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Development Program Report for the North Richmond Area of Benefit

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Prepared Pursuant to Section 913 of the County Ordinance Code

Prepared by and for:

Contra Costa County Public Works Department, Transportation Engineering Division and
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Chapter

1

Introduction and Purpose

The North Richmond Area of Benefit ("North Richmond AOB") was created as a means to collect funds to maintain and improve roadway, bicycle, and pedestrian facilities needed to accommodate travel demand generated by new land development within North Richmond. This Development Program Report ("DPR") contains information and data in support of assessing development projects within the North Richmond AOB as a means for development to pay its fair share towards future infrastructure. The DPR is required by Chapter 913-6 of the County Ordinance Code and is required by the Board of Supervisors' Policy on Bridge Crossing and Major Thoroughfare Fees (adopted July 17, 1979), which implements Division 913 of the County Ordinance Code and section 66484 of the State Subdivision Map Act.

One of the objectives of the County General Plan is to connect new development directly to the provision of community facilities necessary to serve that development. In other words, development cannot be allowed to occur unless a mechanism is in place to provide the funding for the infrastructure necessary to serve that development. The North Richmond AOB Fee is a means of raising revenue to construct road improvements to serve new developments. Requiring that all new development pay a road improvement fee will help ensure that they participate in the cost of improving the road system.

Each new development or expansion of an existing development will generate additional traffic. Where the existing road system is inadequate to meet future needs of new development, improvements are required to meet the new demand. The proposed infrastructure improvements within the road right-of-way should integrate best management practices for roadway design that facilitate a reduction in vehicle emissions, especially emissions from truck traffic. Roadway design that is sensitive to air quality is consistent with the County's General Plan policies on air quality as well as sustainable community strategies. The purpose of a development program is to determine improvements ultimately required by future development and to require developers to pay a fee to fund these improvements. Because the North Richmond AOB Fee is based on the relative impact on the road system and the costs of the necessary improvements to mitigate this impact, the fee amount is roughly proportional to the development impact. This report discusses the basis of that fee amount.



Chapter

2

Background

On January 11, 1994, the Board of Supervisors adopted Ordinance No. 94-3 to establish the North Richmond AOB, and to establish transportation mitigation fees to be imposed on new development within the AOB, to improve capacity and safety of the arterial road network in the unincorporated area of North Richmond. The North Richmond AOB has not been updated since 1994.

The North Richmond area has, in recent years, experienced changes in the area's circulation needs and development potential. The Nexus Study provides the technical basis for a comprehensive update of the North Richmond AOB Program. The focus of the updated program is to support an overall transportation system in the North Richmond AOB that serves the expected future demand based on changes in regional and local land use projections, planned and approved development projects, and associated changes to capital improvements and updated cost estimates.

The Nexus Study documents the analytical approach for determining the nexus between the fees, the local impact created by anticipated development in the North Richmond AOB, and the transportation improvements to be funded with fee revenues. A traffic and fair-share cost analysis was conducted to equitably distribute the cost of the necessary improvements to developments that cause the impacts, per the provisions of the Mitigation Fee Act. The most up-to-date analytical tools and techniques, available at the time this study commenced, were used to ensure the highest level of consistency with current standards.



Chapter

3

Location and Boundary

The North Richmond AOB boundary location is described in Exhibit A and generally shown in Exhibit B. However, fees will only be collected within the unincorporated portions of the AOB and will only fund projects within the unincorporated portions of the AOB.

Chapter

4

General Plan Relationship

One of the objectives of the County General Plan is to relate new development directly to the provision of community facilities necessary to serve that new development. Accordingly, development cannot be allowed to occur unless a mechanism is in place to provide the funding for the infrastructure necessary to serve that development. The North Richmond AOB Program is a fee mechanism providing funds to construct transportation improvements to serve new residential, commercial and industrial development. Requiring that all new development pay a transportation improvement fee will help ensure that it participates fairly in the cost of improving the transportation system. This Program applies only to new development within the unincorporated portions of the North Richmond AOB.

