsoil	1,350	CY	25.00	33,750.00
	c. Mulch	200	CY	25.00	5,000.00
	d. Shrubs	850	EA	50.00	42,500.00
	subtotal				\$ 120,250.00
10	Irrigation				
	a. Irrigate Planters	1	ALLOW	150,000.00	\$ <u>150,000.00</u>
	subtotal				\$ 150,000.00
11	Miscellaneous				
	a. Maintenance of Traffic	1	LS	80,000.00	\$ 80,000.00
	b. Construction Survey/Layout	1	LS	50,000.00	50,000.00
	subtotal				\$ 130,000.00
12	Lighting				
	a. Street Lighting	1	ALLOW	200,000.00	\$ 200,000.00
	b. Pedestrian Lighting	1	ALLOW	100,000.00	100,000.00
	subtotal				\$ 300,000.00
13	Traffic Signalization Improvements	1	ALLOW	150,000.00	\$150,000.00
	subtotal				\$ 150,000.00
	TOTAL				\$6,174,742.00
	Contingency (15%)				926,211.30
	General Conditions (4%)				246,989.68
	Bonds and Insurances (2%)				123,494.84
	Mobilization / Demobilization (1%)			61,747.42
	GRAND TOTAL				\$7,533,185.24



2003 AND 2005 TRAFFIC COUNTS

VISUAL PARKING SURVEY BY SVD

RTA 2004 BUS ROUTE PERFORMANCE DATA

PUBLIC MEETING ARTICLE

Documents as Separate Attachments

Subsurface Investigation Report, Fleet Avenue Planning and Design Study, Prepared by Applied Construction Technologies, Inc. (ACT)

Phase I Environmental Site Assessment, Fleet Avenue, Independence Road to 65th Street, prepared by Floyd Browne Group (formerly Environmental Design Group, EDG)

Preliminary Engineering Drawing Set

Public Meeting Survey and Responses

2003 and 2005 Traffic Counts

FLEET AVENUE PLANNING AND DESIGN STUDY • 06.2006



CUYAHOGA COUNTY ENGINEER

ROBERT C. KLAIBER, Jr., P.E., P.S. 2100 Superior Viaduct • Cleveland, Ohio 44113 (216) 348-3800 • FAX 348-3896 • TTD 348-3928

May 11, 2005

Ben Campbell Project Manager Slavic Village Development 5620 Broadway Cleveland, Oho 44127

Dear Mr. Campbell:

As we promised at our last Slavic Village meeting, on May 2, 2004 we conducted a 24-hour machine traffic count at the intersection of Fleet and East 59th Street and Fleet and East 56th Street. We are also enclosing copies of counts that we performed in July 2003 at the intersections of Fleet and East 55th Street and the Bridge over I-77.

Our data shows that the maximum daily traffic on Fleet Avenue in that section is 15,603 vehicles. If you have any questions, please call me.

Very truly yours,

ROBERT C. KLAIBER, JR., P.E., P.S. CUYAHOGA COUNTY ENGINEER

Chief Transportation/Traffic Engineer

Enc: As Noted

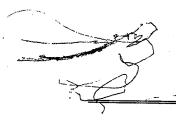
c. Scott Frantz, City of Cleveland, w/enc. Martin Kader, City of Cleveland, w/enc. Robert C. Klaiber, Jr., P.E., P.S. Stan Kosilesky, P.E.



ropy funcic | tose No. 1073 P. 1/10

SLAVIC VILLAGE DEVELOPMENT 5620 BROADWAY AVENUE CLEVELAND, OHIO 44102 PHONE 216 429-1182 FAX 216 429-2632

	FACSIMILE TRANSMITTAL SHEET	
TO:	FROM:	
Mike Kannard	Ben Campbell	
COMPANY:	DATE:	
SCPS	5/12/2005	
FAX NUMBER	TOTAL NO. OF PAGES INCLUDING COVER:	
(216) 696-4767	& NINE PACES	
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:	
RE: Fleet Traffic Counts	YOUR REPERENCE NUMBER:	
☐ URGENT ☐ FOR REVIEW	☐ please comment please reply ☐ please recycle	
Hello Mike,		
The Cuyahoga County Engine wasn't sure if you received a co	eer delivered on their promise to do traffic counts (SEE ATTACHED pp and thought you'd want to review the report with EDG.)). I
Best Regards,		



Ben Campbell

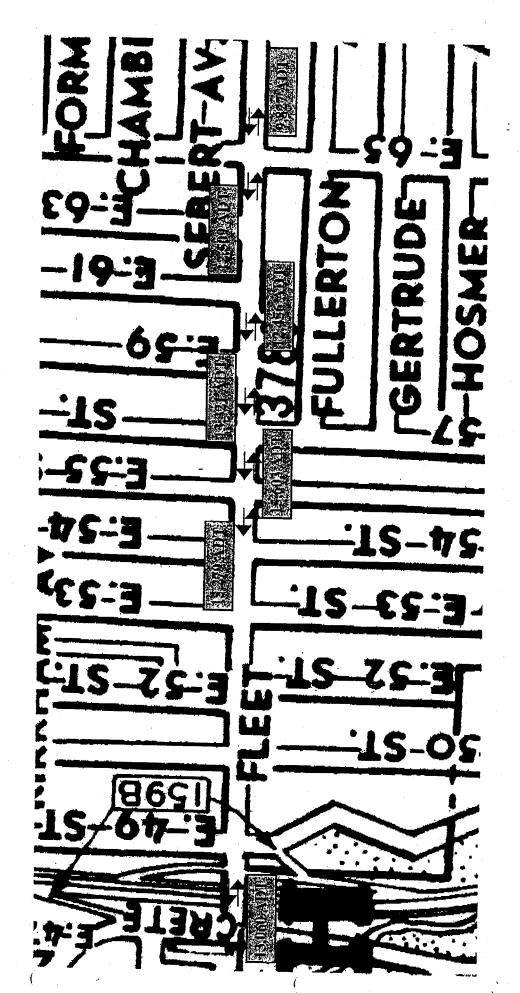
The following intersections on Fleet Avenue have been counted and the eastbound and westbound average traffic volumes for each location are shown for a 24-hour period:

Bridge over I-77
 East 55th Street

Count Start Date - Thursday, July 17, 2003 Count Start Date - Wednesday, July 9, 2003

East 59th Street Count Start Date
East 65th Street Count Start Date

Count Start Date - Monday, May 2, 2005 Count Start Date - Monday, May 2, 2005 The attached pages are count sheets showing hourly volumes for each count location.



