

San Francisco Public Works  
Local Partnership Program Cycle 1 - Formula Funds  
Alemany Boulevard Pavement Renovation



## Alemany Boulevard Pavement Renovation

SB1 Local Partnership Program Cycle 1

Fiscal Year 2018-2019

Formula Funds Application

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San Francisco Public Works  
December 2017

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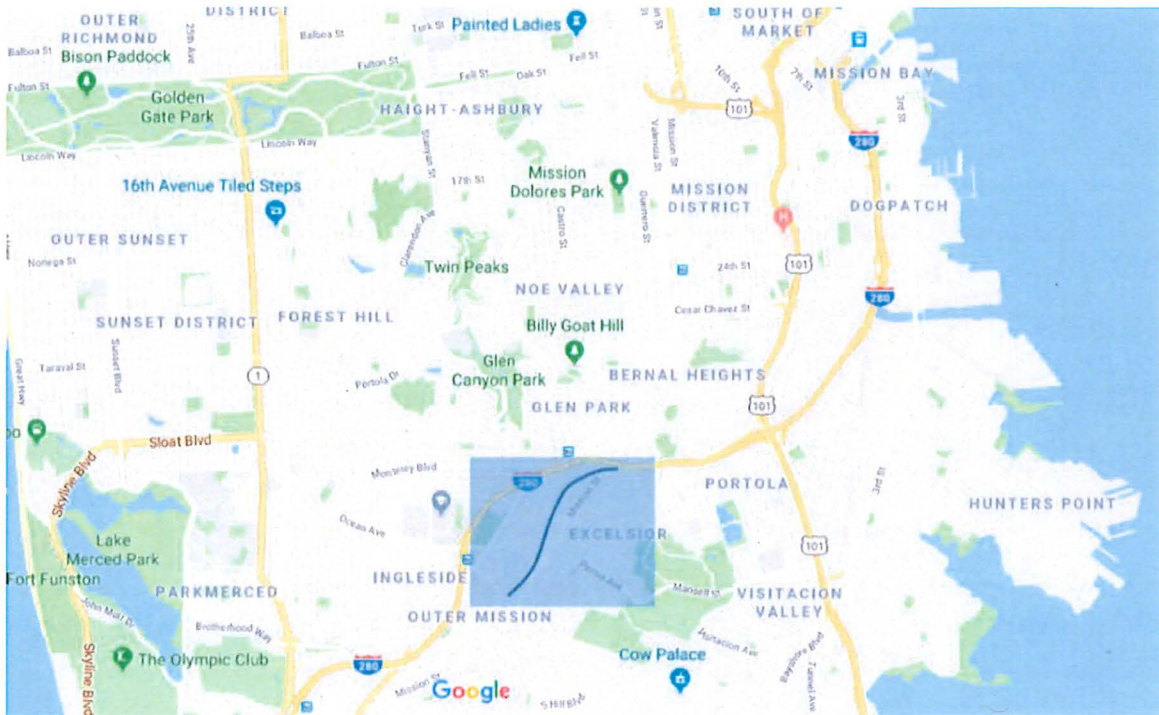
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## Basic Project Information

**Project Name:** Alemany Boulevard Pavement Renovation

**Project Description:** Street resurfacing of 1.3 miles of a key arterial in San Francisco. The project consists of repairs to the road base, paving work, curb ramp construction, and sidewalk and curb repairs. This construction work will, in conjunction with San Francisco Public Works' asset management strategy, decrease the lifetime maintenance and repair costs, while providing a smoother and safer road for drivers, public transit riders, bicyclists, and pedestrians.

**Project Location:** The project will resurface Alemany Boulevard, between Congdon St and Seneca Ave.



**Project Phase:** Construction

**Fiscal Year of Programming:** 2018/19

**Total Project Cost:** \$5,500,000

**LPP Amount Requested:** \$2,083,000

**Local Match:** \$3,417,000 in Proposition K sales-tax funds and local General Fund



## Street Resurfacing Program Background

San Francisco Public Works (Public Works) is responsible for more than 900 miles of streets and roadways, comprising more than 12,800 street segments and blocks. The Public Works Street Resurfacing Program (Street Resurfacing) maintains deteriorated City streets through various treatment types, such as grinding and paving from curb to curb and pavement preservation. Roadway surfaces must be routinely maintained, renewed, and resurfaced to extend the service life of the pavement.



Street Resurfacing inspects each of the City's blocks and assigns a Pavement Condition Index (PCI) score every two years. The PCI score ranges from 0 ("Very Poor") to 100 ("Excellent"). These scores assist Public Works with implementing the pavement management strategy of preserving streets by applying the right treatment to the right roadway at the right time. Streets are prioritized and selected based on PCI scores as well as the presence of transit and bicycle routes, scheduled street clearance, and geographic equity.

In San Francisco, the goal of the Street Resurfacing Program is to maximize every dollar received. Street Resurfacing has adopted asset management best practices to minimize life cycle costs. A street's typical life cycle is approximately 30 years, but can vary depending on usage and other factors. Best practices in street management recommend preserving streets before they become more costly to fix later. This cycle keeps San Francisco streets at a higher lifetime average PCI score, while reducing reconstruction costs.

Since 2011, Street Resurfacing has performed over 110 joint and coordinated projects with public and private agencies. Public Works maintains regular communication with other public and private agencies and tracks the City's projects to determine whether paving should join or coordinate on a project with other agencies. Coordinating street resurfacing work with other major San Francisco projects maximizes the efficiency and effectiveness of public dollars, while minimizing disruption to San Francisco residents, visitors, and businesses.





In the spirit of coordinating projects, Street Resurfacing also helps build curb ramps in San Francisco. The **American Disabilities Act of 1990 (ADA)** requires that the City build out curb ramps to ensure accessibility on the public right-of-way. San Francisco is committed to providing full and fair access to all City streets and complying with ADA accessibility requirements. The City's 2008 update of the **ADA Transition Plan for Curb Ramps and Sidewalks** sets an aggressive goal of putting a curb ramp at every street corner in the City. In accordance with this aggressive goal, Street Resurfacing has constructed over 5,000 curb ramps between 2013 and 2016.