The North Richmond AOB is consistent with the features of the County General Plan and its amendments, and subscribes to the policies of the General Plan elements. The General Plan policies include, but are not limited to, improving the County roadway network to meet existing and future traffic demands. The North Richmond AOB Fee will assist in funding the necessary roadway improvements required for future growth as shown in the General Plan.

Chapter

5

Project List

The project list for the North Richmond AOB is set forth in Table 1 below. This list contains eight projects, with several related to pedestrian and bicycle safety improvements. The improvements not related to pedestrian and bicyclist safety are focused on capacity and safety improvements.

The improvements included on the North Richmond AOB project list have been identified through a Transportation Needs Analyses conducted by DKS Associates, in which existing deficiencies were identified, including traffic congestion and roadway deficiencies, as well as travel demand forecast for 2040 conditions.

The improvements proposed on the North Richmond AOB project list were refined through a cooperative effort between the Public Works Department and community stakeholders through the North Richmond Municipal Advisory Council (MAC).

The proposed improvements will be reviewed periodically to assess the impacts of changing travel patterns, the rate of development, and the accuracy of the estimated project costs. The periodic review of the program will also allow staff to evaluate project priority and the need to increase fees should project costs increase or exceed the rate of inflation.



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Table 1. Proposed Project List for North Richmond AOB Program

North Richmond AOB Recommended Projects	Description
Pittsburgh Avenue at Richmond Parkway Intersection Improvements	Improve intersection operations which may include modification to traffic signal, additional turn lanes, or other safety improvements
Market Avenue Complete Streets Project between Fred Jackson Way and easterly AOB boundary	Improvements to include pedestrian infrastructure and traffic/truck calming measures to create a pedestrian friendly environment conducive to all travel modes.
Fred Jackson Way Complete Streets Project	Improvements to include pedestrian and bicycle infrastructure and traffic/truck calming measures between Chesley Avenue and Parr Boulevard.
Parr Boulevard Complete Streets Project	Improvements to include pedestrian and bicycle infrastructure between Richmond Parkway and AT&SF railroad tracks.
Brookside Drive Complete Streets Project	Improvements to include pedestrian and bicycle infrastructure between Central Street and AT&SF railroad tracks.
Truck route between Verde Avenue and Parr Boulevard	Determine a bypass route for trucks to minimize truck traffic through the residential area.
Circulation and safety improvements for Verde Elementary School	Improve circulation and safety to Verde Elementary School including a potential secondary access.
Safety improvements on Central Street, between Brookside Drive and Pittsburgh Avenue	Provide safety improvements to provide a roadway that meets County standards and provides for bicycle and pedestrian safety.
Pittsburgh Avenue Complete Streets Project	Improvements to include pedestrian and bicycle infrastructure between Richmond Parkway and Fred Jackson Way.
Safety improvements on Goodrick Avenue, between Parr Boulevard and AOB Boundary (550' South of Richmond Parkway)	Provide safety improvements to provide a roadway that meets County standards and provides for bicycle and pedestrian safety.
Chesley Avenue Traffic Calming Measures	Install traffic calming measures on Chesley Avenue to create a pedestrian friendly environment.



Chapter

6

Development Potential

The "Nexus Study: North Richmond Area of Benefit" ("Nexus Study"), dated May 2017, was prepared by DKS Associates in collaboration with Urban Economics for the Public Works Department and is attached as Exhibit D and incorporated herein by reference. The Nexus Study provides the technical basis for establishing the required nexus between the anticipated future development within the North Richmond AOB boundary and the need for certain facilities.

The projected growth in households, employment, and vehicle-miles traveled within the North Richmond AOB is discussed and shown in the Nexus Study.

A summary of the potential new residential dwelling units, office, industrial, and commercial/retail developments (net growth from 2010 to 2040) for the unincorporated portion of AOB is shown in Table 2.

Table 2. Development Potential Summary

Land Use Category	Units
Single-Family Residential	81 dwelling units
Multi-Family Residential	72 dwelling units
Office	38,000 sq ft
Industrial	2,922,000 sq ft
Commercial/Retail	25,500 sq ft



Chapter

7

Estimated Cost of Road Improvements

The estimated costs of the road improvements planned for the North Richmond AOB are shown in Exhibit C. The North Richmond AOB will only finance the proportional share of the improvements necessitated by the impact on the road system from new development.

