# Philadelphia's Study for a Better Roosevelt Boulevard





TIGER 2014 Discretionary Grant Application

April 28, 2014



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# City of Philadelphia

# **TIGER 2014 Discretionary Planning Grant Application**

# Philadelphia's Study for a Better Roosevelt Boulevard

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# **TITLE PAGE**

Project Title:	Philadelphia's Study for a Better Roosevelt Boulevard	
Project Location: Philadelphia, Pennsylvania		
	Pennsylvania's 1 <sup>st</sup> Congressional	
U.S. Congressional Districts:	Pennsylvania's 2 <sup>nd</sup> Congressional	
	Pennsylvania's 13 <sup>th</sup> Congressional	
Application Type:	Regional Planning	
Applicant Name: City of Philadelphia Streets Department		
Applicant Type: Local Government		
TIGER Request:	\$2,500,000	

# **PROJECT SPONSORS:**

# Lead Agency

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# **US Congressional Districts**

District	Representative
Pennsylvania's 1 <sup>st</sup> Congressional	Robert Brady
Pennsylvania's 2 <sup>nd</sup> Congressional	Chaka Fattah
Pennsylvania's 13 <sup>th</sup> Congressional	Allyson Y. Schwartz

### **PROJECT DESCRIPTION**

#### **PROJECT SUMMARY**

Although roughly **150,000 people use the Roosevelt Boulevard** (US 1) in North East Philadelphia, it is notorious for **its inability to serve any mode of transportation well, sometimes with tragic consequences**.

"The Boulevard" has undergone numerous studies to tackle the major issues including high crash rates, especially involving pedestrian fatalities, as well as frequently severe congestion affecting travel reliability and excruciatingly slow transit. For the shortterm, the City, PennDOT and SEPTA, together with the region's MPO (Delaware Valley Regional Planning Commission (DVRPC)) and other agencies have coalesced around enhancing transit service for the 25,000 daily bus riders through low cost. **'Better Bus**' improvement. This will address some of the congestion issues and speed up transit travel, however it is understood that anything less than the physical separation of modes will fail to achieve a comprehensive long-term solution. This requires a full reconfiguration of the Boulevard.

A soon to be completed DVRPC study will generate a long-term option for fixed guideway Bus Rapid Transit (BRT). This will include ridership forecasts and an evaluation for potential fatal flaws in the concept.

The proposed study described here will move a viable multimodal project to the next step. It will build upon the currently ongoing

#### FIXING "THE BOULEVARD"

#### CONTEXT

- 14 mi. from North Philadelphia to Bucks County, PA
- 12 lanes of travel
- Up to 150,000 person trips per day
- Significant low-income and transit-dependent populations
- Near-term implementation of "Better Bus" project

#### **NEEDS**

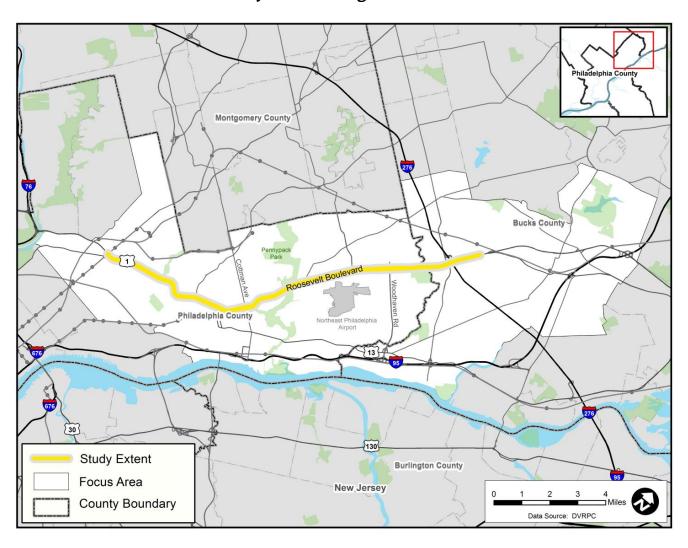
- 3,468 crashes from 2008-2012 including 49 fatalities
- Reliable alternative route for I-95
- Takes 45 minutes to travel 8 mi. using current bus service; limited stop service offers little improvement

#### **PURPOSE**

- Identify long-term, multimodal reconfiguration including:
  - i. Fixed Guideway BRT
  - ii. Access Management for local & through traffic
  - iii. Pedestrian oriented capital improvements
- Provide detailed forecasting and engineering
- Conduct comprehensive environmental & B-C screening
- Fully 'set the table' for seamless NEPA process

effort to provide a detailed evaluation of alternative concepts for reconfiguration of the Boulevard that supports three key components 1) a bus rapid transit service operating in a dedicated guideway, 2) access management achieving effective separation of express/through traffic from local traffic accessing neighborhood destinations, and 3) significant modifications to provide safe pedestrian crossings and transit access, including grade separation in some cases.

#### **Study Area and Regional Context**



#### **Purpose of Long Term Boulevard Improvements**

Each component of the multimodal solution will play a key role.

- i. A premier BRT service will restore connections among diverse neighborhoods and to regional employment, educational, and commercial destinations. BRT will compete effectively with auto travel in terms of time, cost, and convenience providing a sustainable alternative for current users of the Boulevard as well as travelers using the parallel I-95 corridor.
- ii. Effective access management will involve reallocation of space and modification of controls in order to ensure that speeds on the local access lanes can be moderated while merging and exiting movements from the express lanes do not create hazards or contribute to congestion. The Boulevard will continue to serve double-duty as both a neighborhood street (with fronting residences!) and as a major arterial, but a much more robust segregation of local and through traffic will allow this balance to be achieved more safely. This also requires significant use of Intelligent Transportation Systems (ITS) in a manner fully integrated with I-95, the Pennsylvania Turnpike, and other facilities monitored by the City and State traffic operations centers.
- iii. More thorough accommodations for safety will make it easy for users to cross the street, walk to shops, and bicycle to work and make it safe for people to walk to and from transit stations and stops. The project will add new measures and extend existing ones in place to actively and passively reduce egregious driver behavior such as red light running and drag-racing. The focus on safety will seek to restore connections among neighborhoods that are divided by the Boulevard, helping to achieve the City's broader goals of equity, public health, environmental sustainability, quality of life, and economic development.