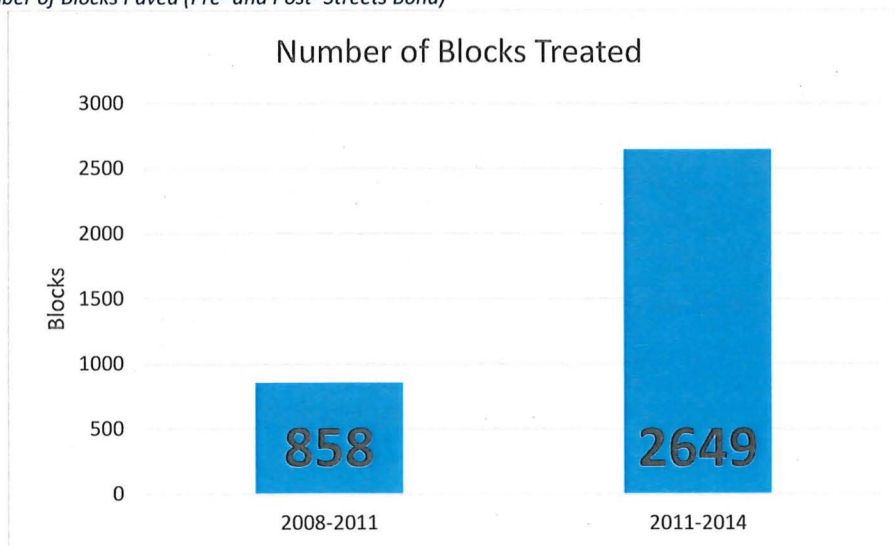
### San Francisco's Street Resurfacing Needs

Well maintained streets provide multi-modal benefits. Motorists, cyclists, and transit benefit from smoother and safer paved streets. Public transportation and the movement of goods and services would not be possible without a network of even and dependable streets.

In 2011, San Francisco voters overwhelmingly approved the **2011 Road Repaving and Street Safety Bond (Streets Bond)** and set a citywide target PCI score of 70. Over 68% of San Francisco voters approved the proposition. Since 2011, the PCI goal has been reiterated in the City's **10 Year Capital Plan**.

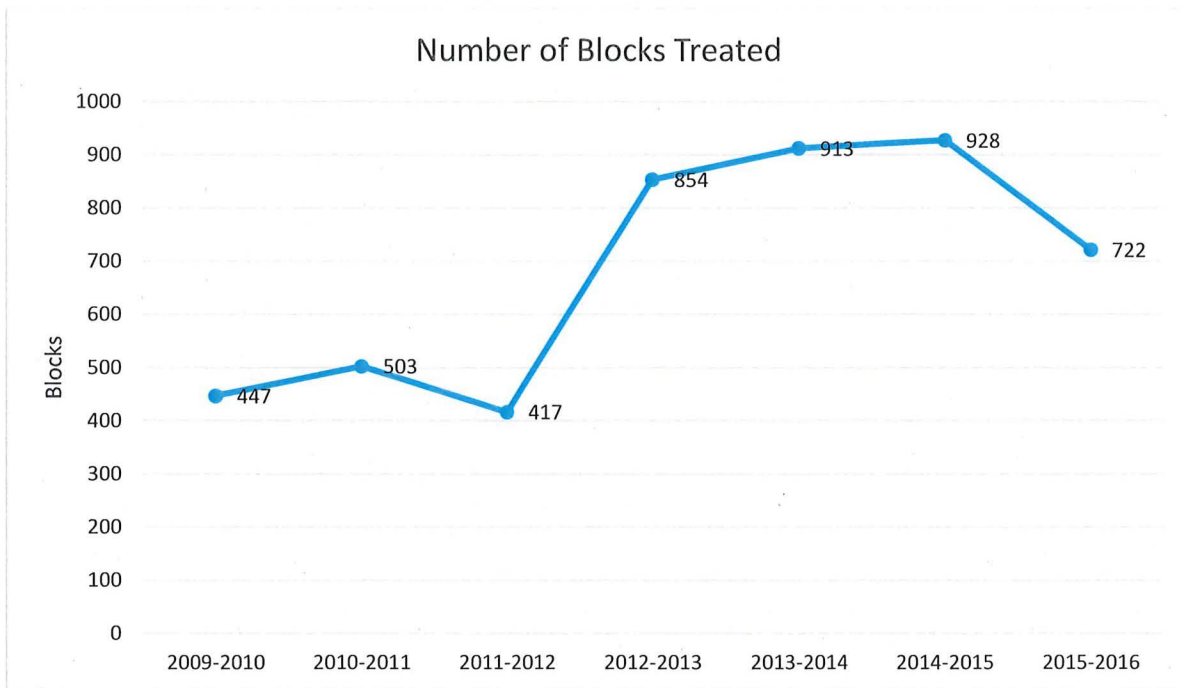
The Street Resurfacing program's use of Streets Bond funds proved that the number of blocks treated each year is directly tied to funding. Street Resurfacing has maximized the Streets Bond funds and, in the three years after the Streets Bond passed, the number of blocks treated in San Francisco has tripled (see Figure 1). Since 2011, Street Resurfacing has treated a total of 4,299 block (see Figure 2).

Figure 1: Number of Blocks Paved (Pre- and Post- Streets Bond)



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Figure 2: Annual Number of Blocks Treated Since Fiscal Year 2009-2010

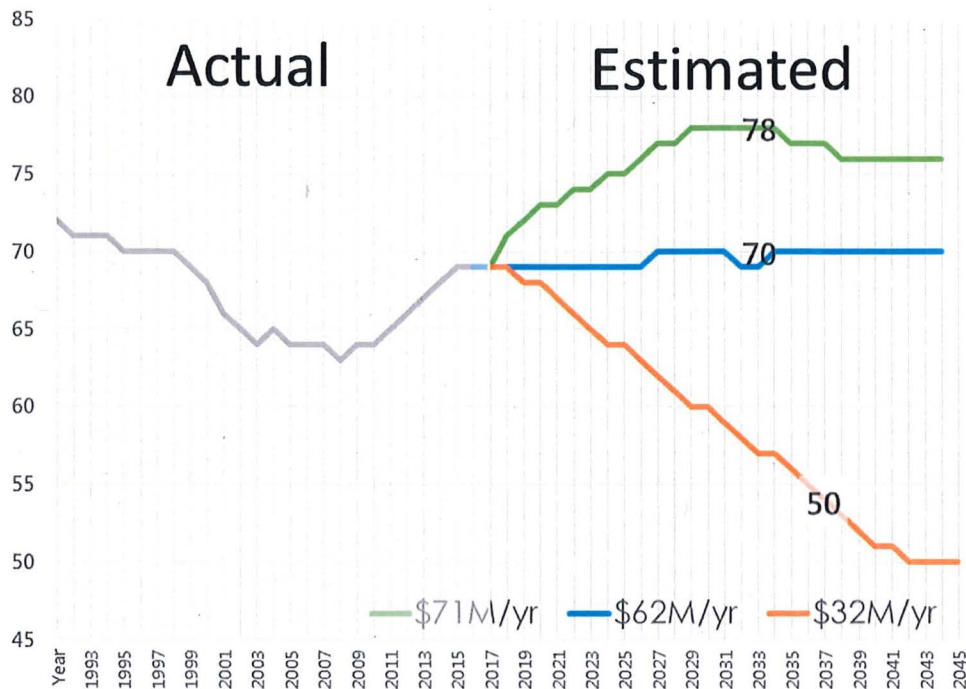


The voter approved target PCI score of 70 aims to make San Francisco streets “Good,” by Fiscal Year 2025. As of December 2016, the average citywide PCI score is 69. This PCI score has increased from the historical low of 63 in 2009, with the bulk of the improvements occurring between 2011 and 2016, largely because of the dedicated funding stream from the Streets Bond during this five year period.

