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March 13, 2017

Martin Alkire Principal Planner City of Mountain View 500 Castro Street Mountain View, CA 94041

# Subject: Spring 2017 North Bayshore Area Trip Monitoring and Annual Report

Dear Mr. Alkire:

This Scope of Work and Budget is to perform the Spring 2017 monitoring of trips and vehicle occupancy in the North Bayshore area and prepare the 2017 Annual Report. This work has two primary purposes: 1) obtain traffic volumes using each of the three gateways to North Bayshore and 2) collect data and estimate vehicle occupancy rates in order to determine person-trip mode share. These data are needed to support these policies included in the North Bayshore Precise Plan(NBPP):

- The vehicle trip cap at the three main entry points (gateways) to the Precise Planarea: Shoreline Boulevard, Rengstorff Avenue and San Antonio Road; and
- The person-trip mode share target of 45 percent single occupancy vehicle (SOV) trips.

Both the trip cap and mode share goal only apply to the morning peak period between 7:00 A.M. and 10:00 A.M.

The NBPP also lays out a monitoring and reporting process for the vehicle trip cap. Data are to be collected twice a year and reported annually. The reporting would also include data and trends regarding person-trip mode share. AECOM prepared the Fall 2016 Update Memo, which included mid-year data collections to be included in the Annual Report. This data is based on the trip and vehicle occupancy monitoring performed by AECOM dating back to 2015 and compares count data to the vehicle traffic volumes and person-trip mode share estimates made in 2014 during the NBPP preparation.

Responsive to requests received from Mountain View City Council and discussions with city staff, additional items will be added to the 2017 annual report. This additional work has three purposes:

- Contextualize the findings in this analysis with development plans, traffic analyses, and updates to the North Bayshore Precise Plan
- Document the outbound and net flow of traffic to the North Bayshore Area to better understand traffic flow changes over time
- Record queuing and delays exiting US 101 to reach North Bayshore

AECOM has outstanding qualifications in the areas of data collection and analysis. In association with our long-standing specialists in data collection efforts, with whom AECOM has successfully worked on many significant traffic engineering projects, including past iterations of this engagement, the AECOM team is well-qualified to continue to assist the City of Mountain View in quickly and effectively completing the tasks collectively named North Bayshore Area Trip and Vehicle Occupancy Monitoring (Trip Monitoring) effort.

## PROJECT UNDERSTANDING

The North Bayshore Precise Plan (NBPP) establishes a vehicle trip cap at the three main entry points to the Precise Plan area: Shoreline Boulevard, Rengstorff Avenue and San Antonio Road. The Precise Plan also includes a person-trip mode share target of 45% single occupancy vehicle (SOV) trips. Both the trip cap and mode share goal only apply to the morning peak period between 7:00 A.M. and 10:00 A.M. The Precise Plan and its EIR, prepared in February - March 2014, included traffic counts and mode share estimates. The NBPP and EIR were informed by previous work on the Shoreline Transportation Study (June 2013) and concurrent work on the Shoreline Boulevard Transportation Study. The proposed work effort would provide current count data and estimates of mode share. The NBPP also lays out a monitoring and reporting process for the vehicle trip cap. Data is collected twice a year and reported annually in May. This proposal covers the Spring 2017 counts and the 2017 Annual Report. As was first done for the 2016 data collection, counts will include the outbound direction and a 24 hour period to better capture traffic patterns in and out of the North Bayshore area. Additionally, expected added trips from entitled development projects and queue delay measurements will be measured added to the annual report for 2017.

## APPROACH

Prior to conducting the counts, the project team will do a site review and confirm the previously established methodology with the City. AECOM will then conduct field data collection of vehicle types entering the gateways as well as pedestrian and bicycle volumes at two trail entries. AECOM will also collect tube counts of traffic volumes at the gateways. To estimate vehicle occupancy rates, AECOM intends to make windshield observations for carpools and passenger counts at bus and shuttle stop locations. The methodology will be consistent with AECOM's previous iterations of this work. AECOM will also thoroughly review its queue delay measuring methodology with the City as that data collection and reporting will be new for 2017.