Detailed cost estimates for the projects included in the road improvement plan are provided in Appendix C of the Nexus Study.

The County will assess an administrative fee equal to 2% of the applicable fee. This additional fee will be used to cover staff time for fee collection, accounting, and technical support to the community groups and traffic advisory committees.



Chapter

8

Method of Fee Apportionment

The total estimated cost of the projects included in the North Richmond AOB project list is \$59,600,000. The cost to accommodate new development within the North Richmond AOB is \$37,160,131. There is an existing balance of approximately \$1,161,000.

An adjusted project cost to be covered by the North Richmond AOB fees was determined by subtracting the existing fund balance from the attributable project cost.

$$\begin{array}{rcl} \$37,160,131 & - & \$1,161,000 = \$35,999,131 \\ \text{(Attributable Project Cost)} & \text{(Balance)} & \text{(Adjusted Project Cost)} \end{array}$$

This adjusted project cost represents the amount of revenue needed from the North Richmond AOB Fee to fund the construction of the projects shown in Exhibit C.

The expected growth in the North Richmond AOB to the year 2040 is 81 single-family units, 72 multi-family units, 25,500 square feet of retail space, 38,000 square feet of office space, and 2,922,000 square feet of industrial space. To determine a fee rate per unit, first each development type is assigned a dwelling unit equivalent or "DUE" rate. DUEs compare the trip making characteristics of a land use in relation to a typical single-family residential unit, which is assigned a DUE of 1. Land uses with lower overall traffic impacts than a single family home are assigned values less than 1, and vice versa. The following Table shows the DUE rates for the various land use categories.

Table 3

Dwelling Unit Equivalent (DUE) Rates						
Land Use Category	PM Peak Hour Trip Rate per	Unit	Trip Length (miles) ²	Percent New trips ²	VMT per Unit	DUE per Unit
Singe Family	1.01	Dwelling Unit	5.0	100	5.050	1.00
Multi-Family	0.62		5.0	100	3.100	0.61
Retail	4.10	1,000 Square Feet	2.3	76	7.167	1.42
Office	1.40		4.5	92	5.796	1.15
Industrial	0.98		5.1	92	4.598	0.91

¹ ITE Trip Generation 7th Edition

² ITE Journal, May 1992

Source: DKS Associates, 2017



Table 4

Growth in DUEs				
Land Use Category	Unit	Growth in Units ¹	DUE per Unit	Growth in DUEs
Singe Family	Dwelling Unit	81	1.00	81
Multi-Family		72	0.61	44
Retail	1,000	25.5	1.42	36
Office	Square Feet	38	1.15	44
Industrial		2,922	0.91	2,659
Total				2,864
¹ See Table 2: "Summary of Estimated Development 2010 to 2040 Growth"				
Source: DKS Associates, 2017				

The growth in DUEs for each land use and the total growth in DUEs is shown above in Table 4. Because the DUE rates are based on estimates of the average vehicle-miles of travel generated during the PM peak hours for each general land use type, the developments are charged fees in proportion to the amount of traffic impact they are projected to generate. In this way, the fees attributed to each new parcel will be proportional to the estimated benefits they receive through use of the new improvements.

Finally, the Cost per DUE is found by dividing the total Cost of Improvements Allocated to AOB Growth by the total Growth in Dwelling Unit Equivalents (DUE's):

$$\frac{\$35,999,131}{2864} = \$12,569 \text{ per DUE}$$



Chapter

9

Fee Rates

Calculation of Fees

The fee calculation is set forth in detail in the Nexus Study.

To determine a maximum fee rate for each land use category, the Cost per DUE is multiplied by the DUE per unit. In the residential categories, this results in a fee per dwelling unit. In the non-residential categories, the fee is listed per square foot. These calculations are summarized in Table 5 below.