Public Works has made great strides in improving the City’s network PCI score, but with the depletion of Streets Bond funds, dependable and sufficient funding for the program does not currently exist. With current levels of funding, San Francisco can expect the average citywide PCI score to drop to 62 by 2027. A score of 62 not only erases all improvements to the citywide network, but also is the lowest average network score San Francisco streets have ever received. If this funding level continues, San Francisco streets can expect to fall to an average PCI score of 50 by 2045 (see Figure 3). Fully funding the Street Resurfacing Program is necessary to sustain the improvements made since 2011 and reach the target PCI score of 70.

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Figure 3: PCI Outcomes from Different Budget Scenarios



As of December 2016, approximately 40% of San Francisco streets are still considered “At-Risk,” “Poor,” or “Very Poor.” These streets are quickly deteriorating and require larger scale maintenance and repair. Work on “At-Risk” and worse streets has significantly higher costs and is more labor-intensive than maintaining “Good” and “Excellent” streets. In order to continue to improve and prevent a drop in the network PCI score, Street Resurfacing must focus repaving efforts on San Francisco’s “At-Risk” and worse streets.

Table 1: Cost of Per Curb Repair Based on PCI Score (as of December 2016)

PCI Score	Rating	Cost of Repair (Per Block)	Treatment Method
85-100	Excellent		No treatment
70-84	Good	\$35k	Preservation
50-69	At-Risk	\$143k	Resurfacing
25-49	Poor	\$161k	Resurfacing with base
0-24	Very Poor	\$261k	Reconstruction

SF Goal: PCI of 70 →

As of December 2016: PCI of 69 →

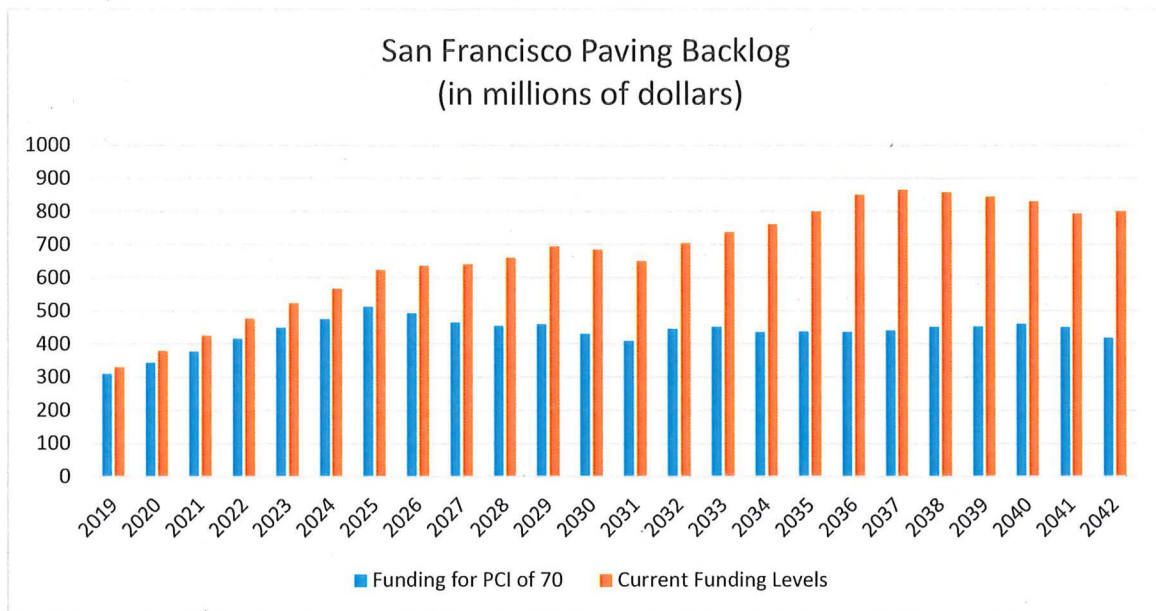


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The quality of the City’s street network affects the cost burden that San Francisco residents will bear. These costs are incurred as personal vehicle maintenance and repair costs, as well as the tax burden needed to upkeep San Francisco roads. As the PCI increases, the cost of maintenance and repair of local roads drastically decreases. According to the costs outlined in Table 2, a PCI score 70 will reduce the maintenance and repair costs of San Francisco streets from \$143,000 per block to \$35,000 per block (see Table 1).

As San Francisco’s network of streets and roads deteriorate, maintaining the citywide network becomes more expensive, and San Francisco’s paving needs increase. More expensive repairs mean that more financial and labor resources are needed to repave the City’s streets. Street Resurfacing will need to spend more time and money to pave less streets. As a result, the citywide paving backlog grows (see Figure 4).

Figure 4: Backlog Trends Based on Funding Levels



The backlog represents streets within the City’s network that require maintenance and repair. However, because of prioritization and resource scarcity, Street Resurfacing lacks the capacity to work on these streets now. Streets in the City’s backlog continue to deteriorate; the longer the streets stay in the backlog, the more expensive they become to repair and maintain.

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Table 2: Backlog Growth Based on Funding Levels

	PCI of 70	Current Funding Levels	PCI in High 70s.
<b>Backlog Growth</b>	37%	161%	-15%
<b>Backlog in 2045</b>	\$420 mil	\$800 mil	\$260 mil

Currently, the San Francisco streets and roads network has a backlog of \$307 million. Based on September 2017 estimates, if the City does not receive additional funding, San Francisco can expect to see a backlog of \$800 million by 2045. If San Francisco secures funding to reach the target PCI score of 70 by 2025, the City’s backlog will still grow, but only by 37%. In this scenario, the backlog will be \$420 million by 2045. If the City was interested in reducing the backlog, funding to reach and maintain a PCI score in the high 70s is needed (see Table 2).