# TEAM STRUCTURE AND QUALIFICATIONS

AECOM performed the first iteration of the semi-annual trip and vehicle occupancy monitoring in the North Bayshore area in March 2015 and has continued doing so for the ensuing twice-annual cycles. We have been providing similar monitoring services to the County of Santa Clara Planning Department for over ten years, where we conduct counts twice a year to monitor Stanford University's compliance with conditions of approval for their General Use Permit (GUP) and prepare an annual report of the findings.

We are experienced working in the context where failure to meet trip count objectives have significant consequences for the landowners, developers and companies being monitored and understand our role in serving the needs of the public agency, while offering suggestions and potential techniques to address the monitored parties' concerns. We strive to make the monitoring process transparent and reproducible through detailed documentation of our procedures and methods.

AECOM's staff for this project would be Greg Gleichman, P.E. as the Project Manager and Michael Cornfield as Transportation Planner. Their resumes are attached.

**Greg Gleichman, P.E.** is a Transportation Planning Manager with more than 30 years of experience in transportation planning and project management. Mr. Gleichman has managed AECOM's North Bayshore trip monitoring work since its inception in 2015. A former employee of Stanford University, he worked with Fehr & Peers to develop the initial traffic monitoring methodology at Stanford University. In the past several years, he has provided quality control review for AECOM's Stanford monitoring work, and has recently become the Project Manager. Mr. Gleichman is also a former employee of the City of Mountain View where he worked as a Transportation Planner in the late 1980s.



**Michael Cornfield** is a Transportation Planner with experience at both the local and regional levels. He is well versed in transportation data analysis, planning and policy. Mr. Cornfield assisted with the North Bayshore 2016 data collection and preparation of the 2016 annual report and update memo.

Baymetrics, a data collection subcontractor, will be engaged by AECOM to complete specific assignments. Baymetrics will assist us in conducting the Vehicle Classification Counts, Transit/Shuttle Vehicle Occupancy Assessment, Tube Counts, and queue delay measurement subtasks. AECOM has used Baymetrics for all previous North Bayshore monitoring cycles.

Greg Gleichman will be the primary contact person, will respond to all questions, and will attend all meetings with City staff and stakeholders. He can be reached at 408-961-8462 or greg.gleichman@aecom.com.

# SCOPE OF WORK

The following Scope of Work has been prepared based on our understanding of the project, experience performing the previous monitoring studies, and knowledge of the study area.

# TASK 1 – Project Management, Meetings, and Quality Control

AECOM will hold a kick-off meeting or conference call with City of Mountain View staff to review the project scope and finalize the schedule. The project manager will be the point of communication for the project and will also manage the budget and monitor its expenditures with respect to progress. In addition to the kick-off meeting, the budget includes one additional meeting with City staff to present the study findings.

AECOM is an ISO 9001:2000 certified company. As such, prior to submitting deliverables to the City, AECOM will subject these items to our quality control process. The deliverables will be reviewed by independent AECOM staff with the relevant expertise.

# TASK 2 – Field Review and Data Collection

## 2.1 Field Review

AECOM will perform a field reconnaissance of the study area with the data firm's project manager to determine any necessary changes in the exact traffic count locations, specific techniques needed, vehicle classification nomenclature, transit vehicle egress areas, etc. Based on the results of the field review, the methodology may need to be adjusted to reflect changes in the site conditions. Any suggested changes will be discussed with the City staff and implemented with the approval of the City.

## 2.2 Data Collection

AECOM will use the services of the traffic data firm we have worked with before to collect all traffic data for this engagement.

## Segment Counts

Bi-directional (inbound and outbound) 24 hour traffic counts will be collected over a two-week period. In each of the weeks, the counts will be collected on three typical mid-week work days: Tuesday, Wednesday, and Thursday. The counts will be conducted on the days when the schools in the surrounding area are in session and there is little or no precipitation. The counts will be on the four roadway segments identified below:

- 1. San Antonio Road between Bayshore Parkway and Casey Avenue
- 2. Bayshore Parkway between San Antonio Road and Garcia Avenue
- 3. Rengstorff Avenue between US 101 Northbound Ramps and Garcia Avenue-Charleston Road
- 4. Shoreline Boulevard between US 101 Northbound Ramps-La Avenida Street and Pear Avenue

Additional counts will be collected at the following three locations to account for traffic not associated with the technology firms that is destined for the Santiago Villa Mobile Home Park and the Shoreline Recreation Area:

- 5. Shoreline Boulevard just north of North Road
- 6. Space Park Way at the entrance to the mobile home park
- 7. Armand Avenue at the entrance to the mobile home park

The exact location of the counts will be based on previous data collection efforts and determined using the information collected during the Field Review. The counting equipment will be downloaded and reset each week to assure there is sufficient machine memory to capture all data.

