Flynn, Allison

From: Albert Jeans
Sent: Tuesday, September 7, 2021 3:55 PM
To: prc@mountainview.gov
Subject: Public Comment on Item 5.3, Sept. 8, 2021
Attachments: Public Comment - Albert Jeans.doc; Albert Jeans - Slides.pdf

Hi,

Please include the attached slide presentation and Word document narration as part of Public Comment for Item 5.3 at tomorrow's meeting and forward to the commissioners. I plan to speak at the meeting as well, but because of limited time I will only summarize my remarks.

Thank you,
Albert Jeans
, Mountain View, CA 94043

Public Comment on Agenda Item 5.3 by Albert Jeans
Parks and Recreation Committee Meeting, Sept. 8, 2021

Dear Commissioners,

[Slide 1]
I am writing to express my opposition to removal of 11 additional Heritage Trees in the median of W. Middlefield Rd. near N. Shoreline Blvd., in particular the 2 mature Coast Redwood trees on the west side of Shoreline Blvd. This is in addition to 4 other redwoods already designated for removal in the median. The justification for the removal is given as the need to construct additional left turn lanes from W. Middlefield Rd. to N. Shoreline Blvd., but I find staff's justification for the turn lanes to be misleading.

[Slide 2]
Staff cites an analysis done for the North Bayshore Precise Plan Environmental Impact Report, Appendix D Traffic Impact Analysis. This analysis uses traffic count data to *estimate* average vehicle delay times, but no actual observations of actual delays or traffic conditions were noted in the EIR for left turns from W. Middlefield Rd. (p. 68). The calculated delays of 80 and 94 seconds are not excessive given that the signal cycle time is 145 seconds. The Level of Service, (LOS), of "E" in fact matches the standard LOS for Mountain View's downtown intersections and those on other major arteries like El Camino Real. LOS "D" is normally used for all other local intersections (p. 8). Signalized intersections are designed to operate at a certain LOS level by setting the signal cycle time. The fact that an intersection may be underperforming during peak times is not necessarily cause for alarm. An LOS "E" intersection is still performing at capacity. Staff claims that the intersection is oversaturated during peak periods, and this is true, but the reason is that N. Shoreline Blvd. is over capacity, not W. Middefield or its turn lanes. Myself and others have almost never seen the left turn pockets overflow during the morning rush hour (pre-COVID of course) after many hours of observation. The traffic count data supports this.[Slide 3] During the morning peak hour, 114 eastbound and 124 westbound vehicles made left turns. There were over 24 signal cycles during this time, so on average only 5 vehicles turned left during each cycle. The existing turn pockets are over 200 feet long and can easily accommodate 10 vehicles.

[Slide 4]
In addition, I have done extensive micro simulations using a public program called SUMO (Simulation of Urban Mobility). This program simulates the behavior of each individual vehicle based on traffic data and signal timing at all the intersections of interest. The simulation faithfully reproduces all of the morning traffic backups seen on the Shoreline corridor. [Slide 5] When we look at the Shoreline Middlefield intersection, the left turn lanes on Middlefield never overflow.

[Slide 6]
It is worth noting that the Shoreline Middlefield intersection is just one of eleven intersections studied in the NBPP EIR, and one of eight intersections which will still be significantly impacted even if mitigations are applied. [Slide 7] In fact, the report states

that the intersection will continue to operate at LOS "F" during the evening peak hour under existing + project conditions.

[Slide 8]
I would also like to ask that staff seriously consider transplanting trees instead of merely cutting them down. This was done recently at the Ameswell Hotel at Moffett Gateway where existing trees were boxed up, stored onsite, then replanted as construction finished. The redwood trees on Varian's site at the corner of Page Mill Rd. and Hanover Ave. in Palo Alto were also all transplanted. Of course this is expensive, but mature trees are also valuable commodities.

[Slide 9]
When trees are to be replaced, 36" or 48" box trees should be used instead of 24" box trees. This seems to be frequently done in private developments like Google's renovation of Charleston Park and Microsoft's La Avenida campus. Mountain View residents should not have to wait 10 years or more for mature trees.