Smoother streets also save individual drivers from paying significant personal vehicle repair and maintenance costs. According to the **American Society of Civil Engineers 2017 Infrastructure Report Card**, deteriorating roads cost the average driver approximately \$800 in annual vehicle repair fees.<sup>1</sup>

### Alemany Boulevard Project Information

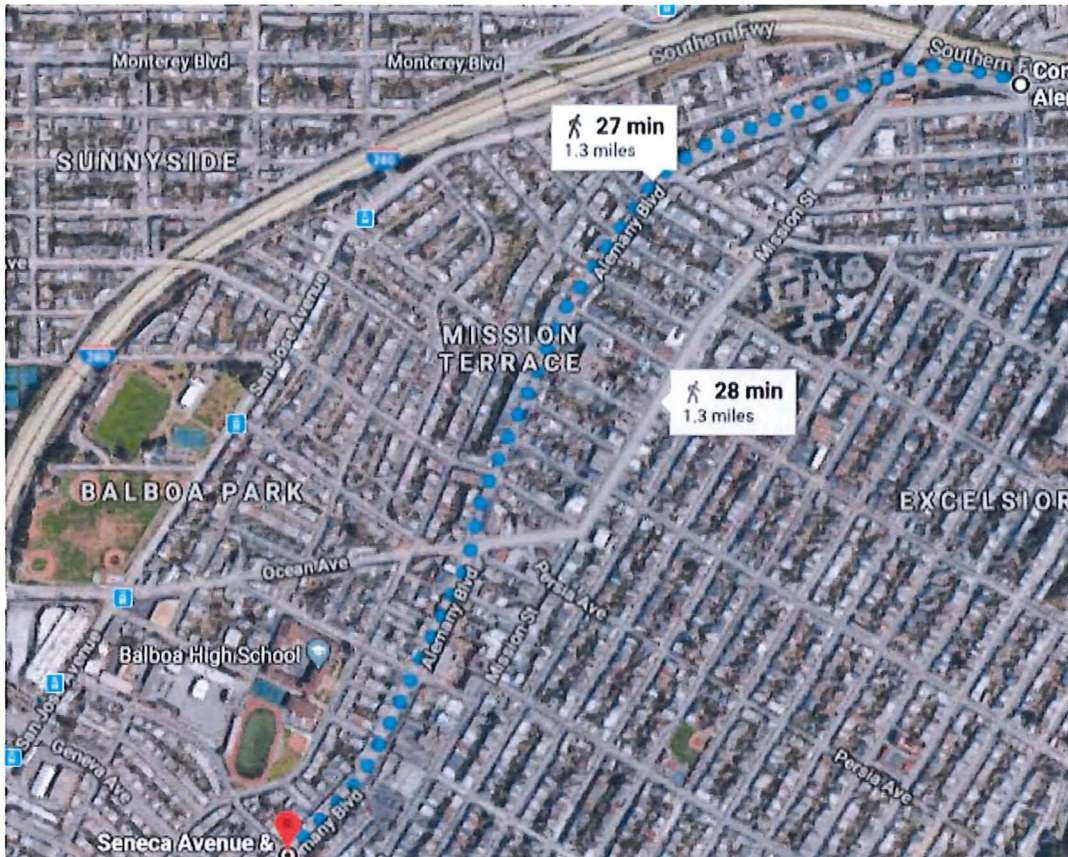
Public Works requests Cycle 1 Fiscal Year 2018-2019 Local Partnership Program (LPP) formula funds for the construction phase of the pavement portion of the Alemany Boulevard Pavement Renovation Project. The project construction phase will cost approximately \$5.5 million. Street Resurfacing is requesting \$2.083 million in Fiscal Year 2018-2019 LPP funds for construction. These funds will be matched with \$3.417 million of local General Fund and Proposition K Sales Tax funds. For further information on project costs, please refer to the attached Project Funding Plan (Attachment A) and Project Cost Estimate (Attachment B).

<sup>1</sup> American Society of Civil Engineers, 2017 Infrastructure Report Card, accessed 2017, November 22.  
<https://www.infrastructurereportcard.org/infrastructure-super-map/>



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Figure 5: Alemany Project Limits



The project is located on 1.3 miles of Alemany Boulevard, between Congdon Street and Seneca Avenue and will repave thirty (30) blocks. This project is situated on a major arterial in the Balboa Park and Mission Terrace neighborhoods of San Francisco. The project will perform work in proximity to many important neighborhood and community centers, such as:

Balboa Park

Located 0.3 miles away from Alemany Boulevard, Balboa Park is a twenty-four acre athletic park. Amenities include a stadium, four ball fields, and an indoor pool. San Francisco Recreation and Parks Department recently updated the playground. There are more improvements planned for the park in the near future.<sup>2</sup>

Monroe Elementary School

Located 0.3 miles away from Alemany Boulevard and in the Excelsior neighborhood, the Monroe Elementary School is a diverse K-5 school with annual enrollment averaging around

<sup>2</sup> San Francisco Recreation and Parks Department, Balboa Park, 2017, accessed 2017, December 4.  
<http://sfrecpark.org/destination/balboa-park/>



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500 students. The school provides important access to language programs to help students become bilingual in Spanish, Chinese, and/or English.<sup>3</sup>

James Denman Middle School

Located 0.2 miles away from Alemany Boulevard, the James Denman Middle School serves the Outer Mission neighborhood's 6<sup>th</sup> to 8<sup>th</sup> grade students. The middle school has seen an increase in enrollment over the last five years. The school had an enrollment of over 800 students during the 2016-2017 school year, up from the approximately 700 students enrolled during the 2015-2016 school year.<sup>4</sup> In the 2016-2017 school year, approximately 60% of the student body received free and reduced-priced meals.<sup>5</sup>

Balboa High School

Located 0.1 miles away from Alemany Boulevard, Balboa High School has an average enrollment of over 1,200 high school students. The school serves a large population of minority students, as well as low income students. Based on California Department of Education data, approximately 95% of enrolled students are considered ethnic minorities. Approximately 66% of enrolled students received free and reduced-priced meals.<sup>6</sup>

City College of San Francisco (Ocean Campus)

Located 0.7 miles away from Alemany Boulevard, the Ocean Campus is the main campus in the City College of San Francisco (CCSF) network. CCSF provides two year accredited education and vocational training to approximately 30,000 students a year.<sup>7</sup> CCSF gives San Francisco residents an affordable higher education option.

San Francisco Public Library (Excelsior Branch)

Located 0.1 miles away from Alemany Boulevard, the Excelsior Branch of the San Francisco Public Library is an important cultural center in the neighborhood. The library holds the neighborhood history file, as well as a collection of Filipino interest materials in English and Tagalog. The library also sports a collection of English, Chinese, and Spanish language materials.<sup>8</sup>

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<sup>3</sup> San Francisco Unified School District, Monroe Elementary School, 2017, accessed 2017 December 4.