Cuyahoga County
Lane 1 - Westbound
Lane 2 - Eastbound
VOLUME SUMMARY ENDING: TUE 05/03/2005

Page: 1

Start Time: 11:00 AM Site ID: 150 ft East Location: WBEB Fleet Ave. E of East 65th St.

File: WBEBFleetEofE65.prn

City: Cleveland County: Cuyahoga

		•	
TIME	1 WB	2 EB	Total
12:00 13:00 14:00 15:00	.224 253 245 416	281 284 291 353	50\$ 537 536
16:00 17:00 18:00 19:00	409 435 397 320	387 331 309 239	769 796 766 706 559
20:00 21:00 22:00 23:00 24:00	231 172 183 132 101	219 216 200 162 93	450 388 383 294 194
01:00 02:00 03:00 04:00 05:00	57 33 24 21 22	52 28 33 26	109 61 57 47
06:00 07:00 08:00 09:00	48 109 222 275	44 71 194 374 377	66 119 303 596 652
10:00	204 216	257 25 7	461 473
AY TOTAL ERCENTS	4749 48.4%	5078 51.6%	9827 100%
M Times M Peaks	08:00 320 H	07:45 449	
M Times M Peaks	16:45 . 478	15:15 387	
	*/A STREET		· · · · · · · · · · · · · · · · · · ·
6101		#	4749
12509 ADT 6408 ->-	→		9827 ADT
		R/W STREET AVENUE	

Cuyahoga County Lame 1 - Eastbound Lame 2 - Westbound VOLUME SUMMARY ENDING: TUE 05/03/2005

Page: 1

Start Time: 11:15 AM Site ID: 150 ft West Location: EBWB Fleet Ave. W of East 65th St.

File: EBWBFleetWofE65.prn City: Cleveland

County: Cuyahoga

TIME		1		2	Total
	. 442	EB		WB	
13:00		331		331	662
14:00		381		348	729
15:00		479		52 4	1003
16:00		457		469	926
17:00		427		. 566	993
18:00		366		437	803
19:00		417		392	809
20:00		302		291	809
21:00		282		244	593 506
22:00		214		308	526
23:00		182		162	522
24:00		114		107	344
01:00		63		707	221
01:00		33		69	132
02:00		33 45		46	79
03:00		45		32	77
04:00		35 50		21	<u>56</u>
05:00		50		33	83
06:00		110		80	190
07:00		272		153	425
00:80		509		319	828
00:00		400		300	700
10:00		323		265	588
11:00		295	_	289	584
12:00		321		315	636
TOTAL		6408		6101	12509
RCENTS		51.3%		48.7%	100%
Times Peaks		07:45 549		07:45 375	
Times		15:00		.16:30	L
Peaks		482	1	586	.
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Cuyshoga County Lane 1 - Westbound Lane 2 - Eastbound VOLUME SUMMARY ENDING: TUE 05/03/2005

Page: 1

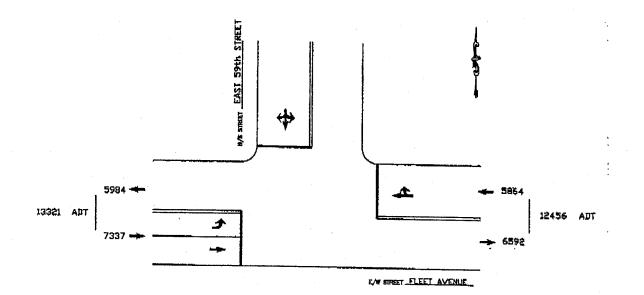
Start Time: 10:45 AM Site ID: 100 ft East

Location: WBEB Fleet Ave. E of East 59th St.

File: WBEBFleetEofES9.prn City: Cleveland

County: Cuyahoga

MT100			
TIME	1 WB	2 EB	Total
	**************************************		***************************************
12:00	305	331	63 6
13:00	333	345	678
14:00	316	405	721
15:00	493	492	98\$
16:00	445	486	931
17:00	508	461	969
18:00	437	392	829
19:00	372	435	807
20:00	2 99	316	615
21:00	214	278	492
22:00	301	213	514
23:00	163	183	346
24:00	113	125	238
01:00	7 1	68	139
02:00	49	37	86
03:00	33	39	72
04:00	24	35	59
Q5:00	32	49	81
06:00	79	92	171
07:00	15 5	259	414
08:00	292	485	777
09:00	314	443	757
10:00	259	329	588
11:00	257	294	551
Y TOTAL	5864	6592	12456
RCENTS	47.1%	52.9%	100%
Times	08:00	07:45	
Peaks	364	556	
Times	16:45	14:45	
Peaks	550	523	



Cuyahoga County
Lane 1 - Eastbound
Lane 2 - Westbound
VOLUME SUMMARY
ENDING: TUE 05/03/2005

Page: 1

Start Time: 10:45 AM Site ID: 150 ft West.

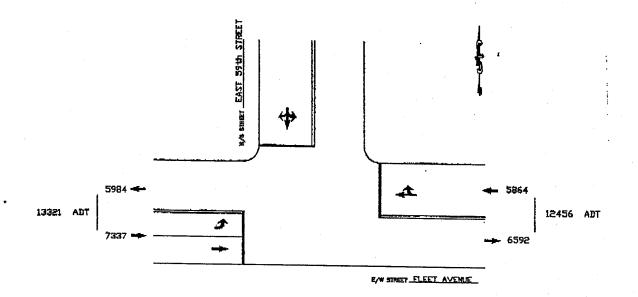
Location: EBWB Fleet Ave. W of East 59th St.