As will be clear, given its context, the Roosevelt Boulevard must be made fully functional as a **"Complete Street."** In accordance with adopted policy, this will promote:

- Design to accommodate all users
- Design for safety to dramatically curtail the risk of crashes
- Priority for appropriate pedestrian movements
- Good fit with surrounding land uses, environment, and community

Based on the Roosevelt Boulevard's context, it is clear that **such a project will have considerable spillover benefits** for the communities adjacent to the Boulevard and for the region as a whole. The corridor has a significant and **growing transit-dependent** 

**population,** and it links a variety of local and regional employment, commercial, and educational destinations. The goal: **a fully functioning multimodal corridor that will restore essential rungs on the ladders of opportunity** sought by the diverse residents, patrons, and travelers who rely on the Roosevelt Boulevard each day.

#### **ROOSEVELT BOULEVARD OVERVIEW & CONTEXT**

The Boulevard is a 12-lane, 300-foot wide divided highway that serves as a major north-south traffic artery and commercial corridor through a densely populated, urbanized area of North and Northeast Philadelphia. Though originally built to support trolleys, the configuration of the Roosevelt Boulevard has evolved to one that gives preference to automobiles; as a result, much of the commercial land use adjacent to it is auto-oriented. **An estimated 90,000 vehicles pass through the Boulevard on a daily basis.** The fact is, however, that along more than half of its length **the Boulevard cuts through and effectively partitions a dense fabric of socio-economically diverse residential neighborhoods**.



View of the Boulevard

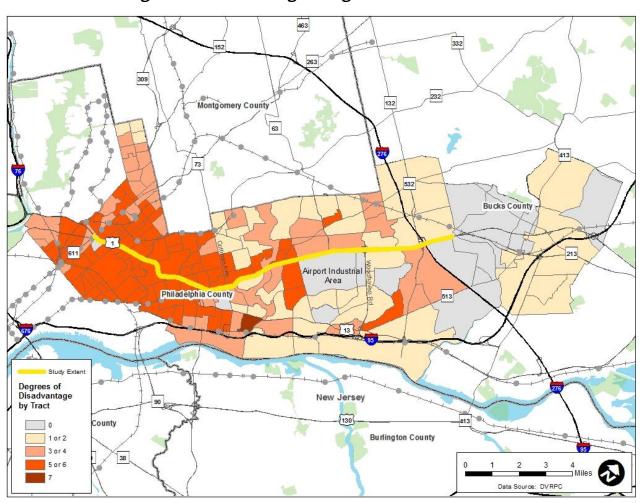
For the past 10 years, neighborhoods in Philadelphia's North and Northeast that are served by the Boulevard have experienced significant changes resulting in an overall increase in transit-dependent households. As the housing stock ages there has been a 5% growth in

the number of people living in poverty. **In 2010, the poverty rate hit 46% for North Philadelphia** (at the south end of the Boulevard).

### **Diversity Constrained by Concentrated Poverty**

CATEGORY	NORTH PHILADELPHIA	PHILADELPHIA AS A WHOLE
Hispanic or Non-White	79%	59%
Median Income	\$20,995	\$37,016
Poverty Rate	46%	26%

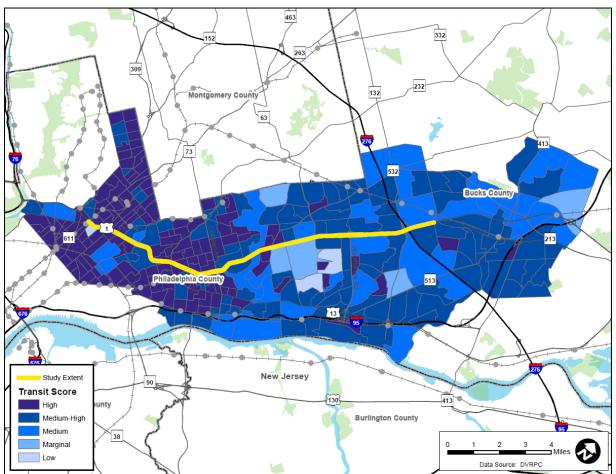
### Degrees of Disadvantage along Roosevelt Boulevard



The Degrees of Disadvantage for a census tract measures how many of up to seven number population characteristics exceed the regional average. The categories include, non-Hispanic minorities, Hispanic, limited English proficiency (LEP) households, elderly over 75 years of age, carless households, female heads of household with children, and households in poverty.

Nearly 50 percent of North Philadelphia residents do not own a car, and another 40 percent have only one car. This severely limits access to the jobs in Northeast Philadelphia and Bucks County. Although these communities clearly need alternatives to driving, as a whole, the Northeast is underserved. In 2010, only 16 percent of residents in Northeast neighborhoods took transit to work, compared to a citywide average of nearly 30 percent.

# **Neighborhood Transit Score**



The DVRPC Transit Score measures the extent that development patterns and the demographic permits and encourages the use of mass transit. It incorporates the statistical impact of population and employment density, and the number of zero car households on ridership.

The Boulevard serves as a connection point to the terminus of the Market Frankford Subway Elevated Rail Line at Frankford Transportation Center and the terminus of the Broad Street Subway Line at the Fern Rock Transportation Center. Additionally, the Boulevard runs parallel to and connects with I-95 located to the east, serving as an alternate route for the heavily-traveled and often congested interstate.

Unfortunately, **even though the Boulevard facility takes up a tremendous amount of physical space, it does not provide safe access or connectivity** for the neighborhoods surrounding it. Crossing the Boulevard to access transit is dangerous, and **bus travel times along it are often more than twice what it takes for trips by private auto.** 

This represents a tremendous lost opportunity. The Boulevard directly serves two hospitals, nearly a dozen shopping centers including two regional malls, an airport, and several industrial parks and other office clusters. The Boulevard crosses two major parks, and within a half mile walking distance are 76 schools, 36 parks, and 27 recreation centers. Short, indirect connections provide access to Temple University and Holy Family University.

Unfortunately, the Boulevard currently makes disproportionately minor provisions for auto-free travel, so transit-dependent households can be perversely isolated from economic activity despite relative geographic proximity to employment, educational, and other activity centers in both the primary and reverse commute directions. Fixing these problems will create access to more of the region's jobs and other choices for neighborhoods along the Boulevard.