Table 5. Fee Calculations

Nexus-Based Fee Rates for North Richmond AOB			
Cost of Improvements Allocated to AOB			\$37,160,131
Growth in Dwelling Unit Equivalents			2864
Cost per DUE			\$12,569.44
Land Use	Units	DUE per Unit	Maximum Fee per Unit ¹
Single Family	Dwelling Unit	1.00	\$12,569
Multi-Family	Dwelling Unit	0.61	\$7,716
Retail	Square Foot	0.00142	\$17.84
Office	Square Foot	0.00115	\$14.43
Industrial	Square Foot	0.00091	\$11.44
Other	Dwelling Unit Equivalent	1.00	\$12,569
¹ Maximum Fee per Unit = (Cost per DUE) x (DUE per Unit)			
Source: DKS Associates, 2017			

To determine the DUE for a development considered "Other," the vehicle miles traveled (VMT) are first estimated using a combination of trip generation data, the default rate for trip length, and percent new trips.

Recommended Fees

The potential maximum fee rates calculated in the Nexus Study and presented in Table 5 above are not the recommended fee rates as this sizeable increase in fee rates could stagnate future growth. To address the housing shortage, the fee rates for residential land uses are proposed to remain at the current fee rate to promote the housing supply. Local retail that supports residential uses is also proposed to remain at the current fee rate. With regards to the employment generating land uses, the most beneficial scenario is a fee increase that would moderately increase the fee rate yet encourage continued economic growth. Thus, the proposed fee rate to implement, as identified in the shaded column in Table 6, is a reduction from the rates calculated in the Nexus Study.

Table 6. Fee Schedule to Implement

Land Use Category	Calculated Nexus Fee Rate	Proposed Fee Rate to Implement
Single-Family	\$12,569 / du	\$3,761 / du
Multi-Family	\$7,716 / du	\$3,018 / du
Commercial/Retail	\$17.84 / sf	\$9.53 / sf
Office	\$14.43 / sf	\$6.63 / sf
Industrial	\$11.44 / sf	\$5.26 / sf
Other	\$12,569 / due	\$5,782 / due

Note: du = dwelling unit; sf = square foot; due = dwelling unit equivalent

Chapter

10**Program Finance Considerations****Other Funding Sources**

The improvements planned for the North Richmond AOB will only be partially funded by North Richmond AOB fee revenues. Other sources of funding, such as State or Federal aid, or local sources such as sales tax, gas tax, etc., will be pursued.

These other funding sources include, but are not limited to, Regional Measure J Funds, State Transportation Improvement Program (STIP) Funds, and Federal Program Funds.

The rate at which revenue is generated by the North Richmond AOB Fee depends on the rate of new development. This rate of revenue generation affects the timing of construction of the improvement projects because it is dependent upon the total amount of fees collected, less expenditures. Alternate sources of funding would permit construction of AOB projects sooner.

Review of Fees

Project cost estimates will be reviewed periodically while the North Richmond AOB is in effect. On January 1 of each year thereafter, the amount of the fees will be increased or decreased based on the percentage change in the Engineering News Record Construction Cost Index for the San Francisco Bay Area for the 12-month period ending September 30 of the previous calendar year, without further action of the Board of Supervisors.

Collection of Fees

Fees will be collected when a building permit is issued, in accordance with Section 913-4.204 of Title 9 (Subdivisions) of the Contra Costa County Ordinance Code. Fees collected will be deposited into an interest bearing trust fund established pursuant to Section 913-8.002 of the Contra Costa County Ordinance Code.



Interest on Fees

The interest accrued on the fees collected shall continue to accumulate in the trust account and shall be expended for construction of the improvements, or to reimburse the County for the cost of constructing the improvements, pursuant to Section 913-8.006 of the County Ordinance Code.

Dedication in Lieu of Fee

A development may be required to construct, or dedicate right-of-way for a portion of the improvements as a condition of approval. In such an event, the developer may be eligible to receive credit for the fee or reimbursement. The eligible credit and/or reimbursement shall be determined in accordance with the County's "Traffic Fee Credit and Reimbursement Policy."



Exhibit

A

Area of Benefit Boundary Legal Description

Real property in the unincorporated area of North Richmond, California. Document and map references are to records of Contra Costa County.