<http://www.sfusd.edu/en/schools/school-information/monroe.html>

<sup>4</sup> San Francisco Unified School District, James Denman Middle School, 2017, accessed 2017 December 4.

<http://www.sfusd.edu/en/schools/school-information/james-denman.html>

<sup>5</sup> Education Data Partnership, Denman (James) Middle, 2017, accessed 2017 December 5. [http://www.ed-data.org/school/San-Francisco/San-Francisco-Unified/Denman-\(James\)-Middle](http://www.ed-data.org/school/San-Francisco/San-Francisco-Unified/Denman-(James)-Middle)

<sup>6</sup> Education Data Partnership, Balboa High, 2017, accessed 2017 December 5. <http://www.ed-data.org/school/San-Francisco/San-Francisco-Unified/Balboa-High>

<sup>7</sup> California Community Colleges Chancellor's Office, Management Information Systems Data Mart, accessed 2017 December 5.

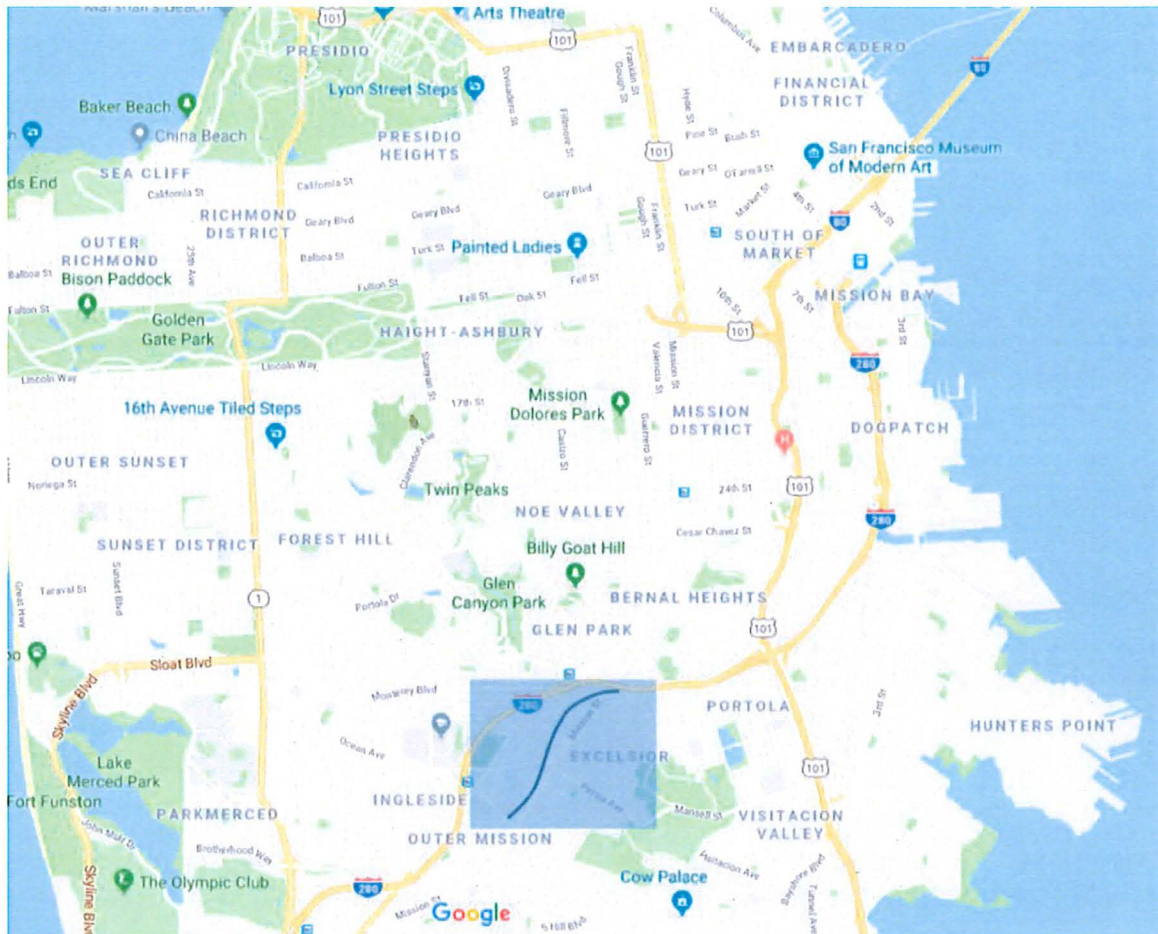
[http://datamart.cccco.edu/Students/Student\\_Term\\_Annual\\_Count.aspx](http://datamart.cccco.edu/Students/Student_Term_Annual_Count.aspx)

<sup>8</sup> San Francisco Public Library, Excelsior, 2017, accessed 2017 December 4. <https://sfpl.org/?pg=0100000601>

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For more information on the project location, please refer to the attached project map (Attachment C).

Figure 6: Project Location



The project is a key motor vehicle connection off the United States Route 101 freeway. In terms of public transit, San Francisco bus lines 44 and 52, both with important service to the western and southern neighborhoods of San Francisco, run and stop along Alemany Boulevard. The Balboa Park Station, with Bay Area Rapid Transit (BART) and San Francisco Municipal Railway (Muni) service, is located 0.4 miles away from the project. Balboa Park Station sees heavy transit traffic; in November 2017, the station registered 10,350 passenger exits from BART riders.<sup>9</sup>

<sup>9</sup> Bay Area Rapid Transit, Ridership: November 2017, 2017 December 3, Accessed 2017 December 6.  
<http://64.111.127.166/ridership/>



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Alemany is also a major bicycle corridor, with dedicated on-road bicycle lanes. Alemany has the closest bike lanes on a major arterial south of Balboa Park; this means, for many bicyclists, the boulevard is the safest arterial connection for bike traffic in the Balboa Park and Mission Terrace neighborhoods.

*Figure 7: Current Conditions on Alemany Boulevard*



Currently, the average PCI score within the project limits is in the mid 50's, making the roads "At-Risk." This project will boost the PCI score to 100, and, subsequently, help boost the City's network PCI. This construction work will, in conjunction with Street Resurfacing's asset management strategy, decrease the lifetime maintenance and repair costs on Alemany Boulevard, while providing a smoother and safer road for drivers, public transit riders, and bicyclists.

The project consists of repairs to the road base, paving work, curb ramp construction, and sidewalk and curb repairs. In an effort to coordinate with other projects in this location, and therefore reduce mobilization costs and minimize public disruption, the project will also include sewer replacement and traffic signals work. The sewer replacement will be funded by San Francisco Public Utilities Commission (SFPUC) and the traffic signals work will be funded by San Francisco Municipal Transportation Agency (SFMTA).<sup>10</sup>

The project is currently in the design phase. As of November 2017, design is 10% complete. The project is scheduled to start construction Spring 2019 and complete construction in Fall 2020.