# Vehicle Classification Counts

Vehicle Classification Counts will be conducted on one day of each week during the Segment Counts at all four Segment Count locations, between 7:00 AM and 10:00 AM. Vehicle Classification Counts will be used to determine the proportions of single occupant vehicles, carpool vehicles, trucks, transit vehicles, shuttle vehicles, bicyclists and pedestrians accessing the North Bayshore area. Transit and shuttle vehicles will be further classified on the basis of provider and/or vehicle size.

On the same days, inbound bicycle and pedestrian counts will be conducted between 7:00 AM and 10:00 AM on the two pedestrian/bicycle trail segments identified below:

- 1. Permanente Creek Trail as it crosses over US101
- 2. Stevens Creek Trail as it crosses under US101

Also on the same days, manual counts will be made at the intersection of San Antonio Road and Bayshore Parkway to collect data needed to correct for certain traffic movements in this area that cannot be measured properly by the hose counts.

## Transit/Shuttle Vehicle Occupancy Assessment

Private shuttle and public transit occupancy counts will be conducted over two days in each week during the observation period. Each week, on one of the two days, the data collection effort will focus on passenger counts for riders disembarking from Google shuttle buses. The data collection effort on the second day will concentrate on passengers disembarking from buses operated by other transit and shuttle services providers.

## Delay Data

In addition to the traffic count at the gateways locations, the length of the queue delays will be measured on US 101 leading to off-ramps providing access to the North Bayshore Area. These measurements will be taken by floating car runs using the gateway exits during the peak hour and recording the time taken from entering the queue to crossing the relevant gateway into North Bayshore. These measurements will be taken one day each week.

# TASK 3 – Data Analysis: Determine Inbound Traffic and Person-Trip Mode Split

Total traffic entering the North Bayshore area during the AM peak period will be calculated based on segment counts at the six gateway roadways and trails. The four segments of vehicle counts will be aggregated into three "gateways" into the North Bayshore area:

- 1. San Antonio Road motor vehicle gateway
- 2. Rengstorff Avenue motor vehicle gateway
- 3. Shoreline Boulevard motor vehiclegateway



# 3.1 Inbound Vehicle Counts

The six days of counts will be averaged to determine the inbound traffic volume at each gateway during a three-hour AM peak period (7:00 AM to 10:00 AM) on a typical mid-week work day. The AM peak hour inbound volume will be determined within the AM peak period.

# 3.2 Person-trip Mode Share Split

The person-trip mode split for the entire North Bayshore area will be estimated for the three-hour peak period and peak hour, using the data collected in the Vehicle Classification Counts and Transit/Shuttle Vehicle Occupancy Assessment subtasks. Traffic volumes by vehicle classification will be calculated for the peak period and peak hour at each of the three gateways.

# TASK 4 – Data Analysis: Determine Outbound Traffic, Hourly Net Traffic, and Time Series Comparison to Previous Studies

# 4.1 Outbound Vehicle Counts

Starting with the Spring 2016 counts, AECOM collected data for Outbound Trips and reported the raw figures in the Annual Report. Continuing that practice with the 2017 counts and beyond will allow a comparison to previous counts, peak period, and peak hour analyses similar to the previously established and ongoing methodology for inbound trip counts.

# 4.2 Net Inbound/Outbound Hourly Traffic Flows

By collecting both inbound and outbound trips data, it will be possible to calculate the net inbound or net outbound number of trips for each hour over a 24 hour period. From this analysis, further understanding of trends in car-pooling, car-share services, and travel patterns can be disseminated.

# 4.3 Time Series Comparison to Previous Study Periods

By comparing inbound and outbound trips data collected over 24 hour periods, an analysis can be performed to track shifts in peak periods and peak hour travel over the various study periods. This analysis will help track traffic patterns outside of the peak hour and peak period and show any shifts in those periods.