[Slide 10]
It really boils down to whether you'd prefer to have mature redwood trees or a marginally useful extra left turn lane. I think that most Mountain View residents would prefer the trees.

Heritage Trees vs Left-turn Lanes

Albert Jeans
Sept. 8, 2021

Staff Memo

Signal cycle time is 145 seconds.

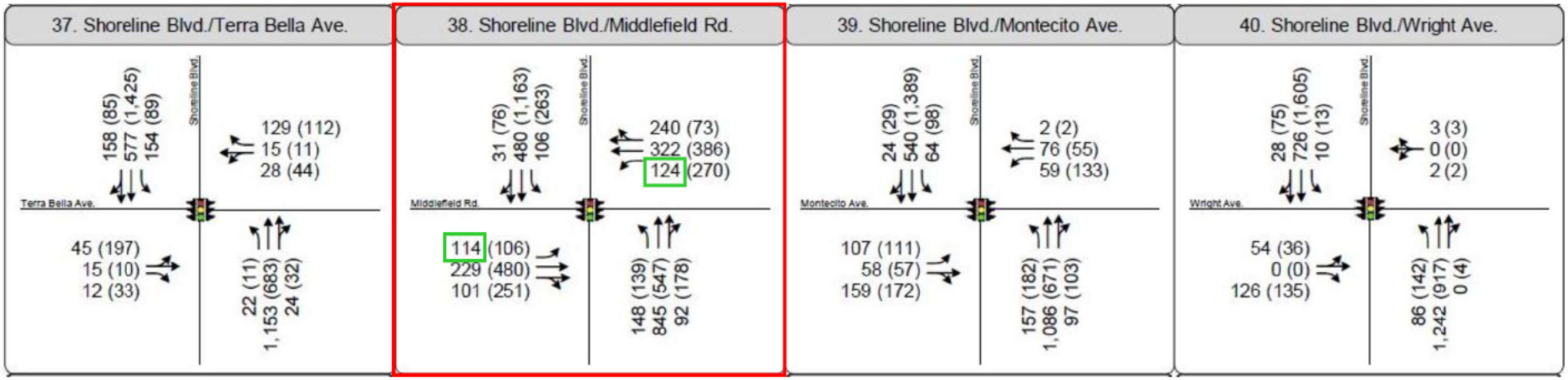
The traffic analysis conducted for the NBPP reviewed the existing traffic conditions based on the demand volumes to determine if any additional improvements are necessary to reduce or mitigate impacts to traffic signal operations. The existing conditions analysis showed significant delays in both directions from the West Middlefield Road left-turn movements (a.m. peak hour delays of 80.3 seconds eastbound, 93.6 seconds westbound), and the overall Level of Service (LOS) at the Shoreline Boulevard/West Middlefield Road intersection of "E" was below the minimum threshold required (LOS D). Additionally, the intersection is oversaturated during the peak periods, and the maximum queue length exceeds the left-turn pocket storage length, creating further congestion in the through movement. The results of the traffic analysis after adding the second left-turn lanes showed increased intersection throughput and reduced delays, queuing, and vehicle emissions.

LOS D is used for local streets, LOS E is used for Downtown and other high volume streets.