File: EBWBFleetWofE59.prn

City: Cleveland County: Cuyahoga

TIME	1. EB	2 WB	Total

12:00	472	181	653
13:00	396	325	721
14:00	415	305	720
15:00	527	490	1017
16:00	558	477	1035
17:00	500	521	1021
18:00	447	487	934
19:00	442	403	845
20:00	374	309	683
21:00	318	231	549
22:00	242	302	544
23:00	210	164	374
24:00	141	125	266
01:00	81	86	167
02:00	43	47	90
03:00	37	34	71
04:00	36	27	63
Q5:00	57	39	96
06:00	94	81	175
07:00	256	183	439
08:00	506	296	802
09:00	486	321	807
10:00	385	280	665
11:00	314	270	584
		2 , 0	204
TOTAL	7337	5984	13321
RCENTS	55.1%	44.9%	100%
Times	07:45	08:00	
Peaks	592	368	
Times	14:45	17.:00	
Peaks	564	580	



Cuyahoga County Lane 1 - Eastbound Lane 2 - Westbound VOLUME SUMMARY ENDING: THU 07/10/2003

Page: 1

Start Time: 11:45 AM

Site ID: 225 ft West Location: Fleet Ave. West of East 55th St.

File: FleetWofE55.prn City: Cleveland County: Cuyahoga

TIME		1	2	Total
		EB	WB	TOLAL
13:00		490	413	903
14:00		489	460	949
15:00		483	462	945
16:00		574	522	
17:00		570		1096
18:00		570	613	1183
10:00		590	574	1164
19:00		508	470	978
20:00		364	344	708
21:00		314	342	6 56
22:00		300	308	608
23:00		290	276	566
24:00		207	184	391
01:00		139	109	248
02:00		75	80	
03:00		51 51	60 60	155
04:00		56	60	111
		20	38	94
05:00		54	57	111
06:00		118	131	249
07:00		298	243	541
08:00		407	319	726
09:00		381	303	684
10:00	e .	393	324	717
11:00		351	345	696
12:00		416	384	800
22.00			204	800
RCENTS Times		7918 51.9% 07:45	7361 48.1% 11:15	15279 100%
Peaks		419	384	
Times		17:00	16:30	
Peaks		602 Li	664	
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Cuyahoga County
Lame 1 - Eastbound
Lame 2 - Westbound
VOLUME SUMMARY
ENDING: FRI 07/18/2003

Page: 1

Start Time: 11:00 AM

Site ID: OVER 1-77

Location: Fleet Ave East of Washington Park Blvd

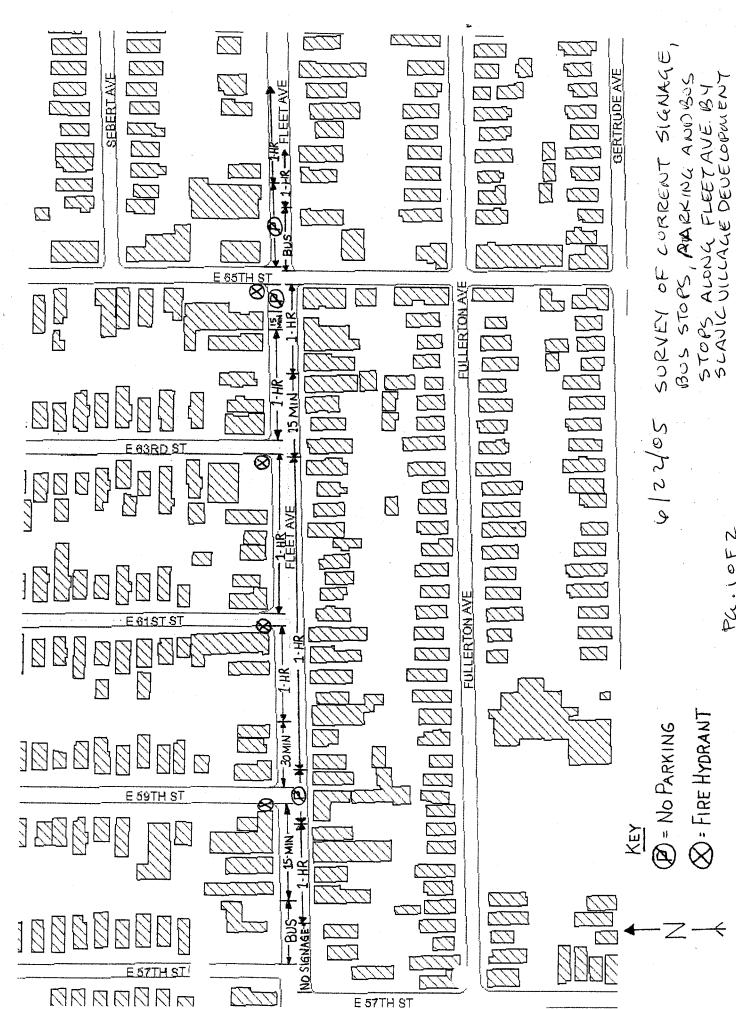
File: FleetEofWashPkBl.prn

City: Cleveland County: Cuyahoga

### Total ### ### ### ### ### ### ### ### ### #		·		~	· •	
12:00 374 279 653 13:00 431 345 776 14:00 398 287 685 15:00 491 412 903 16:00 490 422 912 17:00 505 430 935 18:00 334 338 732 20:00 348 259 607 22:00 337 278 615 22:00 253 261 554 24:00 154 106 300 10:00 104 106 300 114 106 300 1100 107 84 191 12:00 78 47 125 04:00 51 42 112 04:00 51 42 112 04:00 51 42 112 04:00 51 42 112 04:00 51 42 112 04:00 51 42 112 04:00 51 42 112 04:00 51 42 112 04:00 51 118 150 278 06:00 272 319 591 06:00 272 319 591 06:00 272 319 591 07:00 394 248 642 10:00 327 265 592 M Times 07:45 06:15 M Feaks 452 13060 M Times 14:45 5 M Feaks 14:45	TIME	1 EB		2 WB	Total	
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Visual Parking Survey by SVD

FLEET AVENUE PLANNING AND DESIGN STUDY • 06.2006



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RTA 2004 Bus Route Performance Data

FLEET AVENUE PLANNING AND DESIGN STUDY • 06.2006

Greater Cleveland Regional Transit Authority

Bus Route Performance 2004

Operations Division
Service Management Department
Service Planning Section



2004 Annual Bus Productivity Highlights:

Circulators (5%), Downtown Loops (2%), and Seasonal/Supplemental Services (1%). RTA's 2004 route productivity, ridership by category, and Local Radial services contributed 51% of RTA's total ridership followed by Crosstown/Feeders (28%), Express/Flyers (13%), Community category contribution are outlined in Table 1.