#### TRANSPORTATION CHALLENGES

The Roosevelt Boulevard carries many modes of transportation but serves none of them well. For each mode there are specific deficiencies and the complexity of the Boulevard includes how these interact.

**Pedestrian Traffic** – There is significant pedestrian activity along the Boulevard generated by the surrounding residential and community land uses, sidewalks, and bus stops, **but conflict between pedestrian traffic and heavy vehicular traffic has resulted in numerous fatalities.** 

Long crossing distances are exacerbated by complex provisions to accommodate turning movements from this 12-lane facility, whereas there are several segments where no sidewalks exist along the Boulevard. There are a total of 6 miles of missing sidewalk with some sections having no sidewalk on either side of the Boulevard, and this induces midblock jay-walking with dangerous consequences.

Bicycle Traffic – Despite the fact there are several major trail connections crossing under or adjacent to the Boulevard, including the Pennypack and Tacony Creek Trails, there is minimal bicycle traffic that currently traverses the Boulevard largely because there are no accommodations for cyclists on the Boulevard itself. The Boulevard is regarded as prohibitively unsafe for cycling, and conventional bicycling accommodations are not considered adequate or appropriate to mitigate that situation.

**Automobile Traffic** – The Boulevard carries 90,000 vehicles daily, and the development patterns along some segments encourage vehicular use. The six center lanes carry express traffic, and neighborhood access is provided from three local lanes on either side. **Movement between express and local lanes is served by numerous "cross-overs" that must be negotiated through intimidating merge/diverge maneuvers.** 

At intersections and approaches the mix of turn-lanes, bus-stops, crosswalks and crossovers contributes to confusion and severe limitations on signal timing and other operational strategies. Making things worse, the Boulevard currently lacks the fiber optic connectivity required to make use of ITS solutions.

Certain segments of the Boulevard have been identified as high crash locations; between 2008 and 2012, there were a total of 3,468 crashes on both the express and local lanes of the Boulevard, resulting in 49 fatalities. A 2001 State Farm Insurance study ranked two Roosevelt Boulevard intersections as the second and third most deadly intersections in the country.

**Public Transit** – SEPTA provides bus service via five trunk routes. Transfers allow access to rapid transit service via the Broad Street Lines (BSL) and Market-Frankford (MFL) and in addition, three Regional Rail lines connect neighborhoods in the periphery around the Boulevard to Center City Philadelphia, and Trenton and West Trenton in New Jersey.

**Unfortunately**, **given the Boulevard's current configuration and intersection density the major routes are notoriously slow.** Also, no single local SEPTA bus service traverses the entirety of the 14-mile corridor. On the route that comes closest, **it takes 45 minutes to travel 8-miles**. This is over twice the time required when travelling by car.



Express-to-Local Lane "Cross-Over"

#### **OVERVIEW OF PREVIOUS STUDIES/RECOMMENDATIONS**

Over the last decade, the Roosevelt Boulevard Corridor has been the subject of planning and transit studies that have aimed to evaluate the Boulevard's existing conditions and challenges and offer targeted recommendations for improvement of transportation along the corridor.

In an effort to address mobility and safety concerns, the *Roosevelt Boulevard Corridor Transportation Investment Study* (2003) developed and evaluated a short-list of six potential transit alternatives including an express bus system, a new subway/elevated line and a limited access freeway. The preferred alternative was the subway elevated system. At that time cost estimates ranged from \$2.5 to \$3.4 billion (in year 2000 dollars) to construct and \$56 million annually to operate and maintain, and as a result, the project was deemed infeasible.

As part of a 2007 study (US 1 Roosevelt Boulevard Corridor Study), the regional MPO, Vallev Regional Planning Commission (DVRPC), developed the Delaware recommendations to improve pedestrian safety and mobility along the Boulevard. Many of the recommended improvements, including pedestrian countdown signals, push buttons, restriping, regulatory and informational signage, signal retiming, and the elimination or expansion of identified crossover lanes have been implemented. **Unfortunately, despite the improvements**, pedestrians must wait through at least two full, 90-second signal cycles to cross the expansive roadway, and recently pedestrian crashes have begun to rise again.

As part of an ongoing study, Alternatives Development for Roosevelt Boulevard Transit Investments, DVRPC is currently evaluating a financially feasible short-term "Better Bus" alternative that can offer immediate improvements to mass transit along Roosevelt Boulevard. Suggested transit enhancements include painted business access and transit (BAT) lanes, branded buses and stops, far-side stops, transit signal priority, and real time information. A second phase of this study will focus on more significant capital improvements that can be implemented within the existing foot print including fully dedicated bus-lanes and accessible station platforms.

#### PURPOSE OF PROPOSED STUDY

The study proposed in this application would incorporate the long range DVRPC BRT concept into a more detailed analysis, and then also fully explore additional measures that further enhance and deal with safety and travel reliability. This includes assessing the benefits of grade separation and/or right-of-way acquisition at some intersections and segments.

The study will apply PennDOT guidance for "Linking Planning and NEPA" so that detailed analysis of transportation and other key environmental impacts will be performed and documented at a standard facilitating seamless integration with NEPA requirements at that stage of the project development.

The end goal is a **detailed evaluation** for a multimodal project that directly addresses the Roosevelt Boulevard's considerable challenges. **This will provide the technical inputs for any environmental documentation required,** and ultimately for a request for federal and state capital funding as well. As a result of this proposed planning initiative, PennDOT, the City, and SEPTA will be able to initiate a project development process that will culminate in a capital project that finally fixes the Boulevard.

#### STUDY SCOPE

#### **Phase I: Project Initiation**

In consultation with its partners, the City of Philadelphia will lead in drafting a concise problem statement that succinctly captures the complex challenges with the Boulevard. It will also convey the potentially broad transportation and social benefits attainable by meeting those challenges.

These partners will also confirm the study area, taking as a point of reference the section extending from Broad

#### Phase I – Project Initiation

Task 1. Problem Statement

Task 2. Study Area

Task 3. Consultant Selection

Task 4. Alternative Screen Scoping

Street in North Philadelphia to the Neshaminy Mall in Bucks County. Careful consideration also has to be given to how the Boulevard relates to I-95, the PA Turnpike, and SEPTA's Fox Chase, Trenton, and West Trenton regional rail corridors.