Beginning at the intersection of the south line of Chesley Avenue (Road No. 25) with the east line of Southern Pacific Railroad right of way, shown on Map of Wall's Second Addition to the City of Richmond filed March 2, 1912 in Map Book 6 at page 140; thence along the south line of Chesley Avenue, South 89° 56' West 2,588.6 feet, to the centerline of York Street (6 M 140); thence along said centerline, South 00° 04' East 100 feet, to the easterly prolongation of the north line of Lot 15 (6 M 140); thence along said prolongation and north line, South 89° 56' West 125 feet, to the northwest corner; thence along the west line of Lot 15 and its southerly prolongation, South 00° 04' East 125 feet, to the centerline of Gertrude Avenue (6 M 140); thence along said centerline, North 89° 56' East 125 feet, to the centerline of York Street; thence along the centerline of York Street, South 00° 04' East 1,310 feet, to the easterly prolongation of the north line of Block 2, Map of the Andrade-Gularte Tract filed in Map Book 7 at page 175; thence along said prolongation, north line, and westerly prolongation, North 89° 45' West 970.9 feet, to the northwest corner of Block 1 (7 M 175), being a point on the south line of City of Richmond PARCEL THREE recorded April 21, 1978 in Volume 8803 at page 828; thence along the boundary of said City parcel, North 88° 51' 40" West 5.10 feet and North 12° 51' 10" East 21 feet, to the southwest corner: 1 of Lot 18, Block 237, Wall's Second Addition (6 M 140); thence along the boundary of said Addition, North 11° 45' 50" East 7.65 feet, North 60° 34' East 196.92 feet, North 13° 02' 10" East 1,006.29 feet, North 54° East 224.4 feet, and North 01° 45' West 98.16 feet, to the north line of Gertrude Avenue; thence along said north line, North 88° 54' 41" West 2,293.06 feet, to the southwest corner of Chevron U.S.A. Inc. (formerly known as Stanford Oil Co. of California) parcel recorded April 26, 1961 in Volume 3854 at page 360; thence along the west line thereof, North 854.07 feet, to the northwest corner; thence along the north line thereof and its easterly prolongation, North 86° 25' East 620 feet, more or less, to an angle point in the east line of Edward J. Hegarty PARCEL ONE recorded March 26, 1962 in Volume 4083 at page 364; thence along the east line thereof, North 00° 01' 24" West 171.94 feet, to the south line of Golden State Sanwa Bank parcel recorded June 18, 1985 in Volume 12365 at page 62; thence along said south line, South 89° 45' West 72.22 feet, to the southwest corner; thence along the west line thereof and its northerly prolongation, North 1,214.4 feet, to the south line of Garden Tract Road granted to Contra Costa County and recorded September 28, 1956 in Volume 2852 at page 423; thence along said south line, West 30 feet, to the southwest corner; thence along the west line of Garden Tract Road, North 00° 11' East 1,937 feet, to the southeast corner of West Contra Costa Sanitary District parcel recorded July 17, 1953 in Volume 2162 at page 82; thence along the boundary thereof, West 580.70 feet and North 733 feet, to the south line of section 35, Township 2 North, Range 5 West, Mount Diablo Base and Meridian; thence North 60 feet; thence West 3,300 feet to the west line of Section 35; thence West 1,770 feet, more or less, to a point on the boundary of State of California parcel recorded April 30, 1981 as EXHIBIT C in Volume 10304 at page 217; thence along said boundary the following courses: North 12° 52' 08" West 132.38 feet, North 16° 48' 58" East 329.01 feet, North 31° 01' 19" East 94.34 feet, North 76° 42' 32" East 195.26 feet, South 88° 02' 57" East 485.64 feet, South 85° 41' 40" East 910.51 feet, South 89° 27' 21" East 375.13 feet, North 41° 37' 51" East 135.88 feet, and North 646.04 feet; thence East 4,370 feet, more or less, to the most western corner of State of California parcel recorded July 18, 1978 in Volume 8928 at page 164; thence along the boundary of said State parcel, North 64° 30' East 105 feet more or less, North 33° 00' East 290.4 feet, North 03° East 99 feet, and North 63° 30' East