Table 1: Average Productivity & System-wide Ridership Contribution by Category, 2004

Service Category	Average boardings per vehicle hour by route category	2003 Average boardings per vehicle hour by route category	Ridership by Category (Unlinked Trips)	Contribution
LOCAL/RADIAL	39	36	21,286,096	· 50.9%
CROSSTOWN/FEEDER	28	28	11,893,614	28.4%
EXPRESS/FLYER	22	21	5,565,537	13.3%
COMMUNITY CIRCULATORS	15	14	2,106,974	2.0%
DOWNTOWN LOOP	34	37	811,433	1.9%
SEASONAL/SUPPLEMENTAL SERVICES	22	23	164,147	0.4%

- An important factor in route productivity is system-wide contribution. Minor changes in high ridership routes may have a more significant impact on the bus system than larger changes in minor routes. RTA's top ten passenger carrier routes (326, 6, 22, 1, 15, 14, 10, 20, 2, 40) contribute 48% of system-wide bus ridership. Route 326 alone contributes about 8% of system-wide bus ridership. Out of RTA's 105 bus routes thirty routes carry 79% of bus passengers. The remaining seventy-five routes carry the remaining 21% of bus passengers (See table 2).
- RTA's top ten productive routes based on boardings per in-service vehicle hour include 6, 2, 326, 1, 22, 246, 10, 30, 14, and 251. Unlike the top ten passenger carrier routes, top ten productive routes contain a more diverse set of service groups--five routes are Local Radial.
- Forty-eight percent or 15 out of 31 Express/Flyer routes were above the average 22 boardings per vehicle hour productivity in the Express/Flyer service category. Routes 246, 251, 239, 51F, and 39X were the five most productive bus lines.
- Not all top-ten ridership bus lines performed above average. For example routes 20 and 15 displayed below average productivity, in their service category of Local/Radial. Targeting high ridership routes to perform above average will have positive embedded cost savings.
- Local/Radial's with an average boarding of 39 per vehicle hour -- surpassed all other categories, followed by Downtown/Loops and Crosstown/Feeder categories. The Center City Loop, however, is less than half as productive as the Outer Loop
- despite various routing changes in 2004. In addition, route 804 Lakewood remained among on the top thirty largest ridership contributor routes, Overall, circulator productivity improved from 14 to 15 boardings per vehicle hour and from 2 million rides to 2.1 million rides. Within category, route 808 West Shore Community Circulator has continuously remained a low performer in boardings per vehicle hour standards. Route 804 Lakewood and 807 Tremont remained the most productive circulator routes. Also route 802 Southeast Circulator remained a low performer

Purpose and Methodology:

Route Performance Evaluation provides information on service utilization. GCRTA's Revised Service Policy, adopted by the Board of Trustees in May of 2003, identifies the intent of route performance evaluations as, "The policy objective is to ensure that service levels are correlated to demonstrated passenger demands for each route or service. The intent is to provide a level of service, which is attractive to the rider, yet not wasteful of service resources, as well to ensure a minimum level of ridership on all routes." Under-utilized routes may constitute an inefficient use of resources that could be used more productively in areas with higher levels of demand for service.

GCRTA's Revised Service Policy calls for route performance evaluations based upon:

- Passenger boardings per vehicle hour
 - Passenger boardings per vehicle trip
- Passenger boardings per vehicle mile

Indicators are to be calculated compared within route category. Each of these categories has different route characteristics based on passenger demand and travel patterns. Bus routes are categorized as:

- Local Radial
- ▼ Crosstown/Feeder
- Express/Flyer
- ➤ Circulator Bus and Loop
- CBD. It is characterized by frequent stops, shorter passenger trips, higher level of base to off-peak patronage, and slower bus speeds due to 1. Local Radial Service is used to collect and distribute high-turnover traffic along developed corridors radiating to and from the Cleveland passenger boarding/alighting and traffic conditions.
- generally serves suburban areas and/or park-n-ride facilities. This service is characterized by longer passenger trips, reduced levels of II. Express Flyer Service is used to provide fast line-haul service to major trip attractions under high peak-period ridership conditions. patron turnover, and fewer passengers per mile.
- III. Crosstown/Feeder Service is used to link routes or route segments. This type of service provides travel opportunities for patrons with dispersed trip origins and destinations. The service is characterized by patrons boarding throughout a large area and frequently transferring to another bus or to the rail system to complete the trip.
- IV. Circulator Service is used to serve areas with high employment and diversified activities within a well defined-area.
- V. Loop Service is used to operate within the central business district (CBD).

each route's main service pattern. In cases where route branch data are ambiguous, they are collapsed and analyzed by parent route number (i.e. Some routes may change service characteristics for parts of a trip or for certain times of the day or week. RTA classifies such routes according to 55, 15, 20, 32). Within each route category, the mean is calculated as a standard for comparing individual routes. As outlined in the Service Policy (1020.03), routes that exhibit consistently low or declining indicators are to be investigated for possible remedial action. Not every decline in route productivity requires service adjustments. For example, road and bridge construction can have a significant negative impact on productivity by reducing ridership and increasing vehicle hours through reduced speeds and/or temporary re-routes.

Route level data accuracy can be affected by human and machine errors. If an invalid route number is entered into the electronic farebox, ridership totals default into the category "Route 0." Also, any records exceeding the electronic farebox memory defaults into the same category. Future improvements of the data collection and processing will help allow ridership analysis in greater detail by route, fare, and possibly even route segments. This report does not factor or adjust ridership by route. This report has been assembled using unfactored ridership, whereas RTA's monthly ridership report is based on factored ridership. Factored ridership is adjusted for undercounting problems according to fare media usage. Fare media refers to GFI categories for fare payments (cash, farecard, pass, etc,) used to ride RTA. Years with fewer farebox malfunctions require comparatively less adjustment. Adjustment factors vary over time and can impact ridership differently from year to year. In accordance with the Service Policy, routes falling below the average boardings per hour for their route category are candidates for remedial action. These remedial actions can include, but are not limited, to:

- Focused route promotions
- Route realignments to serve major activity centers
- Route realignments to eliminate unproductive segments or branches, reduce route length or increase route speed (i.e. adopt freeway alignment) to reduce in-service vehicle hours
- Add short turn trips, reducing service frequency on outlying route segments
- Reduce vehicle hours by adjusting frequency or shortening daily service spans
- Eliminate route

All routes, which rank in the bottom quartile of their service category in 2004 and were not adjusted will be adjusted during 2005 or will be identified for future remedial actions in the 2006 Service Management Plan.