<sup>10</sup> Due to the nature of the SFPUC and SFMTA work, the sewer replacement and traffic signal work are considered non-participating. The sewer replacement and traffic signal work will not receive LPP formula funds.



For further project schedule information, please refer to the attached Project Schedule (Attachment D).

### Anticipated Benefits from the Alemany Boulevard Project

The Alemany Boulevard Pavement Renovation Project will provide a multitude of benefits both to the citywide population and to the project's neighboring communities. This application does not use the recommended California Department of Transportation Life-Cycle benefit-Cost Analysis Model because the model proved to have limitations when calculating local streets and roads related benefits. The model uses the International Roughness Index (IRI) to measure pavement condition, while Street Resurfacing uses Pavement Condition Index (PCI). Public Works does not currently have the ability to convert PCI into IRI. Instead, benefits in this application are based on research and literature review.

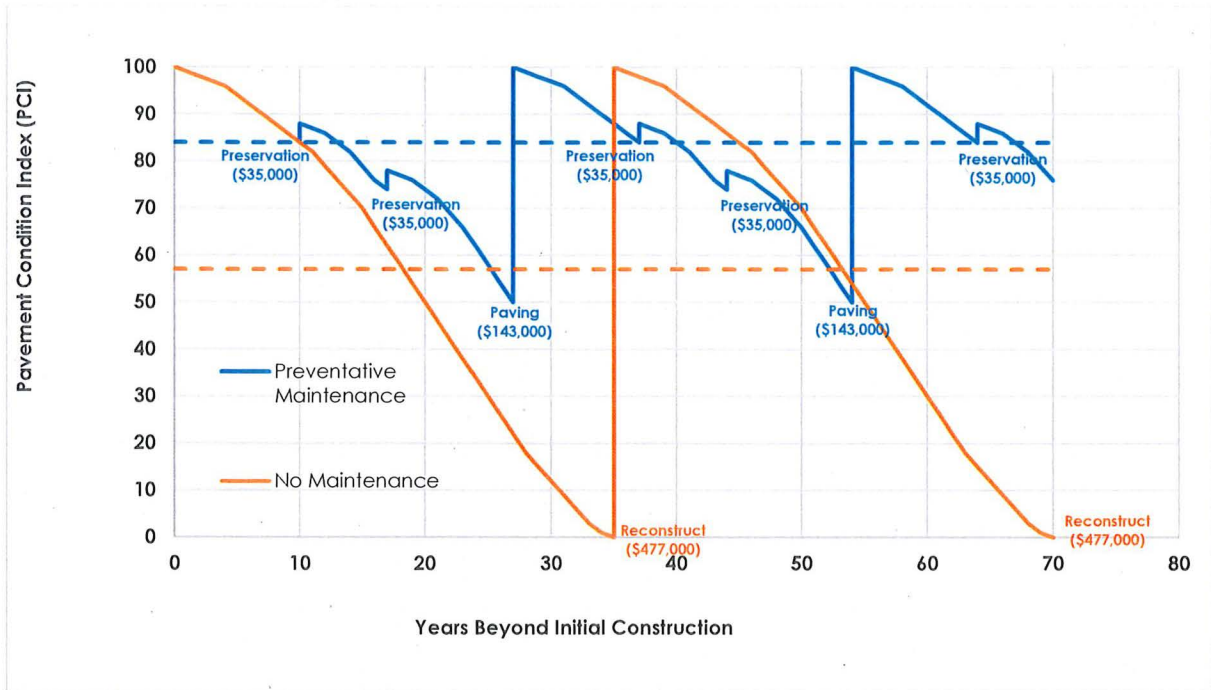
### Monetary Benefits

Street Resurfacing's strategy is to perform preservation treatments approximately every 10 years, with a paving treatment approximately every 30 years. Alemany Boulevard is currently in need of paving treatment to stay on track with asset management best practices. In comparison, if Alemany were to follow a traditional reconstruction cycle, with no maintenance, the boulevard will continue to deteriorate, making it substantially more expensive to fix at a later time.

As shown in Figure 8, a preserve-and-pave cycle is more cost effective than reconstructing streets every 30 years. Additionally, the average PCI over the life of streets, using this best practices strategy, can be as high as 84 (dotted blue line in Figure 8); comparatively, using the traditional reconstruction life cycle, the average PCI of a streets is estimated to be only in the mid-50s (orange dotted line in Figure 8). Using the Street Resurfacing's adopted strategy, maintenance and repair costs, the backlog, and personal motor vehicle damages are expected to decrease.

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Figure 8: "Traditional" vs. "Best Practices" Asset Management Cycle



If a preserve-and-pave cycle is followed ("Preventative Maintenance" line in Figure 8), between Year 0 and Year 40, the Alemany Boulevard Project could potentially save the City approximately \$6.9 million in maintenance and repair costs (see Table 3 for calculations). In order for these savings to be realized, asset management best practices must be continuously used.

Table 3: Cost Savings

Cost Savings from Alemany Boulevard Project (Year 0-40)		
	Best Practices	Traditional
Blocks	30	30
Cost of Repair (Per Block)	\$248,000	\$477,000
Cost of Repair (Total)	\$7,440,000	\$14,310,000
<b>Total savings for City:</b>	<b>\$6,870,000</b>	

Climate Impacts

Research shows that smoother, well-paved streets have associated positive climate impacts. Street Resurfacing incorporates Reclaimed Asphalt Paving (RAP), a sustainable pavement strategy, in the paving process. San Francisco includes, at a minimum, 15% recycled asphalt in all paving projects. Using RAP, Street Resurfacing uses less natural resources and reduces the amount of waste diverted to landfills. According to a New Civil Engineers report, every lane-

mile recycled is the equivalent of removing 11 cars off the road for a year, reducing overall greenhouse gas emissions.<sup>11</sup> Based on this argument, this project, which will repave four lanes, has the potential to reduce greenhouse gases by the equivalent of the emissions from 57 cars in a year.

According to the Concrete Sustainability Hub at Massachusetts Institute of Technology, “rougher roads lead to a greater fuel consumption [...] having a potentially huge impact when aggregated.”<sup>12</sup> The National Cooperative Highway Research Program found that vehicles driving on rough, damaged, unpaved streets can have up to almost 5% increase in fuel consumption.<sup>13</sup> The Federal Highway Administration links the increase in fuel consumption to the energy needed for a vehicle to stabilize itself while sustaining the speed limit on rough and bumpy roads.<sup>14</sup>

The project will greatly improve the condition of Alemany Boulevard. Drivers on the boulevard after the completion of the project will experience smoother streets; drivers will no longer require the use of the extra 5% in fuel consumption to stabilize their vehicles.