## TASK 5 – US 101 Queue Delays

## 5.1 Average Delay / Queue Measurement

The length of the queue delays for vehicles on US 101 traveling to off-ramps providing access to the North Bayshore Area will be analyzed. This analysis will provide another perspective on access issues in the North Bayshore area, since delay is not readily apparent from traffic volume data. The analysis will summarize, for each gateway, the average time taken from entering the queue to crossing into North Bayshore.

## **TASK 6 – Development Planning**

## 6.1 Contextualizing Data Analysis with Development Planning

By aggregating traffic and trip generation analyses related to ongoing real estate development entitlements, the analysis can capture anticipated added trips and document their allocation under the North Bayshore Precise Plan. This piece will depend on data from approved traffic studies identified and provided by Mountain View for inclusion in the memo and annual report.



AECOM should be provided the Site Specific Traffic Analysis (SSTA) and Transportation Demand Management (TDM) documents for those projects that have received entitlements, or are nearing to receive entitlements. AECOM will obtain this information from the Community Development Department (CDD). The memo and annual report will include a summary of the relationship between current actual available trips at each of the Gateways and the available trips after the inclusion of the entitled projects.

AECOM will produce a North Bayshore Trip Cap Summary map including but not limited to showing the gateway locations; text boxes for each gateway with trip volumes and change from last year's counts; parcel locations of new development or impending development with text boxes of SF and anticipated approval or construction date; highlighted planned or proposed public improvements such as new streets, multimodal improvements etc., including estimated date of implementation.

# TASK 7 – Annual Report

# 7.1 Draft Annual Report

A draft annual report will be prepared by the AECOM Team following completion of the Spring 2017 counts. The annual report will consist of analysis summaries, updated tables, and charts from the 2016 Annual Report and 2016 Update Memo, noting any differences in methodology from the Spring and Fall 2016 efforts. A technical appendix will also be assembled which will include all field data notes and other relevant information on which the calculations were based. AECOM staff will be available to present the results to city staff.

# 7.2 Final Annual Report

The draft annual report will be modified as necessary based on one round of comments from the City staff. AECOM will attend the council meeting when the report is presented, and will be available to answer questions.

## DELIVERABLES

- Draft Annual Report and technical appendix.
- Final Annual Report and technical appendix.

## SCHEDULE

Notice to Proceed (NTP)	
Kick-off Meeting	Within one week of NTP
Data Collection	Week of March 20 and March 27 (weather permitting)
Data Analysis	Three weeks
Prepare Draft Annual Report	Two weeks
City Review	Three weeks
Prepare Final Monitoring Update Memo	One week after review comments are received

The schedule includes a minimum of 10 weeks for AECOM's work and City staff review.



## BUDGET

We have identified the total cost of the above scope of work as approximately \$52,944.50 plus a \$7,941.68 contingency, for a grand total of \$60,886.18. A spreadsheet is attached illustrating our proposed labor and cost breakdown for each task. The labor rates in the attached budget are typical for the staff expected to be assigned to the project.

Thank you for inviting us to conduct this work. Please do not hesitate to contact us if you have any questions.

Sincerely,

Typ Rolat

Gregory R. Gleichman, P.E. Project Manager

Simon Kim, P.E.