The following tables contain detailed route performance statistics for 2004. Routes are ranked throughout the report by descending productivity based on passenger boardings per in-service vehicle hour (B/VH). RTA uses ridership data in this report only as an initial screening tool. Other data sources are consulted before any service adjustments are made.

Table 2: 2004 Unfactored Rideship & Systemwide Route Contribution

Cumulative

87.6%

%9.0 0.6%

239,532 227,448 214,774

250,335

88.2%

89.7%

0.5% 0.5% 0.5% 0.5%

210,332 205,892

213,777

90.2%

89.2%

90.7%

198,646

197,837 187,728

91.2% 91.6% 92.1% 92.5% 92.9% 93.3% 93.7% 94.1% 94.5% 94.8% 95.2% 95.5% 95.8% %0.96 96.3% %9.96 8.96 97.0% 97.3% 97.5% 97.7% 97.8% 98.0% 98.2% 98.4% 98.5% 98.7%

> 0.4% 0.4% 0.4% 0.4% 0.4% 0.4% 0.3% 0.3% 0.3% 0.3% 0.3% 0.3% 0.3% 0.2% 0.2% 0.2% 0.2% 0.2%

183,758

186,287

162,576

155,922

168,502

173,587

153,059

141,817 136,341 129,245 123,045 114,820 111,924 109,735 98,175 91,411 88,537 87,541 81,168

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	Route	38	52	908	808	246	88X	78	147	801	7	94	263	803	83	16	51F	39BX	820	98	20	25NX	39F	802	55CX	805	239	781	251	89	135	36	79X	451	45	821	15F	33	86	29F
	Rank	40	41	42	43	44	45	46	47	48	49	20	51	52	53	54	22	26	22	28	29	09	19	62	63	64	65	99	29	89	69	20	7	72	73	74	75	9/	11	78
%	Cumulative	8.3%	15.5%	20.4%	25.2%	30.0%	34.6%	39.1%	42.3%	45.3%	48.3%	50.8%	53.0%	55.3%	57.5%	29.7%	61.8%	63.9%	65.5%	%0′.29	68.5%	%0.02	71.4%	72.8%	74.1%	75.2%	76.3%	77.2%	78.1%	79.1%	%0.08	80.8%	81.6%	82.3%	83.1%	83.8%	84.5%	85.2%	85.8%	
%	Contribution (8.3%	7.1%	4.9%	4.9%	4.7%	4.6%	4.5%	3.3%	3.0%	2.9%	2.5%	2.3%	2.3%	2.2%	2.2%	2.1%	2.1%	1.6%	1.6%	1.5%	1.5%	1.4%	1.4%	1.2%	1.1%	1.1%	1.0%	%6.0	%6.0	%6.0	%8.0	%8.0	0.8%	%8'0	0.7%	0.7%	0.7%	%9.0	
2004	Boardings	3,442,131	2,941,560	2,041,450	2,005,840	1,958,665	1,888,796	1,866,657	1,351,598	1,228,787	1,210,848	1,033,437	946,316	933,870	913,712	904,131	871,647	860,636	652,221	641,508	605,541	604,994	598,214	592,587	504,725	472,776	439,222	393,372	382,436	379,718	373,916	336,716	321,474	321,195	317,600	297,370	276,579	270,567	263,081	
3	САТ	뜨	뜨	出	굨	프	꿈	R	프	R	CF	LR	S	R	유	씸	Ϋ́	꿈	씸	Ŗ,	겁	Ϋ́	R	R	CRC	씸	뜨	띡	R	Ϋ́	Ϋ́	Ϋ́	띰	ΧF	X	Ϋ́F	CRC	뭐	R	
	Route	326	9	22	-	15/15A	14	10	20AII	7	40	19	28	48	20	35	X6/6	25	79	41A/41C	247	75X	30	32/32X	804	23	8	œ	37	39X	06	51X	4	X92	55SX	11	807	70	34	
	Rank	-	7	e en	4	ß	9	7	80	6	10	1	12	13	1	15	16	17	18	19	20	21	22	23	22	56	27	28	59	30	31	32	33	34	35	36	37	38	39	

78 **29F** XF 43,026 0.1% 99.0% Operations Division, Service Management Department, Service Planning Section

2004 Route Performance

%6.86

0.2%

65,477 56,724 49,702 44,957

66,792

75,416 70,955

%	Cumulative	99.1%	99.2%	%8'66	99.4%	99.4%	89.5%	%9.66	%2'66	%2'66	%8'66	%8.66	%8'66	%6.66	%6.66
%	Contribution	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	%0.0	%0.0	%0.0	%0:0	%0.0
2004	Boardings	42,456	36,191	35,883	35,022	33,453	33,195	31,392	27,710	25,090	17,710	16,165	15,793	11,860	11,343
	CAT	X	Χ	Χ	Υ	Χ	CRC	Υ	P.	X	P.	SS	P.	SS	Ϋ́
	Route	87F	96F	31	46/46F	X26	808	27F	24	86F	53	20C	42	722	76F
	Rank	79	80	81	82	83	84	85	98	87	88	89	06	9	92

			2004	%	%
Rank	Route	САТ	Boardings	Contribution	Cumulative
93	92	SS	7,417	%0.0	%6.66
94	761	SS	7,190	%0.0	%6.66
92	724	SS	6)6'9	%0.0	86.66
96	742	SS	5,124	%0.0	100.0%
97	723	SS	4,290	%0.0	100.0%
98	721	SS	4,083	%0.0	100.0%
66	741	SS	2,805	%0.0	100.0%
100	701	SS	2,503	%0.0	.100.0%
101	743	SS	1,569	%0.0	100.0%
102	703	SS	1,391	%0.0	100.0%
103	702	SS	732	0.0%	100.0%
104	744	SS	626	%0.0	100.0%
105	704	SS	72	0.0%	100.0%
	Total		41,315,272	100.0%	