A technical advisory committee will be convened, drawing from partner agencies as well as key officials and community groups who have a vested interest in improving the transportation conditions of the Boulevard. As the lead agency, the City will manage the project and procure a consulting team. In coordination with the Technical Advisory Committee, an RFP will be released and a consultant team selected and hired. The City, consultant, and advisory committee will finalize a detailed work plan.

### **Public Outreach (Continuous)**

A key element of the scope will be a public outreach plan. Following project initiation this will be an ongoing a process during the full course of the study. The public outreach effort will include a communications strategy, including a plan for translation services, and a framework for employing interactive social media. Previous planning work provides a foundation to build upon for conducting public meetings with neighborhoods, businesses and civic institutions, and for keeping elected officials informed.

#### **Public Outreach (Continuous)**

Task 1. Media Strategy

Task 2. Meeting Framework

- Elected Officials
- Peer Agencies
- Communities

Task 3. Social Media Approach

#### Phase II: Background Analysis

The team will analyze existing conditions related to travel patterns, including mode share, as well as to the land use, housing, and population characteristics. General information can be obtained from prior studies, but some data will be updated from more current sources.

The team will also review previous studies and prepare a synthesis of methodologies, and findings and recommendations. Appropriate methodologies to provide baseline analysis will be defined in a manner that lends itself to subsequent NEPA documentation. This will focus on social and economic benefits in addition to transportation performance.

#### Phase II - Background Analysis

Task 1. Analyze Existing
Conditions

- Travel Patterns
- Land Use
- Housing
- Population Characteristics

Task 2. Review Previous Studies

- Findings and Recommendations
- Outreach Efforts
- BRT Concept

Task 3. Define Methodology

The outreach component of each of the previous studies will be reviewed to ensure that all stakeholders have been identified and are being included. The project team will coordinate with the region's MPO, DVRPC, to incorporate the analysis for the long-term BRT option currently under study. This is the point of departure for the Alternative Definition to be undertaken in Phase IV of the proposed planning study.

Information on travel demand and origin destination patterns will be analyzed **to a high resolution and supplemented with up-to-date information** on turning movements and multimodal measures of level of service at an intersection, segment, and route level. The background conditions analysis will provide stakeholders and planners with the data necessary to establish a baseline for projecting future conditions, and comparing and refining transportation options.

#### Phase III: Alternative Definition

A statement of the purpose and need for improvements to Roosevelt Boulevard will be documented for use throughout this as well as later tasks.

Building on previous studies, **consistent measures of effectiveness and other evaluation criteria will be defined**. Additional criteria will be solicited through public outreach. The base alternative, consisting of **DVRPC's** 

# Phase III – Alternative Definition

Task 1. Define Purpose and Need

Task 2. Establish Evaluation Criteria

Task 3. Communicate
Alternatives

**forthcoming long-term BRT option will be evaluated against these criteria** and specific modifications with potential to improve performance on one or more criteria will allow the team to **generate new alternatives**. Each alternative will be defined to a consistent level of detail.

#### Phase IV: Transportation Forecasting and Modeling

Travel, land use, and socio-economic data will be incorporated from background documentation, **detailed forecasts will be generated**, and analysis will be conducted to generate measures required to fully compare alternatives. Analysis of traffic and transit operations **including simulation and network optimization** will be undertaken to address specific features of each alternative. Expanding on the background analysis, **transportation impacts will be evaluated for each alternative** at the level of route, segment, and intersection.

# Phase IV – Transportation Forecasting & Modeling

- Task 1. Generate Travel Forecasts
- Task 2. Develop Traffic and Transit Analysis Models
- Task 3. Evaluate and Compare Transportation Performance
- Task3. Present Analysis
  Results

This requires detailed modeling for future traffic and pedestrian circulation at up to 48 existing signalized intersections, 90 unsignalized intersections along the Boulevard, and at midblock crossings, bus stops and proposed future BRT stations.

The alternatives and analysis results will be presented to the public and key stakeholders, and on the basis of public input, alternatives may be fine-tuned or further alternatives may be added.

#### Phase IV: Environmental and Cost-Benefit Screening

Transportation analysis will be extended to **determine air-quality and noise impacts.** The assessment will also consider the project's **impacts to the five watersheds spanned by the Boulevard** and downstream impacts to the Delaware River, Delaware Bay, and the Atlantic Ocean. **Identification of other resources contemplated by NEPA** will be undertaken, and these will be subjected to a screening level of analysis. **Screening will be conducted across a full spectrum of environmental subject areas** in close coordination with local, State, and Federal resource management agencies.

# Phase V – Environmental and Cost Benefit Screening

- Task 2. Environmental
  Resource Identification
- Task 3. Environmental Impact Screening
- Task 4. Environmental Justice Analysis
- Task 5. Cost-Benefit Analysis
- Task 6. Analysis

  Documentation

In the context of the emphasis on ladders of opportunity, environmental justice impacts will be evaluated at a considerable level of detail. The project's benefits in terms of economic development will be explored and documented, and the team will create a Cost-Benefit Analysis Model in order to calculate the relative economic benefits of each alternative. The transportation alternatives analysis in Phase IV will identify costs and Level of Service improvements associated with many components of each alternative, and Phase V will estimate costs for any components not already factored into the transportation alternatives analysis. The Cost-Benefit Analysis Model will then supplement this data with consideration of the quantifiable savings to determine a cost-benefit ratio and corresponding payback period for each alternative, which will play an important role in the decision making process.

Public outreach including meetings will be held in the course of environmental screening development and as needed in the course of the assessment to present the project, obtain input, and present findings. Similarly, meetings will be coordinated with resource agencies and other stakeholders. **Documentation will be prepared in a manner consistent with Linking Planning and NEPA.** 

#### **Phase V: Survey and Conceptual Design**

Concurrent with background analysis, the project will undertake compilation of existing **topographic survey data** and/or the collection of new topographic survey data. This should be completed by the time environmental and cost benefit screening reveal a discrete set of viable project alternatives in Phase IV. At this stage, conceptual design

Phase VI – Survey and Conceptual Design

Task 1. Topographic Survey

Task 2. Conceptual Design

will be undertaken in order to **illustrate and systematically validate** the engineering feasibility of the major components of viable alternatives. Particular attention will be paid to detailed conceptualization of traffic management and **ITS components**, **such as traffic monitoring**, **transit signal priority and real-time information** some of which may be segmented for more immediate deployment.