Transportation Business Unit Leader, Northern California

Enclosures: Budget Billing Rates Resumes

Traffic Volumes and Person-Trip M	lode Sp	lit						-					Date:	3.1	3.2017
TASK	Project Manager			Planner			Quality Control Officer		Technical Support / Administration		Total Hours and Direct Labor				
	\$		230.00	\$		120.00	\$		205.00	\$		100.00	Dire	ect L	abor
Task 1															
Project Management, Meetings, and Quality Control															
1.1 Project Management	10	\$	2,300.00		4 \$	480.00		\$	-	12	\$	1,200.00	26	\$	3,980.00
1.2 Review of Project Deliverables	4	\$	920.00		\$	-		4 \$	820.00		\$	-	8	\$	1,740.00
1.3 Project Meetings	6	\$	1,380.00		6\$	720.00		\$	-		\$	-	12	\$	2,100.00
Sub-Total for Task 1	20	\$	4,600.00		10 \$	1,200.00		4 \$	820.00	12	\$	1,200.00	46	\$	7,820.00
Task 2															
Field Review and Data Collection															
2.1 Field Review	4	\$	920.00		4 \$	480.00		\$	-		\$	-	8	\$	1,400.00
2.2 Data Collection	2	\$	460.00		8 \$	960.00		\$	-		\$	-	10	\$	1,420.00
Sub-Total for Task 2	6	\$	1,380.00		12 \$	1,440.00		0\$		0	\$	-	18	\$	2,820.00
Task 3								1			Ì			Ì	
Data Analysis															
3.1 Determine Inbound Traffic	8	\$	1,840.00		44 \$	5,280.00		\$	-		\$	-	52	\$	7,120.00
3.2 Person-Trip Mode Split	8	\$	1,840.00		44 \$	5,280.00		\$	-		\$	-	52	\$	7,120.00
Sub-Total for Task 3	16		3,680.00		88 \$	10,560.00		0 \$		0	\$	-	104		14,240.00
Task 4		Ŧ	-,		+	,				-	Ť			Ť	,
Outbound and Net Traffic Analysis															
4.1 Determine Outbound Traffic	1	\$	230.00		2 \$	240.00		1 \$	205.00	0	\$	-	4	\$	675.00
4.2 Determine Hourly Net Traffic	1	\$	230.00		2 \$	240.00		1 \$	205.00	0	\$	-	4	\$	675.00
4.3 Time Series Comparison to Prev Studies	1	\$	230.00		2 \$	240.00		1 \$	205.00	0	\$	-	4	\$	675.00
Sub-Total for Task 4	3	\$	690.00		6\$	720.00	:	3 \$	615.00	0	\$	-	12	\$	2,025.00
Task 5															
US 101 Queue Delays															
5.1 Floating Car Run Queue Delays Analysis	1	\$	230.00		4 \$	480.00		1 \$	205.00	0	\$	-	6	\$	915.00
Sub-Total for Task 5	1	\$	230.00		4 \$	480.00		1\$	205.00	0	\$	-	6	\$	915.00
Task 6															
Development Planning															
6.1 Provide Development Planning Context		\$	580.00		8\$	960.00		0\$	-	1	\$	100.00	11		1,640.00
Additional Sub-Total for Task 5	2	\$	580.00		8\$	960.00		0\$	-	1	\$	100.00	11	\$	1,640.00
Task 7															
Annual Report															
7.1 Prepare Draft Monitoring Report and Documentation	4	\$	920.00		16 \$	1,920.00		\$	-	2	\$	200.00	22		3,040.00
7.2 Prepare Final Monitoring Report and Documentation	4	\$	920.00		8\$	960.00		\$	-	2	\$	200.00	14	\$	2,080.00
Sub-Total for Task 7	8	\$	1,840.00		24 \$	2,880.00		0\$	•	4	\$	400.00	36	\$	5,120.00
TOTAL HOURS AND LABOR COSTS	56	\$	13,000.00	1	52 \$	18,240.00		8\$	1,640.00	17	\$	1,700.00	233	\$	34,580.00
							Other Dire	ect C	Costs (mileag	je, printing	, de	livery, etc.)	2.5%	\$	864.50
								Т	OTAL AEC	OM ESTI	MAT	ED COST		\$	35,444.50
											Sul	oconsultant		\$	17,500.00
									SUBTO	AL ESTI	MAT	ED COST		\$	52,944.50
											С	ontingency	15.0%	\$	7.941.68

Title	<b>Billing Rate Range</b>							
Business Unit Manager	\$290.00	to	\$335.00					
Senior Consulting Manager	\$235.00	to	\$315.00					
Senior Project Manager	\$195.00	to	\$290.00					
Technical Leader	\$195.00	to	\$275.00					
Engineer IV	\$145.00	to	\$205.00					
Engineer III	\$125.00	to	\$185.00					
Engineer II	\$105.00	to	\$140.00					
Engineer I	\$90.00	to	\$125.00					
Planner IV	\$145.00	to	\$205.00					
Planner III	\$125.00	to	\$185.00					
Planner II	\$105.00	to	\$140.00					
Planner I	\$90.00	to	\$125.00					
Project Engineer IV	\$205.00	to	\$245.00					
Project Engineer III	\$195.00	to	\$215.00					
Project Engineer II	\$185.00	to	\$200.00					
Project Engineer I	\$165.00	to	\$190.00					
CADD Designer	\$95.00	to	\$125.00					
QA/QC	\$155.00	to	\$255.00					
Graphic Artist	\$125.00	to	\$155.00					
Project Support/Administrator	\$75.00	to	\$105.00					
Intern	\$55.00	to	\$85.00					