Furthermore, a smoother Alemany Boulevard means a safer bike path for bicyclists. According to the SFMTA study, when asked about their decision to bike, 70% of respondents cited safety as a major factor for not biking.<sup>15</sup> Currently, bikes represent between 0 - 2% of the mode share on Alemany Boulevard.<sup>16</sup> The Alemany Boulevard Project will help make the area more bike friendly by providing a smoother ride. By making Alemany Boulevard safer for bikes, the project can boost bike ridership, therefore potentially reducing private vehicle ridership, and subsequently, greenhouse gas emissions from fossil fuel consumption.

### Land Use, Housing Planning, Transportation Goals

The Alemany Boulevard Pavement Renovation Project also aligns with many of the City’s land use and transportation goals.

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<sup>11</sup> New Civil Engineers, Final Report: California Statewide Local Street and Roads Needs Assessment, 2016 October, pp. 23-24, accessed 2017 November 30. <http://www.savecaliforniastreet.org/wp-content/uploads/2016/10/2016-CA-Statewide-Local-Streets-and-Roads-Needs-Assessment-Final-Report.pdf>

<sup>12</sup> Greene, Suzanne, et al. Pavement Roughness and Fuel Consumption, Massachusetts Institute of Technology Concrete Sustainability Hub, 2013 August, pp. 11-15, accessed 2017 November 30. [https://cshub.mit.edu/sites/default/files/documents/PVIRoughness\\_v15.pdf](https://cshub.mit.edu/sites/default/files/documents/PVIRoughness_v15.pdf)

<sup>13</sup> Chatti, Karim and Imen Zaabar, National Cooperative Highway Research Program Report 720: Estimating the Effects of Pavement Condition on Vehicle Operating Costs, Transportation Research Board, 2012, pp. 19-23, accessed 2017 November 30. <https://www.nap.edu/read/22808/chapter/4#21>

<sup>14</sup> U.S. Department of Transportation Federal Highway Administration, Pavements, 2017 June 27, accessed 2017 November 30. [https://www.fhwa.dot.gov/pavement/sustainability/articles/vehicle\\_fuel.cfm](https://www.fhwa.dot.gov/pavement/sustainability/articles/vehicle_fuel.cfm)

<sup>15</sup> San Francisco Municipal Transportation Agency, Pedaling Forward, 2017 July 7, accessed 2017 December 6. [https://www.sfmta.com/sites/default/files/reports-and-documents/2017/09/booklet\\_final\\_web\\_version.pdf](https://www.sfmta.com/sites/default/files/reports-and-documents/2017/09/booklet_final_web_version.pdf)

<sup>16</sup> San Francisco Municipal Transportation Agency, ACS Bicycle Commute Mode Share 2011-2015, accessed 2017 December 6. [https://www.sfmta.com/sites/default/files/acs\\_bicyclecommutemodeshare\\_2011-2015.pdf](https://www.sfmta.com/sites/default/files/acs_bicyclecommutemodeshare_2011-2015.pdf)



According to the **San Francisco General Plan**, a priority of the City's streets and roadways is to accommodate human movement and join the districts of the City.<sup>17</sup> Alemany Boulevard is an important arterial for facilitating movement in the City and connecting San Francisco's southern neighborhoods to the rest of the City. Alemany's closeness to transportation facilities, such as Muni bus stops (44 and 52 lines run on Alemany), a BART/Muni station (0.4 miles away), and the Interstate 101 off ramp (1.1 miles from Congdon and Alemany), makes it an important pathway for San Francisco residents travelling in and out of the Balboa Park and Mission Terrace neighborhoods.

The project also falls in line with infrastructure investment goals outlined in **Plan Bay Area 2040**. The plan prioritizes maintaining San Francisco Bay Area's local streets and roads and stresses the importance of improving pavement condition in the region.<sup>18</sup> The completion of the Alemany Boulevard Pavement Renovation Project will improve San Francisco's network PCI score, to hit the PCI 70 goal, as well as the Bay Area regional network PCI score.

## Conclusion

The funding for the Alemany Boulevard Pavement Renovation Project will help deliver a project with wide ranging benefits. The project will help boost San Francisco's network PCI score continuing the will San Francisco voters established in the **2011 Streets Bond** and **10 Year Capital Plan**, while providing more safe and reliable roadways for multi-modal transportation. Repaving Alemany Boulevard will significantly reduce life cycle costs, freeing up funds and capacity for the Street Resurfacing Program to work on projects in the City's growing backlog.

With a \$5.5 million investment in this project and an adherence to the best practices asset management strategy, the Alemany Boulevard Project has the potential to generate almost \$7 million (realized over in the 40 years after construction) in maintenance and repair cost savings to the City. With the addition of greenhouse gas emission reductions and increased neighborhood connections, the benefits of this project greatly outweigh the requested investment.

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<sup>17</sup> San Francisco Planning Department, San Francisco General Plan: Urban Design Element, amended 2010, December 7, accessed 2017 November 30. [http://generalplan.sfplanning.org/15\\_Urban\\_Design.htm](http://generalplan.sfplanning.org/15_Urban_Design.htm)

<sup>18</sup> Metropolitan Transportation Commission, Plan Bay Area 2040, adopted 2017 July 26, accessed 2017 November 30. <http://2040.planbayarea.org/strategies-and-performance>

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Attachment A: Funding Plan

Phase	Fund Source	Fund Source Status	Fiscal Year Funds Programmed	Total	Percent of Total
Construction	LPP Funds	Planned	18/19	\$2,083,000	38%
Construction	Prop K	Programmed	18/19	\$3,157,000	57%
Construction	SF General Fund	Planned	18/19	\$260,000	5%
<b>Total Construction Phase Funding</b>				<b>\$5,500,000</b>	<b>100%</b>

Prop K funds for this project were programmed by the San Francisco County Transportation Authority Board on December 12, 2017, through resolution 2018-029.

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Attachment B: Cost Estimate

Alemany Boulevard Project Cost Estimate				
Item	Item Description	Estimated Quantity	Unit*	Cost
1	Traffic Routing Work	---	LS	\$360,000
	Grinding	850,000	SF	\$950,000
3	Hot Mix Asphalt	11,000	TON	\$1,150,000
4	Concrete Base 8-Inch	76,000	SF	\$1,000,000
5	Concrete Sidewalk	8,500	SF	\$100,000
6	Concrete Curb And Concrete Gutter	2,100	LF	\$130,000
7	Concrete Curb Ramp With Detectable Tiles	90	EA	\$400,000
8	Adjust City-Owned Castings	90	EA	\$40,000
9	Adjust City-Owned Hydrant And Water Main Valve Castings	170	EA	\$30,000
10	City-Owned Pull Box	40	EA	\$20,000
11	Temporary 4-Inch White/Yellow Striping	5,500	LF	\$10,000
Construction :				\$4,190,000
Construction Contingency:				\$410,000
Construction Management:				\$900,000
TOTAL :				\$5,500,000

This cost estimate is provided by the San Francisco Public Works Street Resurfacing Program. This is an order of magnitude estimate and will be updated as design comes closer to completion.