At this stage documentation will be fully available that will lend itself to formal NEPA requirements and application for capital grants. Furthermore, based on survey work conceptual design and detailed transportation modeling the project should move forward efficiently to the generation of preliminary engineering designs and specifications when that stage of project development occurs.

#### **ANTICIPATED STUDY OUTCOMES**

The study will provide the basis for consideration for a multimodal corridor improvement on the region long range plan and the solicitation of funding through local capital planning and through federal and state grant programs. The study will directly generate information suitable to support formal environmental documentation including:

- A well-defined statement of purpose and need to ensure that all of the complex challenges in terms of safety, congestion, and transportation choices are addressed in a balanced way, and that the project maintains an appropriate focus on environmental justice and ladders of opportunity.
- A comprehensive set of project evaluation criteria suitable for later incorporation into a NEPA project selection process including standards of significance with respect to potential environmental effects.
- **A base of technical information** that includes ridership and other travel demand forecasts specific to individual alternatives, multimodal measures of effectiveness, measures of economic impact, impact to the environment, as well as appropriately documented qualitative information including public input.
- Clarification of subsequent requirements for environmental documentation ranging from some form of Categorical Exclusion through the possibility of an Environmental Impact Statement.
- A robust public outreach plan this project will build on a considerable foundation of public outreach from previous studies and City plans. The public is well aware of the problems, is generally aware of the options, and will be encouraged that a project development process is being undertaken to implement a comprehensive fix on the ground.

#### Benefits of a Multimodal Corridor Improvement

Ultimately, the purpose of the study is to achieve a project that addresses the Boulevard's needs. An effective multimodal transportation solution will have dramatic effects on the region's economic competitiveness and quality of life and offers competitive transportation alternatives for existing communities in North and Northeast Philadelphia. Implementing access management and extending BRT to the Northeast and Lower Bucks County also makes it easier to travel to Philadelphia from surrounding areas. This will also increase development opportunities to existing and emerging centers of commercial and industrial employment. The safety improvements incorporated into

the project will **address** a **source of long standing inequity** experienced between users of different modes and among different communities using the Roosevelt Boulevard.

#### **PROJECT BUDGET**

The proposed study will to require \$5,000,000 to complete the scope of work described here and thereby robustly support subsequent NEPA environmental analysis and document requirements in accordance with PennDOT's Linking Planning and NEPA approach.

ACTIVITY	COST
Project Initiation	\$100,000
Background Analysis	\$300,000
Alternative Definition, Forecasting and Modeling	\$500,000
Transportation Forecasting and Modeling	\$800,000
Environmental Screening	\$1,000,000
Survey and Conceptual Design	\$2,100,000
Public Outreach	\$200,000
TOTAL COST:	\$5,000,000

#### **PROJECT SCHEDULE**

The proposed project should be completed within a 42-month timeframe from project initiation through documentation and public presentation of the study results.

ACTIVITY	ANTICIPATED COMPLETION
Project Initiation	By Month 6
Background Analysis	By Month 12
Alternative Definition	By Month 18
Transportation Forecasting and Modeling	By Month 24
Environmental Screening By Month 32	
Survey and Conceptual Design By Month	
Documentation and Presentation By Month 42	

### **GRANT FUNDS AND SOURCES/USES OF PROJECT FUNDS**

Through partnership with SEPTA and The Pennsylvania Department of Transportation PennDOT, the City has been able to secure a **50% local match** to implement the planning

project. Copies of the letters documenting the level of financial support for the project are included in Appendix B.

	FUNDING	
PROJECT SPONSOR	Amount	Percentage
PennDOT	\$1,500,000	30%
City of Philadelphia	\$500,000	10%
SEPTA	\$500,000	10%
US DOT TIGER Grant	\$2,500,000	50%
Total Project Cost	\$5,000,000	100%

#### **DESCRIPTION OF PROJECT PARTNERS/ROLES**

**City of Philadelphia** – This planning effort will be led by the City of Philadelphia in a coordinated effort among the Department of Streets, the Philadelphia City Planning Commission, and the Mayor's Office of Transportation and Utilities. The City of Philadelphia has direct responsibility for traffic operations on the Boulevard and performs all planning functions for the surrounding neighborhoods within the city limits. The City of Philadelphia is committed to working with partners in Bucks County through their shared relationship to the regional MPO, DVRPC (below).

**The Pennsylvania Department of Transportation (PennDOT)** – PennDOT has direct jurisdiction over the Roosevelt Boulevard and takes responsibility for maintenance and capital projects. PennDOT will participate in the procurement process and scope development and will provide access to data and other relevant technical resources. PennDOT has committed a financial contribution to this effort.

**The Southeastern Pennsylvania Transportation Authority (SEPTA)** – SEPTA operates transit service throughout the region including the bus lines serving the Roosevelt Boulevard. SEPTA will also participate in the procurement process and scope development and will provide access to data and other relevant technical resources. SEPTA has committed a financial contribution to this effort.

The Delaware Regional Planning Commission (DVRPC) – The sponsoring partners will work closely with the region's MPO, DVRPC. The base BRT option which is the point of departure for this study is currently under development by DVPRC under contract for PennDOT. Similarly, DVRPC is the keeper of the Regional Travel Demand Model and has taken significant leadership in documenting and studying the Roosevelt Boulevard's considerable safety issues.

**Bucks County** – **Bucks County** is served by the northern end of the Boulevard including suburban neighborhoods and office centers and the Neshaminy Mall. Bucks County will be consulted with throughout the course of the study.

#### **CONSISTENCY WITH OTHER PLANS**

**Philadelphia 2035: Citywide Vision** – The City of Philadelphia's Comprehensive Plan (2011), recognizing that Northeast Philadelphia and the Roosevelt Boulevard are underserved by transit, suggests building a new transit extension along the Roosevelt Boulevard corridor through Northeast Philadelphia to help reduce auto dependence and congestion, and improve connections between residences, employment, and recreation for city and regional riders.