2004 Route Performance: Sorted by In-Service Boardings Per Vehicle Hour in Descending Order

ço ۽							BVH	Average						Bottom	Quartile					
dicator	tal	B/VM	5.35	3.12	3.22	2.91	2.63	- 3.06	2.22	2.53	1.87	1.96	2.27	1.56	1.29	1.70	1.18	1.18	1.67	2.41
Route Performance Indicators	Total	B/VH	47	38	37	35	33	31	53	28	22	27	23	19	19	19	9	16	16	30
erform	ice	B/VM	5.82	3.74	3.56	3.44	2.91	3.13	2.77	2.58	2.28	2.31	2.44	1.89	1.49	1.94	1.36	1.42	1.78	2.81
Route P	In-service	B/VH	58	20	48	48	42	40	37	35	32	35	35	22	22	22	24	22	22	39
		B/VT	40	22	35	36	35	16	40	19	56	56	16	27	31	18	21	8	œ	32
		Miles	549,497	1,104,179	622,320	700,986	718,090	128,451	881,923	127,230	868,779	528,609	113,998	552,163	701,841	258,473	551,537	402,174	29,765	8,840,015
	Total	Hours	62,727	90,121	54,132	58,468	57,784	12,555	66,444	11,658	66,117	38,637	11,436	46,073	46,422	22,787	37,174	29,826	3,083	715,442
ıtistics		Trips	85,978	80,539	68,451	67,585	65,061	26,014	67,292	19,032	84,860	48,727	18,917	42,874	39,060	28,259	41,215	33,075	6,910	823,849
Vehicle Statistics		Miles	505,294	920,054	563,307	593,480	649,226	125,805	708,347	124,416	710,376	446,418	105,827	455,703	607,707	226,065	481,292	332,179	27,935	7.583,431
_	In-service	Hours	50,391	68,206	41,770	42,927	45,283	9,899	52,307	9,170	46,869	29,948	8,007	34,038	35,762	17,520	27,182	21,117	2,240	542.635
		Trips	72,720	60,028	57,732	57,111	54,361	24,666	48,596	16,883	62,044	39,168	16,281	32,130	28,875	24,485	31,046	26,011	6,120	658,257
by Route	%	Contribution	13.8%	16.2%	9.4%	9.6%	8.9%	1.8%	9.2%	1.5%	7.6%	4.9%	1.2%	4.0%	4.2%	2.1%	3.1%	2.2%	0.2%	100%
Ridership by Ro		Boardings	2,941,560	3,442,131	2,005,840	2,041,450	1,888,796	393,372	1,958,665	321,474	1,622,165	1,033,437	258,518	860,636	904,131	439,222	652,221	472,776	49,702	21.286.096
adial	RIDERSHIP BY ROUTE 2004	DESCRIPTION	Euclid Ave	Detroit-Superior	St. Clair	Lorain	Kinsman	Cedar	Union & Union - Walden	Payne-Wade Park	W25th-Broadview	Broadway-Miles	Hough	Madison	Broadview-Quincy	Tremont - Storer	Fulton	Clark	Central	
1. Local Radial	RIDERSHII	Route	9	326	-	22	14	æ	15/15A	4	20/20A	19	38	25	35	81	79	23	33	

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In-Service	Includes in-service vehicle or revenue stats only
Total	Includes dead-head and other non-revenue stats
% Contribution	% Contribution Category specific contribution not system-wide
*	Data validity issuesridership data is not reliable
*	New route

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CAT	Route Categories assigned by Service Planning
BVT	Boardings per vehicle trip
BVH	B/VH Boardings per vehicle hour
B/VM	B/VM Boardings per vehicle mile

2004 Route Performance: Sorted by In-Service Boardings Per Vehicle Hour in Descending Order

Ridership by Route
%
Boardings Contribution
1,228,787 10.3%
1,866,657 15.7%
598,214 5.0%
1,210,848 10.2%
933,870 7.9%
946,316 8.0%
250,335 2.1%
210,332 1.8%
76,087 0.6%
44,957 0.4%
187,728 1.6%
66,792 0.6%
141,817 1.2%
136,341 1.1%
27,710 1.3%
11,893,614 100%

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In-Service	Includes in-service vehicle or revenue stats only
Total	Includes dead-head and other non-revenue stats
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CAT	CAT Route Categories assigned by Service Planning
BVT	Boardings per vehicle trip
ВЛН	Boardings per vehicle hour
B/M	Boardings per vehicle mile