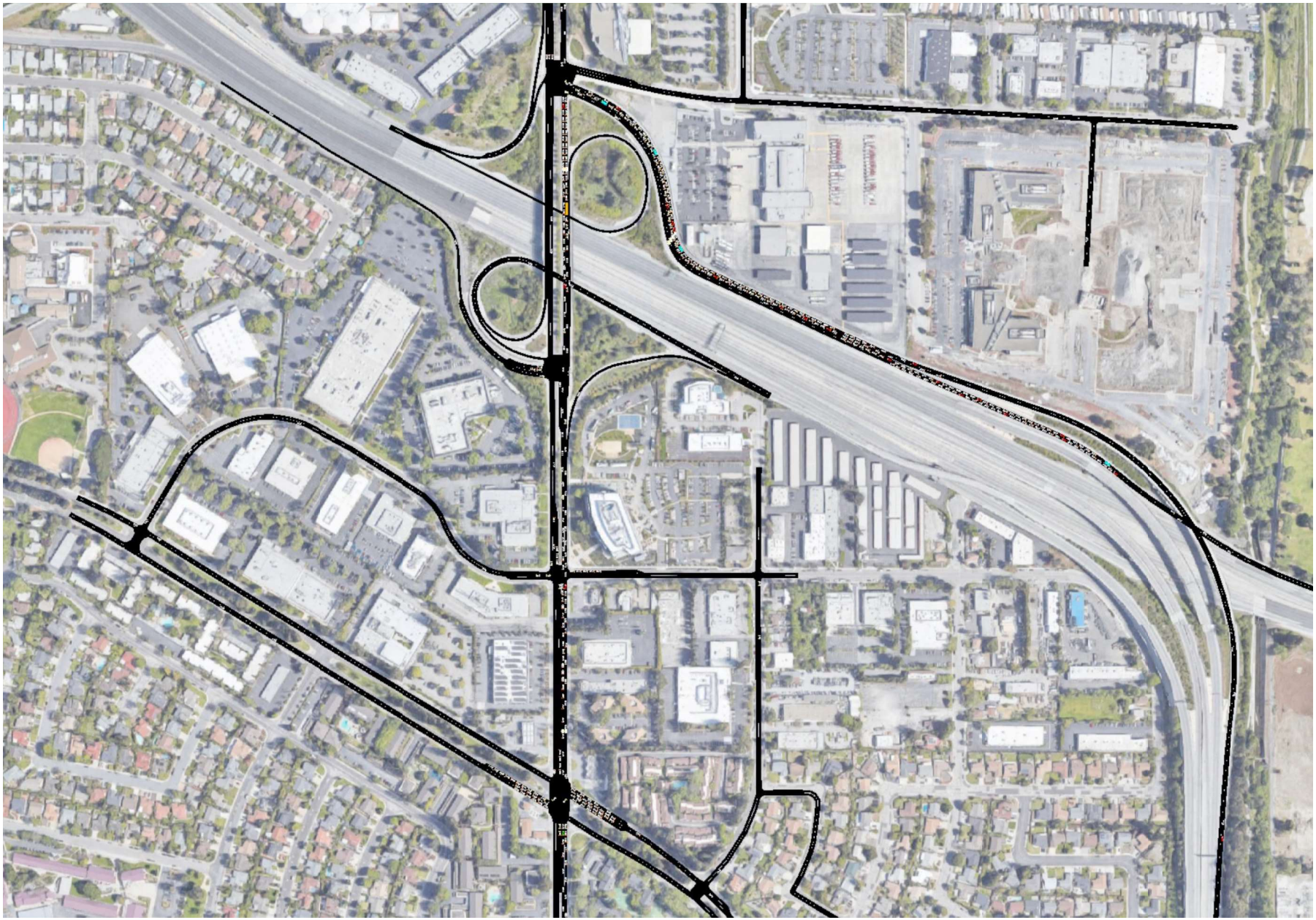
Not observed in reality.