# **AECOM 2017 BILLING RATES**

**Expert Testimony** is invoiced at a rate of two (2) times the Standard Hourly Rate and minimum of 4 hours.

**Expenses:** Project expenses will be invoiced at cost plus 10% for service and handling. Project expenses include project-related costs such as transportation, mileage at IRS standard auto mileage rate subsistence, reproduction, plotting and subcontractor services. Each project will be subject to initial set up, coordination and close out charges. Invoices are due and payable within 30 days after invoice date. A finance charge of 1.5% will begin to accrue once an invoice is 31 days past due.

## All rates are subject to an annual increase in January of each year.



# Gregory R. Gleichman Transportation Planning Manager

#### **Professional History**

11/2005 - Present, AECOM **Transportation Planning Manager** 02/1998 - 07/2002, Stanford University Parking & Transportation Services **Program Manager** 08/1994 - 01/1998, Korve Engineering, Inc. Principal Transportation Planner 11/1991 - 07/1994, Wilbur Smith Associates Inc Senior Transportation Planner 05/1990 - 10/1991, Bay Area Rapid **Transit District Planning Department** Manager of Service Integration 10/1988 - 04/1990, Mountain View Planning Department Transportation Planner 07/1986 - 09/1988, Contra Costa County **Community Development Department** Senior Transportation Planner 08/1981 - 06/1986, Bay Area Rapid **Transit District Planning Department** Access Planning Coordinator

09/1980 - 06/1981, Booz Allen Hamilton Consultant

#### Education

BS, Civil Engineering, University of California - Berkeley, 1978 MA, Public Policy Analysis, University of Pennsylvania, 1980

#### Registrations

Professional Engineer (Civil), California

#### Years of Experience

With AECOM: 10 With Other Firms: 21

#### **Professional Affiliations**

SPUR WTS American Planning Association - California Chapter Institute of Transportation Engineers Mr. Gleichman has 30 years of transportation planning and engineering experience in the public, private, and non-profit sectors. His management and technical experience includes transportation planning, transit planning and operations, transportation demand management, and rail planning. His previous employment includes positions as Manager of Service Integration for the Bay Area Rapid Transit District (BART) and as a transportation planner with Contra Costa County and the City of Mountain View.

Mr. Gleichman has extensive experience working with public agencies to deliver major infrastructure improvement projects. Most projects have required direct involvement or approval by multiple agencies, where the varied interests of key stakeholders are blended into a cohesive plan. Mr. Gleichman combines his extensive project implementation experience with his in-depth knowledge of transportation and land use planning principles to achieve successful outcomes.

#### Experience

Freeway Capacity Management Study, Phase 2, San Francisco County Transportation Authority. Project manager for an ongoing study to examine the feasibility of various managed lane concepts, including conversion of an existing mixed-flow lane to an HOV lane, Express Lanes with variable pricing, HOV bypass lanes, and other scenarios. An important part of the study is integration with state and regional policies and plans, and the relationship of a potential project in San Francisco to HOV and Express Lane concepts currently being studied for U.S. 101 in San Mateo County.

Bay Area Rapid Transit District (BART), Embarcadero/Montgomery Capacity Plan, San Francisco, CA. Project director for a study to verify the operational feasibility of adding new side platforms to BART's two busiest stations. Due to anticipated future crowding on the platforms in the evening peak period, and extensive queuing to leave the platforms in the morning peak period, BART developed the concept of adding additional platforms on the outside of the existing tracks that currently serve a center platform. The study modeled passenger flows in the stations and reviewed operating strategies for the side platforms.

**County of Santa Clara, Stanford Traffic Monitoring, Palo Alto, California.** Project Manager for AECOM's contract with the county to perform traffic monitoring as part of the university's building and development entitlements. Peak period traffic is counted twice a year and compared to a baseline year volume. If traffic exceeds baseline, Stanford is required to pay for a number of transportation improvements to provide traffic mitigation. AECOM prepares an annual report for county review and approval, and also reviews traffic studies prepared by Stanford that analyze localized impacts around development projects.