Philadelphia 2035: Lower Northeast (LNE) District Plan – Building on the Citywide Vision's recommendation to expand rapid transit in the Northeast via the Boulevard, the LNE District Plan identifies Roosevelt Boulevard as one site that has the potential to serve as a catalyst for change in the LNE region. Recommendations sited in the District Plan include: (1) Complete a Corridor Study to determine the best options for transforming Roosevelt Boulevard into a multimodal corridor with expanded transit service, automobile circulation improvements, and pedestrian and bicycle upgrades; and (2) Improve pedestrian and bicycle facilities on Roosevelt Boulevard by constructing a shared-use side path on one or both sides of the Boulevard.

**DVRPC Long-Range Vision for Transit** – DVRPC highlights Northeast Philadelphia and the Roosevelt Boulevard in its vision for transit extensions in the urban core. DVRPC's Long-Range Vision for transit envisions that a Northeast Philadelphia extension of the Broad Street Line, or the Roosevelt Boulevard Line, will further expand the subway's importance as a regional anchor for residential and employment growth. As a less costly alternative to the Roosevelt Boulevard rail extension, DVRPC also suggests that bus rapid transit could provide similar transportation benefits, noting that a BRT project along the Boulevard could serve as a stepping stone to a longer-term rail project.

**Shared Prosperity Philadelphia: Our Plan to Fight Poverty** - In 2013 Mayor Nutter launched the city's anti-poverty plan aimed at implementing a comprehensive strategy to address poverty in Philadelphia. At a staggering 26.9%, Philadelphia's poverty rate is the highest amongst the nation's 10 largest cities. Poverty affects the entire city and most distressing of all, 39 percent of the Philadelphia's children are poor. One of the key strategies of Shared Prosperity is a "Focus on job creation and workforce development efforts" this includes ensuring residents that live in poverty have safe and reliable access to employment centers and are not disadvantaged by land use and transportation policies.

The BRT project and this proposal will provide a plan that is consistent with and advances Shared Prosperity.

**Complete Streets Handbook** - In 2009, Mayor Nutter recognized that for Philadelphia to accommodate the many different ways Philadelphians choose to travel, the City needed to treat every street as a Complete Street. Complete Streets are streets that accommodate all Philadelphians, whether they are on foot, bike, bus, or in a car. In June of 2009, the Mayor signed an Executive Order establishing a Complete Streets Policy for the City, which requires all departments to 1) give full consideration to accommodation of the safety and convenience of all users 2) balance the needs of all users in planning, design, construction, maintenance, and operation; and 3) prioritize the safety of children, the elderly, and persons with disabilities.

### How the Project Satisfies TIGER VI Selection Criteria

	How the Project Satisfies Citation			
Но	How the Project Satisfies Criteria			
Primary	State of Good Repair  Economic Competitiveness  Quality of Life  Environmental Sustainability		Improving options for and access to transit could lead to a decrease in the number of auto trips and vehicle miles traveled, which will reduce the wear and tear on the roadway system, thereby assisting in maintaining the road pavement in a state of good repair. Additionally, in the near-term, transit options along the Boulevard could help to mitigate I-95 reconstructions disruptions to commute patterns.	
			Enhancing multimodal connections to employment centers will create ladders of opportunity for residents who live along the corridor and for commuters who travel through it. A new transit line will link workers living in North Philadelphia to the industrial parks of the Northeast, and allow those living in the Northeast (particularly those without access to a vehicle) to commute more easily to employment opportunities in Center City Philadelphia or reverse commute to significant retail and office employment centers in Lower Bucks County, thereby restoring ladders of opportunity. At current congestion levels, this study and the resulting solution has the potential to save travel time for commuters along a major corridor further improving Philadelphia's economic competitiveness.	
		Quality of Life	Establishing a new transit corridor that extends transit options into the Northeast and Lower Bucks County will support sustainable, livable communities by connecting socio-economically and demographically diverse together and to places for work, shopping, education, and recreation. This will improve the direct access the corridor provides to major elements of Philadelphia's world class Fairmount Park System including the Takoony/Tacony and Pennypack park and trail systems.	
		This planning effort and the resulting capital project will increase access to and encourage use of multimodal transit options which could reduce auto emissions and fossil fuel consumption.		
		Safety	The Boulevard will allow pedestrians, bicyclists, motorists, and transit users to safely move along and across it, adding accommodations for bicyclists and pedestrians to reduce conflict with vehicular traffic.	
Secondary	Secondary		The City and its partners will undertake a major planning effort to update and evaluate project alternatives developed in previous studies, ultimately advancing a preferred alternative to a formal project development process. The end goal of the study is a multimodal project that deploys state of the art BRT vehicle and station amenities including real time information, and to the extent feasible advanced practice in terms of ITS, traffic controls, access management, and pedestrian and bike safety.	
		artnership	This project represents a collaborative effort between the City of Philadelphia, PennDOT, SEPTA, and DVRPC and other partners including suburban Bucks County. The project will provide greater mobility, safety, and consumer choice, resulting in significant regional benefits.	

#### CONCLUSION

It is widely recognized that the Roosevelt Boulevard corridor fails to reliably serve any mode of transportation effectively. Philadelphia's Study for a Better Roosevelt Boulevard builds directly upon previous planning efforts to promote a viable, long-term solution that will fully reconfigure and finally fix the Boulevard.

This study will provide a detailed evaluation of alternative concepts for reconfiguration that support three key components, including a bus rapid transit service operating in a dedicated guideway, access management achieving effective separation of express/through traffic from local traffic accessing neighborhood destinations, and significant modifications to provide safe pedestrian crossings and transit access.

An effective multimodal transportation solution that offers competitive transportation alternatives for existing communities in North and Northeast Philadelphia will have dramatic effects on the quality of life for City residents and the economic competitiveness of the region. New transit options will restore ladders of opportunity and access to employment centers, recreation, and services, particularly for those low income residents without access to a vehicle, linking workers living in North and Northeast Philadelphia to nearby industrial parks, Center City Philadelphia, and Lower Bucks County.

A reconfigured Roosevelt Boulevard will add accommodations for bicyclists and pedestrians, allowing pedestrians, bicyclists, motorists, and transit users to safely move along and across it. Implementing access management and extending BRT to the Northeast and Lower Bucks County also makes it easier to travel to Philadelphia from surrounding areas. This will also increase development opportunities to existing and emerging centers of commercial and industrial employment. The safety improvements incorporated into the project will address a source of long standing inequity experienced between users of different modes and among different communities using the Roosevelt Boulevard.