Traffic Volumes, NBPP

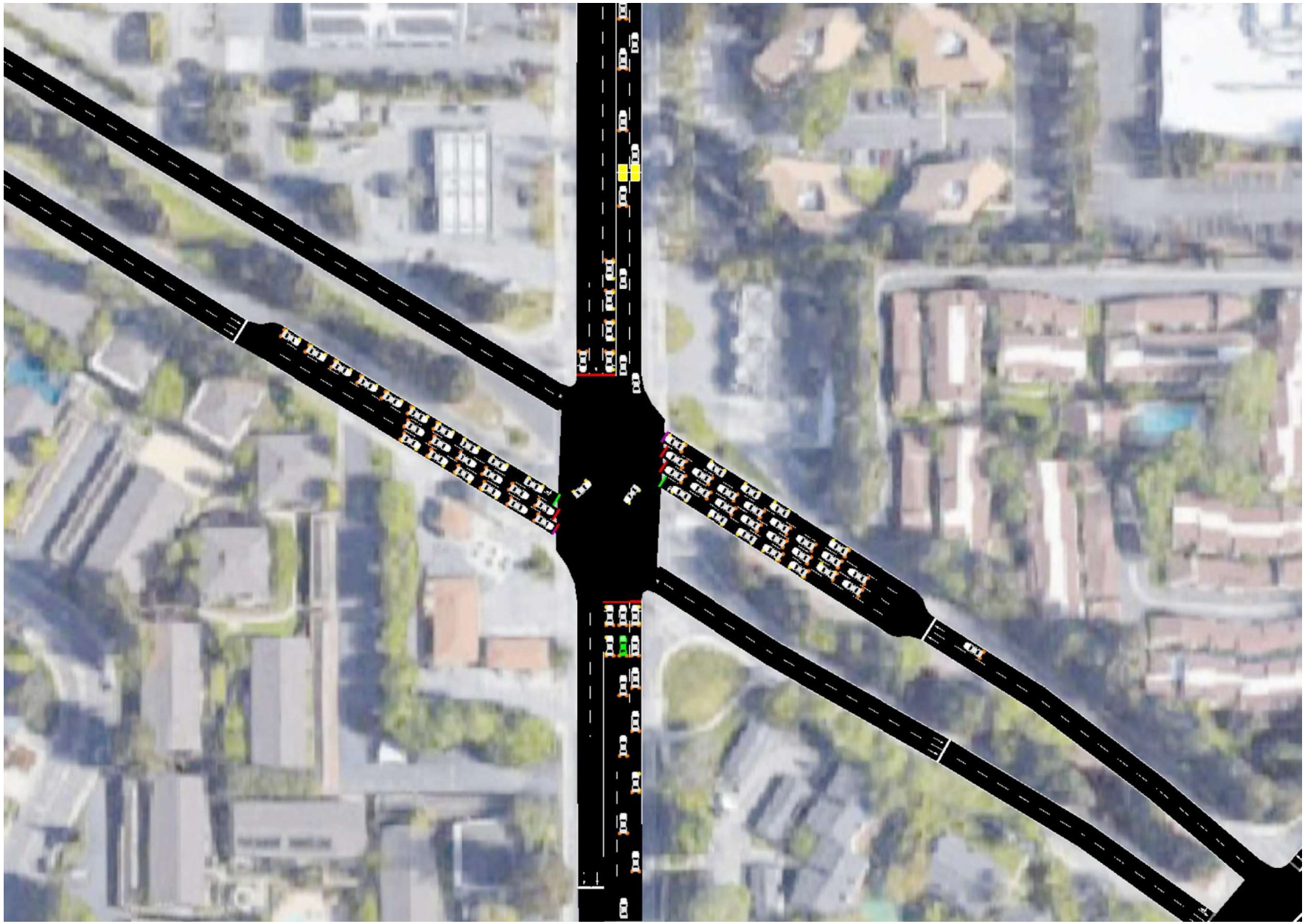
#38 Shoreline & W. Middlefield



SUMO Traffic Simulation



SUMO Traffic Simulation



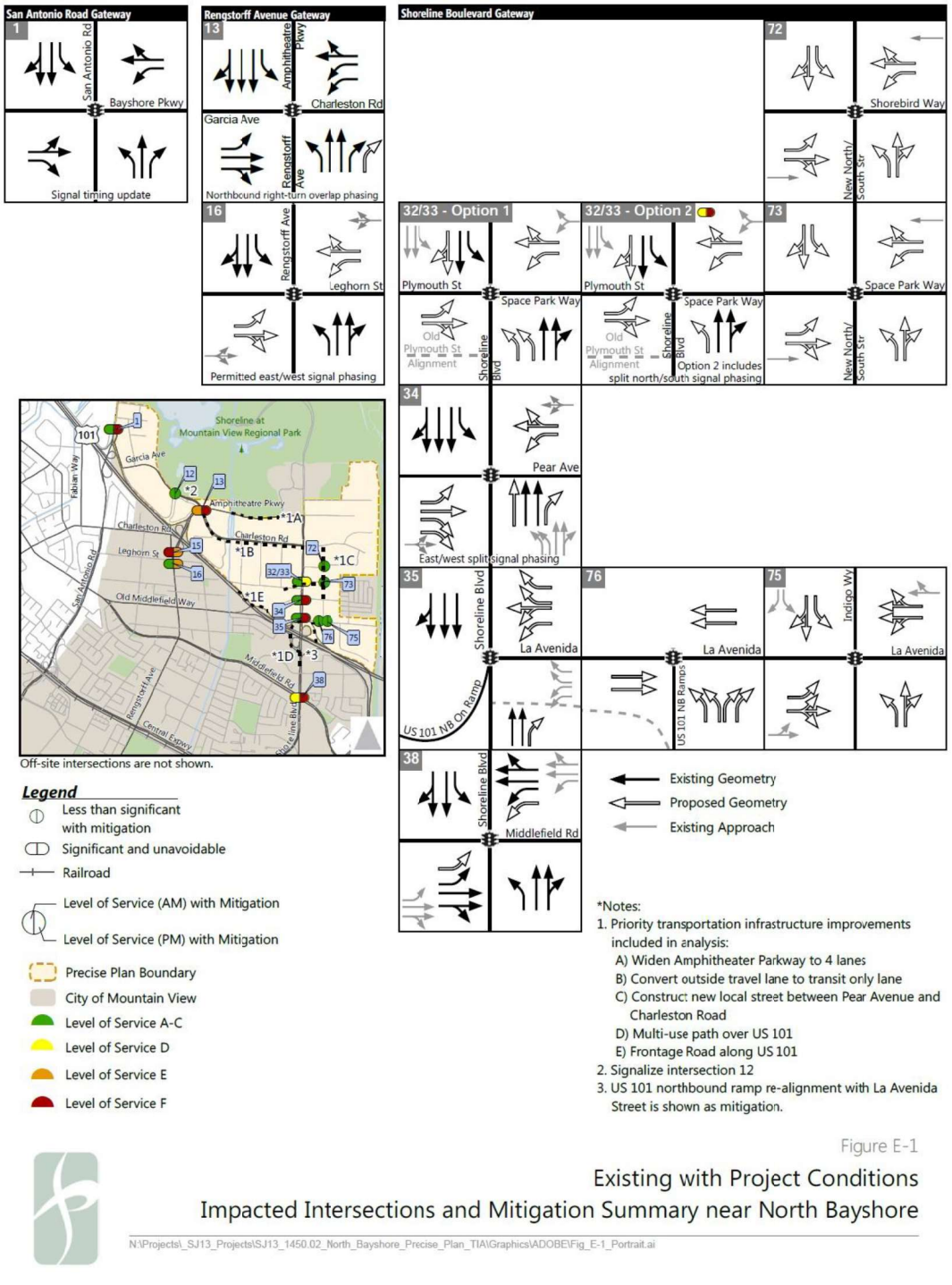


Figure E-1

Existing with Project Conditions

Impacted Intersections and Mitigation Summary near North Bayshore

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NBPP Impacted Intersections

Shoreline/Middlefield is just one of eight intersections which will be significantly impacted by North Bayshore development even with mitigations applied.

Impacts and Mitigations

Shoreline Boulevard and Middlefield Road (Int. #38, Mountain View): Converting the westbound and eastbound approaches to include two left turn lanes, a through lane, and a shared through-right turn lane and signal timing modifications would reduce the project impact. These additional left-turn lanes may require relocation of existing utilities and removal of trees within the median of Middlefield Road. However, these mitigation measures do not improve intersection operation to an acceptable LOS in the PM peak hour. Therefore the impact is considered ***significant and unavoidable*** under Existing with Project Conditions. This improvement is designed with reversible bus lane project. No other improvements are possible due to right-of-way constraints.

NBPP EIR Appendix D, Traffic Impact Analysis, p. 128.