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Attachment C: Project Map



Attachment D: Anticipated Project Schedule

Project Delivery Milestones	Status	Work	Start Date		End Date	
Phase	% Complete	In-house - Contracted - Both	Month	Year	Month	Year
Planning/Conceptual Engineering (30%)						
Environmental Studies (PA&ED)						
Design Engineering (PS&E)	10%		October	2017	September	2018
R/W Activities/Acquisition						
Advertise Construction	0%	N/A	December	2018	N/A	N/A
Start Construction (e.g. Award Contract)	0%	Contracted	April	2019	N/A	N/A
Start Procurement (e.g. rolling stock)						
Project Completion (i.e. Open for Use)	N/A	N/A	N/A	N/A	August	2020



STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION  
**PROJECT PROGRAMMING REQUEST**  
DTP-0001 (Revised July 2017)

General Instructions

Amendment (Existing Project) No					Date:	12/14/17
District	EA	Project ID	PPNO	MPO ID	Alt Proj. ID	
04						
County	Route/Corridor	PM Bk	PM Ahd	Project Sponsor/Lead Agency		
SF	Alemaný Boulevard			San Francisco Public Works		
				MPO	Element	
				MTC	Local Assistance	
Project Manager/Contact		Phone		E-mail Address		
Rachel Alonso		415-554-4139		<a href="mailto:rachel.alonso@sfdpw.org">rachel.alonso@sfdpw.org</a>		
<b>Project Title</b>						
Alemany Boulevard Pavement Renovation						
<b>Location (Project Limits), Description ( Scope of Work)</b>						
Street resurfacing of 1.3 miles of a key arterial in San Francisco. The project consists of repairs to the road base, paving work, curb ramp construction, and sidewalk and curb repairs. The project will resurface Alemany Boulevard, between Congdon St and Seneca Ave.						
<b>Component</b>		<b>Implementing Agency</b>				
PA&ED		San Francisco Public Works				
PS&E		San Francisco Public Works				
Right of Way		Not Applicable				
Construction		San Francisco Public Works				
<b>Legislative Districts</b>						
Assembly:	19	Senate:	11	Congressional:	12	
<b>Project Benefits</b>						
This construction work will, in conjunction with San Francisco Public Works' asset management strategy, decrease the lifetime maintenance and repair costs, while providing a smoother and safer road for drivers, public transit riders, bicyclists, and pedestrians. The project is along a key motor vehicle connection off the US 101 freeway, supports MUNI bus service, and is also a major bicycle corridor, with dedicated on-road bicycle lanes.						
<b>Purpose and Need</b>						
The quality of the City's street network affects the cost burden that San Francisco residents will bear. In order to hit the City's target Pavement Condition Index (PCI) score of 70, Street Resurfacing must focus on the street segments that are in great need of maintenance and repair. The average PCI score within the project limits is in the mid 50's ("At-Risk").						
<b>Category</b>		<b>Outputs/Outcomes</b>			<b>Unit</b>	<b>Total</b>
Local streets and roads		Local road lane-miles rehabilitated			Miles	5.2
ADA Improvements	Yes	Bike/Ped Improvements	Yes	Reversible Lane analysis	Y/N	
Includes Sustainable Communities Strategy Goals			Yes	Reduces Greenhouse Gas Emissions	Yes	
<b>Project Milestone</b>					<b>Existing</b>	<b>Proposed</b>
Project Study Report Approved					N/A	
Begin Environmental (PA&ED) Phase						N/A
Circulate Draft Environmental Document			<b>Document Type</b>			N/A
Draft Project Report						N/A
End Environmental Phase (PA&ED Milestone)						N/A
Begin Design (PS&E) Phase						10/01/17
End Design Phase (Ready to List for Advertisement Milestone)						09/01/18
Begin Right of Way Phase						N/A
End Right of Way Phase (Right of Way Certification Milestone)						N/A
Begin Construction Phase (Contract Award Milestone)						04/01/19
End Construction Phase (Construction Contract Acceptance Milestone)						08/01/20
Begin Closeout Phase						02/01/21
End Closeout Phase (Closeout Report)						02/01/22

**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento,



**PROJECT PROGRAMMING REQUEST**

DTP-0001 (Revised July 2017)

Date: 12/14/17

District	County	Route	EA	Project ID	PPNO	Alt Proj. ID
04	SF	Alemanya				
Project Title: Alemany Boulevard Pavement Renovation						

Existing Total Project Cost (\$1,000s)									Implementing Agency
Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total	
E&P (PA&ED)									San Francisco Public Works
PS&E									San Francisco Public Works
R/W SUP (CT)									Not Applicable
CON SUP (CT)									San Francisco Public Works
R/W									Not Applicable
CON									San Francisco Public Works
TOTAL									
Proposed Total Project Cost (\$1,000s)									Notes
Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON		5,500						5,500	
TOTAL		5,500						5,500	

Fund No. 1:	LPP Cycle 1 Formula Fund (FY 18/19 Funds)								Program Code
Existing Funding (\$1,000s)									Funding Agency
Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total	
E&P (PA&ED)									CTC
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON		2,083						2,083	
TOTAL		2,083						2,083	

Fund No. 2:	Proposition K Local Sales Tax								Program Code
Existing Funding (\$1,000s)									Funding Agency
Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total	
E&P (PA&ED)									SFCTA
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total	
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON		3,157						3,157	
TOTAL		3,157						3,157	

Prop K funds for this project were programmed by the San Francisco County Transportation Authority Board on December 12, 2017, through resolution 2018-029.

**PROJECT PROGRAMMING REQUEST**

DTP-0001 (Revised July 2017)

Date: 12/14/17

District	County	Route	EA	Project ID	PPNO	Alt Proj. ID
04	SF	Alemanya				
Project Title: Alemanya Boulevard Pavement Renovation						

Fund No. 3:	General Fund								Program Code
Existing Funding (\$1,000s)									
Component	Prior	18/19	19/20	20/21	21/22	22/23	23/24+	Total	Funding Agency
E&P (PA&ED)									City and County of SF
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding (\$1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			260					260	
TOTAL			260					260	