2004 Route Performance: Sorted by In-Service Boardings Per Vehicle Hour in Descending Order

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RIDERSHIP BY ROUTE 2004		%		In-service		-	Total		-	In-service	ice	Total		
DESCRIPTION	Boardings	Contribution	Trips	Hours	Miles	Trips	Hours	Miles	BNT	B/VH	BVM	BNH BNN	N/N	
Westlake Park-n-Ride	214,774	3.9%	2,609	4,509	116,870	18,237	10,124	244,426	28	48	1.84	21	0.88	
Strongsville Park-n-Ride	88,537	1.6%	3,315	2,133	56,898	8,272	4,634	115,886	27	42	1.56	19	9.76	
Broadway-Northfield	33,453	%9.0	880	840	16,117	1,650	1,284	24,202	38	4	2.08	56	1.38	
Euclid Park-n-Ride	98,175	1.8%	4,080	2,465	54,417	10,710	5,759	116,785	24	40	1.80	17	0.84	
I-71/Pearl Rd. Flyer	162,576	2.9%	5,610	4,139	106,687	11,427	7,331	175,577	29	39	1.52	22	0.93	
N.Olmsted Park-n-Ride	186,287	3.3%	6,912	6,079	155,831	17,899	10,468	286,132	27	31	1.20	48	0.65	
Mayfield	871,647	15.7%	33,018	28,997	424,314	47,049	39,559	517,117	56	30	2.05	22	1.69	
Lakeshore Flyer	123,045	2.2%	6,120	4,335	98,165	13,625	8,766	176,330	20	28	1.25	4	0.70	
akeshore & Lakeshore via Bratenhal	al 535,640	%9.6	27,272	19,246	424,911	35,897	27,765	491,146	20	28	1.26	15	19.29	
aurel Square Flyer	70,955	1.3%	2,550	2,614	63,878	6,775	5,284	132,721	28	27	1.11	13	0.53	
Butternut-Hilliard 190	36,191	0.7%	1,536	1,429	29,338	3,941	2,087	49,013	24	52	1.23	17	0.74	
Broadway-Turney	321,195	5.8%	15,957	13,372	198,491	21,320	18,726	240,948	20	24	1.62	17	1.33	
North Olmsted Express	604,994	10.9%	26,890	25,257	484,579	34,422	31,779	526,858	22	24	1.25	19	1.15	
Solan Flyer	31,392	%9:0	2,120	1,438	41,148	3,816	2,507	57,314	15	22	0.76	13	0.55	ВИН
Westwood I-90 Fiyer	42,456	0.8%	2,048	1,946	38,830	5,320	2,966	68,931	21	22	1.09	4	0.62	Average
Avon Lake	35,883	%9:0	1,530	1,674	34,341	4,139	3,513	82,687	23	21	1.04	10	0.43	
Broadway-Libby	373,916	6.7%	20,343	19,011	396,615	26,080	25,011	443,289	18	20	0.94	15	0.84	
Fulton Express	75,416	1.4%	3,970	4,114	72,165	9,677	7,504	142,988	19	18	1.05	9	0.53	
Clifton-Wooster	317,600	2.7%	19,415	17,653	325,010	35,901	26,239	458,673	16	18	0.98	12	69.0	
Brecksville	297,370	5.3%	19,815	16,601	350,080	32,575	24,025	484,562	15	18	0.85	12	0.61	
Broadview-N Royalton	81,168	1.5%	4,756	4,653	269'06	12,105	8,139	163,315	17	17	0.89	10		Bottom
Hub Parkway Flyer	43,026	0.8%	5,355	2,639	79,611	11,531	5,453	122,995	80	16	0.54	80	_	Quartile
Broadway-Northfield	213,777	3.8%	13,716	13,198	212,860	17,646	17,401	241,470	16	16	1.00	12	0.89	
Berea Flyer	25,090	0.5%	2,295	1,658	38,013	5,049	3,127	73,436	7	15	99.0	œ	0.34	
W 25-Pearl	336,716	6.1%	24,109	23,432	388,273	36,253	31,855	486,441	14	4	0.87	-	69.0	
Clifton-Wagar	129,245	2.3%	12,052	9,282	134,982	21,136	13,830	179,596	7	4	96.0	6	0.72	
Warrensville Hts. Flyer	56,724	1.0%	5,230	4,117	76,738	11,504	6,728	136,477	7	14	0.74	80	0.42	
Clifton-Lake	111,924	2.0%	9,400	8,393	158,399	18,993	12,590	229,104	12	13	0.71	6	0.49	
Rocky River - Westlake	35,022	%9.0	4,160	3,740	65,308	8,929	5,968	109,307	∞	တ	0.54	9	0.32	
Turney Flyer	11,343	0.2%	1,530	1,492	26,431	3,464	2,455	40,243	7	80	0.43	S.	0.28	
	5,565,537	100%	293,593	250,454	4,759,997	495,342	372,877	6,617,969	19	22	1.17	15	0.84	

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In-Service	Includes in-service vehicle of revenue stats only
Total	Includes dead-head and other non-revenue stats
% Contribution	% Contribution Category specific contribution not system-wide
*	Data validity issuesridership data is not reliable
**	New route

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CAT	Route Categories assigned by Service Planning
BNT	Boardings per vehicle trip
BVH	Boardings per vehicle hour
B/VM	Boardings per vehicle mile

2004 Route Performance: Sorted by In-Service Boardings Per Vehicle Hour in Descending Order

4. Commui	4. Community Circulators	Ridership by Route	Route		_	Vehicle Statistics	tistics				Route Performance Indicators	erforma	nce Indi	cators	
RIDERSHII	RIDERSHIP BY ROUTE 2004		%		n-service		-	Total		-	In-service	ņ	Total		
Route	DESCRIPTION	Boardings	Contribution	Trips	Hours	Miles	Trips	Hours	Miles	BNT	B/VH E	B/VM	B/VH B/VM	≥	
804	Lakewood	504,725	24.0%	39,040	25,350	357,009	44,008	34,096	407,309	13	20	1.41	15	1.24	
807	Tremont	276,579	13.1%	25,317	15,664	214,182	28,533	20,174	237,281	7	49	1.29	14	1.17	
820	St. Clair - Five Points	153,059	7.3%	15,436	980'6	118,609	17,358	11,701	125,381	우	11	1.29	13	1.22	BNH
803	St. Clair - Hough	183,758	8.7%	17,958	11,683	161,263	20,050	13,842	168,731	9	16	1.14	43	1.09	Average
808	Kamm's-Puritas	227,448	10.8%	16,208	15,703	208,119	19,288	20,985	244,216	14	14	1.09	11	0.93	
801	Lee-Harvard	198,646	9.4%	17,420	14,512	219,516	20,228	16,840	232,026	Ξ	4	0.00	12	98.0	
806	Euclid	239,532	11.4%	25,145	18,612	286,979	28,245	21,785	298,810	9	5	0.83	-	0.80	Bottom
802	Slavic Village	109,735	5.2%	19,867	8,551	113,472	21,215	10,238	119,545	9	13	0.97	-	0.92	Quarfile
821	Heights Area	65,477	3.1%	16,756	7,058	110,305	17,996	8,665	114,294	4	6	0.59	8	0.57	
802	Southeast	114,820	5.4%	16,650	13,364	195,434	19,032	17,092	199,254	_	თ	0.59	7	0.58	
808	West Shore	33,195	1.6%	6,131	5,384	104,916	7,165	6,498	120,109	2	9	0.32	5	0.28	
		2,106,974	100%	215,928	144,966	2,089,804	243,118	181,918	2,266,956	10	15	1.01	12	0.93	
5. Downtown Loops	wn Loops	Ridership by Route	Route	·		Vehícle Statistics	listics				Route Performance Indicators	erforma	nce Indi	cators	
RIDERSHII	RIDERSHIP BY ROUTE 2004		%	-	In-service		•	Total		-	In-service	ą	Total		
Route	DESCRIPTION	Boardings	Contribution	Trips	Hours	Miles	Trips	Hours	Miles	BNT	B/VH E	B/VM	BIVH BIVM	N/S	
247	Outer Loop	605,541	74.6%	37,485	15,423	132,702	40,800	19,559	151,164	16	39	4.56	31	4.01	
147	Center City Loop	205,892	25.4%	40,290	8,194	86,111	43,350	10,702	104,496	2	22	2.39	19	1.97	
		811,433	100.0%	77,775	23,617	218,813	84,150	30,260	255,660	10	34	3.71	27	3.17	