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58.74 feet, to the north line thereof, being also the south line of Subdivision 5754 filed June 18, 1982 in Map Book 264 at page 36; thence along said south line and its easterly prolongation, South 89° 01' 12" East 2,007 feet, to the east line of Goodrick Avenue (264 M 36); thence along said east line, South 01° 02' 18" West 704.96 feet, to the northwest corner of Minor Subdivision 758-84 filed August 24, 1984 in Parcel Map Book 111 at page 30; thence South 84° 48' 42" East 25.07 feet to the northwest corner of PARCEL D (111 PM 30); thence along the west lines of PARCEL D and PARCEL C (111 PM 30), South 01° 02' 18" West 618.81 feet, to a tangent curve, concave to the northeast with a radius of 50 feet; thence along the arc of said curve, Southeasterly 90.12 feet, thru a central angle of 103° 16' 20", to a point of reverse curvature (a radial to said point bears North 12° 14' 02" West 1,040 feet); thence along the arc of said reverse curve, being also the north line of Parr Boulevard, Easterly 607.91 feet, thru a central angle of 32° 29' 28", to the southeast corner of PARCEL B (111 PM 30); thence along the east line of PARCEL B, North 05° 11' 18" East 647.61 feet, to the northeast corner thereof, being also the most southeastern corner of PARCEL A filed January 24, 1973 in Parcel Map Book 26 at page 12; thence along the east line of PARCEL A, North 04° 06' 30" East 1,071.05 feet, to the southwest corner of PARCEL C filed October 3, 1984 in Parcel Map Book 112 at page 17; thence along the west line of PARCEL C, North 04° 06' 30" East 203.78 feet, to the northwest corner; thence along the north line of PARCEL C and its easterly prolongation, South 85° 53' 30" East 1,230 feet, more or less, to the east line of Southern Pacific Railroad 125 feet wide right of way; thence along said east line, Southerly 2,245 feet, more or less, to the north line of Parr Boulevard; thence Southerly 82 feet, more or less, to the south line of Parr Boulevard at its intersection with the east line of Southern Pacific Railroad 100 feet wide right of way; thence along said east line, Southerly 2,300 feet, more or less, to the northwest corner of Southern Pacific Railroad Company parcel 872-7-9E Pdl 15; thence along the boundary thereof the following courses: South 67° 15' East 23.1 feet, South 48° 30' East 52.8 feet, South 71° 45' East 37.6 feet, South 03° 45' West 609.14 feet, North 86° 15' West 6.5 feet, South 03° 45' West 537 feet, and North 89° 57' West 100 feet, to the east line of Southern Pacific Railroad 100 feet wide right of way; thence along said east line, South 04° 06' 10" West 630 feet and South 03° 45' West 507 feet, more or less, to the point of beginning.