**With a 50% local contribution** and a strong project partnership, federal dollars will be greatly leveraged to maximize long-term improvements. Philadelphia's Study for a Better Roosevelt Boulevard will move Philadelphia into a future with greater mobility and livability, and positive benefits to the region's transportation system consistent with the goals of the TIGER VI discretionary grant program.

# **APPENDIX A: WAGE CERTIFICATION LETTER**



Municipal Services Building 1401 John F. Kennedy Boulevard, Suite 1430 Philadelphia, PA 19102-1683

RINA CUTLER
Deputy Mayor for Transportation
and Utilities

April 25, 2014

The Honorable Anthony Foxx Secretary of Transportation U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, D.C. 20590

Subject: TIGER 2014 Discretionary Grants

Dear Secretary Foxx,

The City of Philadelphia Department of Streets will comply with requirements of subchapter IV of Chapter 31 to tile 40, United States Code (Federal Wage Rate Requirements) for all contracted or in-house work necessary to implement the proposed project.

The City of Philadelphia uses contract specifications requiring prime contractors and all subcontractors to pay, their laborers, and mechanics employed under the contract, a wage not less than the prevailing wage applicable to their work classification. This is as specified by the current and applicable Federal wage determination. If no federal work classification appears to apply, the prime contractor shall make a written request to obtain the applicable work classifications and wage rates prior to the start of construction.

The prime contractor is responsible for ensuring subcontractors comply with Davis-Bacon and related acts' requirements. If the City is awarded a TIGER grant, we will require all prime and sub contractors to meet all applicable Federal wage rate requirements.

Sincerely,

Michael Carroll

Director of Engineering and Special Projects

City of Philadelphia, Mayor's Office of Transportation and Utilities

# **APPENDIX B: LETTERS OF FINANCIAL SUPPORT**



#### CITY OF PHILADELPHIA

Office of the Mayor 215 City Hall Philadelphia, PA 19107 (215) 686-2181 FAX (215) 686-2180 MICHAEL A. NUTTER Mayor

April 24, 2014

The Honorable Anthony Foxx Secretary of Transportation U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, D.C. 20590

#### Dear Secretary Foxx:

I write in strong support for the City of Philadelphia's request for TIGER Discretionary Grant funding through the U.S. Department of Transportation's National Infrastructure Investments program. The grant will allow the City to conduct vital planning work that will address transportation, mobility, and safety issues within the Roosevelt Boulevard corridor, a major north-south traffic artery that runs through a densely populated, urbanized area of North and Northeast Philadelphia.

The Boulevard is notorious in its inability to serve any mode of transportation well, sometimes with tragic consequences. As a 12-lane, 14-mile facility, it takes up a tremendous amount of physical space, and yet it neither provides safe access and connectivity for the neighborhoods surrounding it, nor supports reliable auto or transit travel along its length. The Boulevard is auto centric and currently makes disproportionately minor provision for auto free travel, and yet more than half of the Boulevard cuts across a dense fabric of residential neighborhoods that house a population which is socio-demographically diverse, including many households with little or no access to private vehicles. The effect is that these households can become perversely isolated from opportunities.

Recognizing these transportation challenges, the City of Philadelphia is committed to transforming the Boulevard from a perceived liability to the region's transportation system into an asset contributing equitably to better mobility, quality of life, and the economic development of its neighborhoods and the region as a whole.

Funding for the Roosevelt Boulevard planning efforts will allow the City to evaluate the most effective short- and long-term multimodal improvement alternatives based on current conditions and forecasts, and more significantly, allow PennDOT and the City to initiate a true project development process that would continue beyond the grant to ultimately deliver an effective multimodal capital project.

PennDOT, SEPTA and the City will provide a 50 percent non-federal match to the TIGER funds we have requested for this project. This includes \$1.5 million that will come from PennDOT and \$500,000 each from the City and SEPTA. I strongly support this project and it is my top planning priority for TIGER 2014 funding. I want thank you sincerely for your consideration and do not hesitate to contact me if you would have any questions.

Sincerely.

Michael A. Nutter

Mayor



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION HARRISBURG, PENNSYLVANIA 17101-1900

OFFICE OF SECRETARY OF TRANSPORTATION

April 25, 2014

The Honorable Anthony Foxx, Secretary U.S. Department of Transportation 1200 New Jersey Avenue SE Washington, DC 20590

RE: Philadelphia's Study for a Better Roosevelt Boulevard TIGER 2014 Project Planning Grant Request

Dear Secretary Foxx:

I write in strong support for the City of Philadelphia's request for TIGER Discretionary Grant funding through the U.S. Department of Transportation's National Infrastructure Investments program. The grant will allow the City to conduct vital planning work that will address transportation, mobility, and safety issues within the Roosevelt Boulevard corridor, a major north-south traffic artery that runs through a densely populated, urbanized area of North and Northeast Philadelphia.

The Boulevard is notorious in its inability to serve any mode of transportation well, sometimes with tragic consequences. As a 12-lane, 14-mile facility, it takes up a tremendous amount of physical space, and yet it neither provides safe access and connectivity for the neighborhoods surrounding it, nor supports reliable auto or transit travel along its length. The Boulevard is auto centric and currently makes disproportionately minor provision for auto free travel, and yet more than half of the Boulevard cuts across a dense fabric of residential neighborhoods that house a population which is socio-demographically diverse, including many households with little or no access to private vehicles. The effect is that these households can become perversely isolated from opportunities.

Recognizing these transportation challenges, the City of Philadelphia is committed to transforming the Boulevard from a perceived liability to the region's transportation system into an asset contributing equitably to better mobility, quality of life, and the economic development of its neighborhoods and the region as a whole. Funding for the Roosevelt Boulevard planning efforts will allow the City to evaluate the most effective short- and long-term multimodal improvement alternatives based on current conditions and forecasts, and more significantly, allow Pennsylvania Department of Transportation and the City to initiate a true project development process that would continue beyond the grant to ultimately deliver an effective multimodal capital project.

The Honorable Anthony Foxx Page 2 April 25, 2014

PennDOT, SEPTA and the City will provide a 50 percent non-federal match to the TIGER funds we have requested for this project. This includes \$1.5 million that will come from PennDOT and \$500,000 each from the City and SEPTA. I strongly support this project and it is my top planning priority for TIGER 2014 funding. I want to thank you sincerely for your consideration and do not hesitate to contact me if you would have any questions.