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In-Service	Includes in-service vehicle or revenue stats only
Total	Includes dead-head and other non-revenue stats
% Contribution	% Contribution Category specific contribution not system-wide
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*	New route

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3	CA! Route Categories assigned by Service Planning
BNT	Boardings per vehicle trip
ВИН	Boardings per vehicle hour
B/VM	Boardings per vehicle mile

2004 Route Performance: Sorted by In-Service Boardings Per Vehicle Hour in Descending Order

6. Total	Ridership by Route	Route			Vehicle Statistics	ics			Route Performance Indicators	erforma	nce Ind	cator	(0
	2004	%		In-Service			Total			In-Service	vice	F	Total
	Boardings	Contribution	Trips	Hours	Miles	Trips	Hours	Miles	BNT	В/ИН	B/VM	B/VH	B/VM
Local Radial	21,286,096	20.9%	658,257	542,635	7,583,431	823,849	715,442	8,840,015	32	39	2.8	30	2.4
Downtown Loop	811,433	1.9%	77,775	23,617	218,813	84,150	30,260	255,660	10	34	3.7	27	3.2
Crosstown	11,893,614	28.4%	615,010	417,848	6,238,114	734,424	554,194	6,969,116	19	28	1.9	21	1.7
Express/Flyer	5,565,537	13.3%	293,593	250,454	4,759,997	495,342	372,877	6,617,969	19	22	1.2	15	8.0
Seasonal/Supplemental Services	164,147	0.4%	22,627	7,460	121,678	47,975	26,898	279,108	7	22	1.3	9	9.0
Community Circulator	2,106,974	2.0%	215,928	144,966	2,089,804	243,118	181,918	2,266,956	10	15	1.0	12	6.0
Total	41,827,801	100%	1,883,190	1,386,981	21,011,837	2,428,858	1,881,589	25,228,824	22	30	2.0	22	1.7

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In-Service	in-Service Includes in-service vehicle or revenue stats only	
Total	Includes dead-head and other non-revenue stats	•
% Contribution	% Contribution Catagory specific percentage contribution not exetem-wide route contribution	

Route 2005 (4)

		Monthly Boardings				
	- markadhan (Camis into dhalana)	Jan-05	Feb-05	Mar-05	Apr-05	May-05
Route	DESCRIPTION		THE PERSON NAMED IN COURT OF THE PERSON NAMED			We will a second day
2	2 E.55th / E.79th	167,622	172,847	189,587	188,200	76,590
16	16 East 55th	13,673	14,670	14,734	14,546	15,386
19	19 Broadway-Miles	90,691	91,771	100,586	91,711	89,887
76X	76X Broadway-Turney	28,001	30,440	32,046	33,588	34,943
88X	88X Broadway-E 135 Expres	18,117	15,589	18,839	18,722	17,773
90	90X Broadway-Libby	26,415	25,756	32,440	29,159	28,912
805	805 Slavic Village Circ.	10,727	10,504	11,683	10,686	9,946
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Note: Boarding represents the whole route, not any specific segment. E.g.: 805 data is not just for Slavic Village's Fleet Ave boardings

Public Meeting Article

FLEET AVENUE PLANNING AND DESIGN STUDY • 06.2006

Residents, merchants meet to hear about future of Fleet

SLAVIC VILLAGE

On Thursday, Sept. 15, nearly 70 Fleet area residents and merchants crowded into the St. John Nepomucene school gymnasium, to help determine the future of Fleet Avenue.

Having invested over six months in gathering ideas and suggestions from city officials, local planning professionals and most importantly, neighborhood stakeholders, project architects from Schmidt Copeland Parker Stevens rolled out two potential visions of what Fleet Avenue could look like in the near future.

The first plan, featuring a center median with planted trees, would recast the street in the form of a boulevard. The second proposal would replace the existing center turn lane with a decorative median, adding an ornamental touch to the existing, wide expanse of cracked asphalt.

Both plans include dedicated bike lanes, improved sidewalks and streetscape amenities designed to enhance the look of the street.

In his opening remarks, Assistant Planning Director Ed Rybka

emphasized that the Campbell administration "strongly supports this study and very much wants to know how the residents and merchants [will] react to the preferred alternative."

Rybka added that "the administration is committed to seek[ing] state and federal funding sources with appropriate local dollar match to make the final preferred plan a reality."

Councilman Anthony Brancatelli noted that the proposal for Fleet Avenue is "the next step in a planning process for reinventing the Fleet area of Slavic Village."

Focusing on examples of how similar projects have recently succeeded in the neighborhood, he reminded those present of the new Fleet Avenue/I-77 bridge, the First Tee Golf Course in the new Washington Park Reservation, and the newly installed Cleveland Metroparks Trail that now connects Fleet Avenue to the Ohio & Erie Canal Reservation.

Audience response was strong, as the question and answer session that followed the presentation lasted almost a full hour. Taking the opportunity to voice their opinions, participants

stressed the importance of slowing speeding traffic, improving street lighting, and increasing the visibility of area merchants.

One pragmatic neighborhood observer reminded skeptics in the audience that any project that draws investment into the community was worth pursuing.

Hoping to calm traffic, create a new streetscape and capitalize on nearby Metroparks projects, Slavic Village Development recently teamed with the city of Cleveland to look at ways to rebuild Fleet Avenue into a thoroughfare attractive to both residents and businesses.

With funding provided by a Federal Highway Administration grant, SVD, the city and a panel or area residents and planning professionals have been evaluating various streetscape improvement proposals since March.

Following a review of the feed-back provided by those in attendance at the Sept. 15 meeting, representatives from SVD, the city and project architects hope to have a final recommendation before the public before the end of the year.

Slavic Village Development will be accepting public input on proposed project alternatives until 5 p.m. Friday, Oct. 7. For more information, call Ben Campbell at (216) 429-1182. ext. 105.