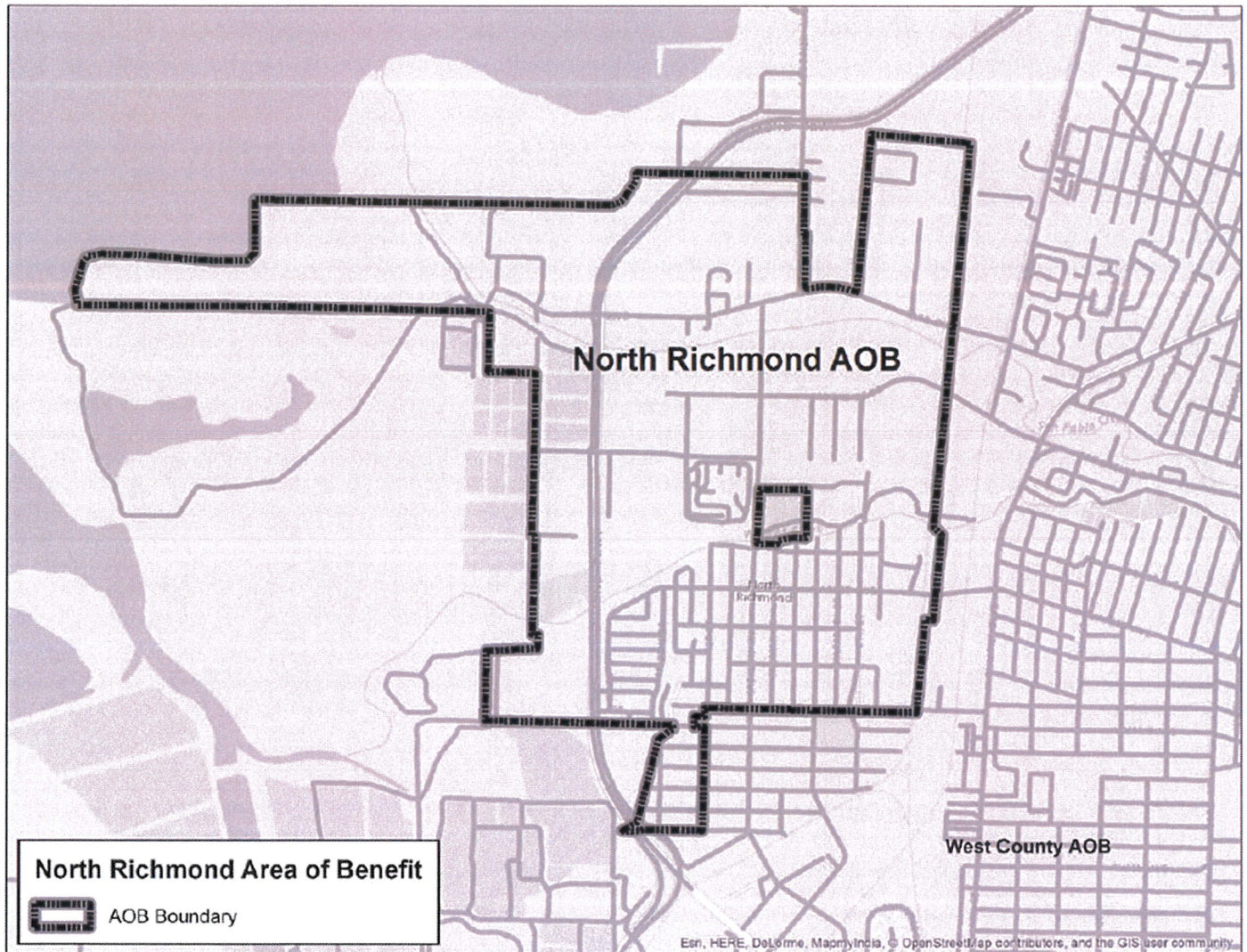
Excepting therefrom all of 8.43 acre City of Richmond parcel recorded August 4, 1972 in Volume 6717 at page 145.



Exhibit

B

Area of Benefit Boundary Plat Map





Exhibit

C

**Road Improvement Plan –
Project List with Associated Costs**

Allocation of Project Costs to North Richmond AOB Program		
Recommended Project	Estimated Total Cost	AOB Allocation
Pittsburgh Avenue at Richmond Parkway Intersection Improvements	\$1,183,000	\$86,637
Market Avenue Complete Streets Project	\$6,544,000	\$4,531,102
Fred Jackson Way Complete Streets Project	\$5,345,000	\$3,700,908
Parr Boulevard Complete Streets Project	\$5,527,000	\$1,874,437
Brookside Drive Complete Streets Project	\$4,892,000	\$1,964,974
Truck route between Verde Avenue and Parr Boulevard	\$28,453,000	\$19,701,016
Circulation and safety improvements for Verde Elementary School	\$2,597,000	\$1,798,177
Safety improvements on Central Street, Between Brookside Drive and Pittsburgh Avenue	\$1,013,000	\$701,407
Pittsburgh Avenue Complete Streets Project	\$2,208,000	\$1,528,832
Safety improvements on Goodrick Avenue, between Parr Boulevard and AOB Boundary (550' South of Richmond Parkway)	\$1,695,000	\$1,173,627



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Chesley Avenue Traffic Calming Measures	\$143,000	\$99,014
Total	\$59,600,000	\$37,160,131
Source: DKS Associates, 2017		



Exhibit

D

Nexus Study

North Richmond Area of Benefit

Exhibit D
Attached as separate document