Sincerely,

Barry J. Schoch, P.E. Secretary of Transportation

Frany J Rle

cc: Barry Seymour, Executive Director, DVRPC 190 N. Independence Mall West, 8<sup>th</sup> Floor Philadelphia, PA 19106-1520





Chairman Pasquale T. Deon, Sr.

Vice Chairman Thomas E. Babcock

April 24, 2014

Beverly Coleman Rina Cutler Thomas Jay Ellis Christopher H. Franklin Stewart J. Greenlead Kevin L. Johnson John I. Kane Daniel J. Kubik Kenneth Lawrence, Jr. Charles H. Martin Leslie S. Richards James C. Schwartzman Cuyler H. Walker

Secretary Anthony Foxx U.S. Department of Transportation 1200 New Jersey Ave. SE Washington, D.C. 20590

General Manager Joseph M. Casey Re: TIGER Application for Philadelphia's Study for a Better Roosevelt Boulevard

Dear Secretary Foxx,

On behalf of the Southeastern Pennsylvania Transportation Authority (SEPTA), I am pleased to support the City of Philadelphia's request for TIGER VI Discretionary Grant funding through the U.S. Department of Transportation's National Infrastructure Investments program. The grant will allow the City to conduct vital planning work that will address safety, transportation, mobility and access issues within the Roosevelt Boulevard corridor, a major north-south traffic artery that runs through a densely populated, urbanized area of North and Northeast Philadelphia.

The Boulevard has the reputation of not being able to serve any mode of transportation well, and sometimes with tragic consequences. As a 12-lane, 14-mile corridor, it occupies a significant amount of physical space, and yet it neither supports reliable auto or transit travel along its length, nor provides safe pedestrian or bicycle access and connectivity for the neighborhoods surrounding it. There are currently no accommodations for bicyclists along the Boulevard, and conflict between pedestrian and vehicle traffic has resulted in fatalities. With 90,000 vehicles using the Boulevard daily, some segments have been identified as high crash locations with more than 3,400 crashes, resulting in 49 fatalities between 2008 and 2012. Some existing transit routes along the corridor are notoriously slow, and express bus service is not competitive with auto use.

Recognizing the Boulevard's severe limitations and inadequacies in its current condition, the City of Philadelphia is committed to transforming the Boulevard into a "Complete Street," making it easy for users to cross the street, walk to shops, and bicycle to work, allowing buses to run on time, making it safe for people to walk to and from transit stations, improving connections between residences, employment, and recreation, and reducing auto dependence and

Secretary Foxx Page 2

congestion. Funding for the Roosevelt Boulevard planning efforts will allow the City to evaluate the most effective comprehensive long-term multimodal improvement alternatives based on current conditions and forecasts, and more significantly, allow PennDOT and the City to initiate a true project development process that would continue beyond the grant to ultimately deliver an effective multimodal capital project.

SEPTA will commit \$500,000 to serve as matching funds for this project. We strongly support this project and the City of Philadelphia's application for TIGER VI funding.

Thank you for your consideration. If you have any questions or need any additional information about this application, please do not hesitate to contact us.

Sincerely,

Joseph M. Casey General Manager

# **APPENDIX C: OTHER LETTERS OF SUPPORT**



190 N INDEPENDENCE MALL WEST 8TH FLOOR PHILADELPHIA, PA 19106-1520 Phone: 215-592-1800 Fox: 215-592-9125 www.dvrpc.org

April 23, 2014

Mr. Anthony Foxx Secretary of Transportation U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, D.C. 20590

Re: TIGER Application for Philadelphia's Study for a Better Roosevelt Boulevard

Dear Secretary Foxx:

The Delaware Valley Regional Planning Commission (DVRPC) is pleased to support the City of Philadelphia's application for *Philadelphia's Study for a Better Roosevelt Boulevard* for the Transportation Investment Generating Economic Recovery (TIGER) Discretionary Planning Grant program. As the Metropolitan Planning Organization (MPO) for the Greater Philadelphia Region which includes a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey, DVRPC works with stakeholders to approve and advance federal transportation infrastructure investment in the region. DVRPC confirms that we are committed to taking the necessary steps to ensure this planning project is appropriately included in the Transportation Improvement Program, as required, should the Department of Transportation select this application for TIGER Grant funding.

The objectives of this project are consistent with DVRPC's 2040 long range plan, Connections – The Regional Plan for a Sustainable Future, which was adopted by the DVRPC Board on July 25, 2013. Philadelphia's Study for a Better Roosevelt Boulevard will additionally build on short-term Roosevelt Boulevard "Better Bus" investments that are included as an operational enhancement in the draft Connections 2040 update.

As noted in the TIGER application, Roosevelt Boulevard cuts a wide swath through the dense, mixed-use urban fabric of Northeast Philadelphia. Its width and footprint give it ample automobile capacity, yet its complex and obsolete design limit its mobility benefits even for drivers. Corridor residents and workers without cars, or who would prefer not to drive, experience Roosevelt Boulevard as a wide moat that severs Northeast Philadelphia in two, significantly impairing pedestrian mobility and safety, and neighborhood commerce. In short, Roosevelt Boulevard in its present form does not serve the needs of any users well.

Although the planned Roosevelt Boulevard "Better Bus" transit enhancements are a key outcome of an ongoing DVRPC planning effort for the corridor, other significant corridor needs remain largely unresolved, including a modern reconfiguration to enhance pedestrian and automobile safety. The proposed TIGER planning work, *Philadelphia's Study for a Better* 

Anthony Foxx April 23, 2014 Page 2 of 2

Roosevelt Boulevard, would build on near-term investments and lay the groundwork for a complete, phased, and comprehensive redesign of Roosevelt Boulevard. This will ultimately transform the corridor from an arguable liability to an undisputed asset for the communities it directly serves, the city, and the region.

Creating a safe, modern, and efficient multimodal transportation system is part of DVRPC's vision for the Delaware Valley. Our transportation network is already expansive and interconnected. Targeted investments in improving the network's performance, better integrating facilities, and resolving high priority multimodal and safety challenges like Roosevelt Boulevard will produce enormous benefits for residents, businesses, and visitors to the region. We look forward to your support of this important project.

Thank you for your consideration of the proposal.

Barry Seymour Executive Director

Attachments

BS:kh