#### American Society of Civil Engineers

**City of Mountain View, North Bayshore Area Trip Monitoring, Mountain View, CA.** Project manager for performing traffic monitoring as required for implementation of the North Bayshore Precise Plan. The Plan regulates new development by capping A.M. peak period trips entering the employment area that includes Google, LinkedIn, and Intuit. The Plan also sets a drivealone goal of 45%. Conducted traffic and transit passenger counts, occupancy studies of company sponsored commuter shuttle buses, and vehicle classification at the three gateways to the area. This data was analyzed and summarized in a report to city staff.

San Mateo County Transportation Authority (SMCTA), Route 101 HOV Lanes, San Mateo County, CA. Project manager for preparation of the traffic analysis (TEPA and environmental assessment (PEAR) for adding HOV lanes between Whipple Road in Redwood City and I-380 in San Bruno.

San Francisco 49ers, Levi's Stadium, Santa Clara, California. Project planner responsible for developing a transit plan for the new stadium constructed on a parking lot adjacent to the Great America theme park. Work also included developing the layout for the bus loading area, and estimating transit and alternative mode use by fans and employees. Performed similar duties regarding prior stadium proposals in San Francisco.

City of Palo Alto, Stanford University Medical Center Expansion Environmental Impact Report, Palo Alto, California. Prepared analyses in response to comments on the traffic section of the draft EIR. Developed a conceptual employee shuttle plan to evaluate its cost and effectiveness as an alternative to subsidizing employee use of Caltrain.

Sunset Development Company, Bishop Ranch City Center, San Ramon, California. Lead transportation planner for a traffic impact study of a proposed mixed-use development within the Bishop Ranch Business Park, which would also serve as the town center of San Ramon. Major project components included a one-acre "town square" park, a city administrative building, entertainment facilities, retail shopping, a specialized business hotel, and Class A office buildings.

**Stanford University, General Use Permit, Palo Alto, California.** Program manager and the university's lead transportation representative during the 2-year permit update process. Led the development of the traffic mitigation monitoring methodology. Building and development of the 2,000-acre campus is regulated under a general use permit developed by the county's planning department. The permit is updated every 10 to 15 years to accommodate the university's growth plans. [Prior to AECOM]



# Michael Cornfield Transportation Planner

#### Education

BA, History, University of Iowa, 2008 MUPP, Transportation, University of Illinois Chicago, 2016

#### Years of Experience

With AECOM: 1 With Other Firms: 6 Mr. Cornfield is a transportation planner with expertise in transportation planning, funding, and finance crossed with a deep understanding of land use and transit oriented development. He offers a unique perspective on strategies for solving transportation and land use challenges. He also has several years of experience in data collection, data analytics, project documentation, and quality control. Mr. Cornfield has served both public and private sector clients and is committed to realistic solutions to transportation and related land use development problems.

#### Experience

#### California Department of Transportation, 2018 CA State Rail Plan.

Supported original research and future socio-economic, land use, and travel trends and projections in plan development of integrated high speed, intercity, regional, and metro rail transit service.

**Cook County, Long-Range Transportation Plan, Chicago, Illinois.** Developed transportation project evaluation and prioritization metrics and led presentation to county executives. Provided policy strategy, transportation and land use planning analysis, and project management assistance incorporating transit oriented development, value capture, and transit expansion strategies into regional transportationplans.

Chicago Transit Authority, Wilson Ave Station - TOD, Chicago, Illinois. Helped lead a study of TOD opportunities at the station in conjunction with station reconstruction. Developed strategy, led stakeholder outreach and presentations to agency executives and elected officials, and lead author and editor of final report deliverables.

**Regional Transit Authority, Mobility Management, Chicago, Illinois.** Assisted in strategic planning for accessible mobility program overhaul including project management, preparation of risk assessment tool, project timeline, meeting facilitation, and documentation.

Housing Authority of the City of Milwaukee, Milwaukee, Wisconsin. Developed new business plan, residential and commercial real estate development market analyses, and growth strategy for HACM's real estate development entity, 'Travaux', relying on market segmentation, stakeholder interviews, and growth projections for public-private partnership in real estate development.

**Metra, Commuter Rail Audit, Chicago, Illinois.** Lead author of internal audit reports related to land use practices, intergovernmental and interagency coordination, and public sector real estate policy, strategy, and valuation. Compiled and analyzed data related to financial management and contracting practices for Metra real estate assets and land use policies.