Transplanted Trees

Replacement Trees

36” and 48” box Coast Live Oaks at Charleston Park

Bottom line:
What value do you put on trees vs. marginally useful left-turn lanes?

Flynn, Allison

From:
Sent: Tuesday, September 7, 2021 3:32 PM
To: prc@mountainview.gov
Cc: City Council
Subject: 9/8/21 meeting agenda item 3.5 (Middlefield median tree removal)
Attachments: ABC 6-30-21 Heat due to tree loss.txt

To: Mountain View Parks and Recreation Commission

From: Joel Dean, ., Mountain View

Subject: 9/8/21 meeting agenda item 5.3 (Reversible Bus Lane Tree Removal)

DPW's proposal to increase the number of trees removed to accommodate double left-turn pockets on Middlefield Road at Shoreline Boulevard represents a metastasis of a malignant project based on false data and failed concepts. It is an insult to present it to the PRC, it would insult the City Council to send it to them as is, and an insult to the public if the Council were to approve it.

The negative environmental impacts of tree removal are obvious: loss of cooling shade, carbon sequestration, aesthetic benefits, etc. The attached story from ABC news reveals how the health of residents, of neighborhoods -- primarily low-income ones -- without adequate tree cover is compromised. The vicinity of the subject project is already heavily paved over with wide traffic arteries, large parking lots, and single-family homes on small lots with two-car garages and driveways. The already limited tree cover is shrinking further by redevelopment of existing housing complexes at 1555, 777, 759 and 555 West Middlefield. We do not need to have the City of Mountain View add to the destruction. Speaking of destruction, if excavating the Middlefield median can compromise tree roots, it can also compromise the gas transmission line which runs through there. There is no mitigating the damage that could do.

It is particularly galling to have this happen to support a project whose origins are murky and which has suspect justification. As of 2016, the Shoreline Boulevard Corridor Study referred to on page 1 of the staff memo was in preparation. At the same time, the Nroth Bayshore Precise Plan was undergoing one of its plastic deformations. On July 26, 2016 I attended a community meeting hosted by Nelson\Nygaard, the consultants on the Corridor Study. I obtained printed copies of the slide show presented at the meeting. The slide of Shoreline at Middlefield did not show double left-turn pockets on either direction of Middlefield. Only six weeks later, on September 6, in seeking conceptual design approval for the reversible bus lane, DPW reported to the City Council that "An additional left turn will be added on both directions on Middlefield Road at Shoreline boulevard. This additional left turning capacity is a mitigation measure for the North Bayshore Precise Plan." So far, I have been unable to determine if the idea of double left-turn pockets sprouted sometime between July and September, or if Nelson\Nygaard was blindsided by the change, or if they were told to clam up about it so that DPW could spring it from ambush, as is their usual tactic.

While the germination of the double-left pocket is cloaked in fog, its justification can't be disguised anything but fiction.

In April, Mr. Albert Jeans contacted the City to inquire why the trees in the Middlefield median had been marked for removal. He noted that pre-pandemic official counts of left turns from eastbound Middlefield at Shoreline were low enough to be accommodated by the existing single-lane turn pocket. DPW Director Cameron replied:

"The City's construction plan for the project includes trying to preserve these trees, and only removing one or more of them if absolutely necessary. Adding the second left turn lane will intrude into the root system of these trees, and we will not know the extent of the intrusion until excavation begins. An arborist will evaluate the root systems once they are exposed to assess the viability of preserving the trees. The trees will only be removed if the arborist's determination is they cannot be preserved."

As of today, September 7, there is no sign that the medians have been excavated and the roots exposed. Someone should ask how the arborist was able to make a sweeping determination to remove more trees than originally planned, or if the arborist was merely rubber-stamping a predetermined result.

Director Cameron wrote further:

"The traffic count data presented in your slides that lead to your conclusion that the average queue length was 7 cars is based on the assumption that the vehicle count is equal to vehicle demand. This intersection (and the entire Shoreline Blvd corridor) is in oversaturated condition during the AM and PM peaks. There are more vehicles that want to move through the intersection than are actually getting through and when the left-turn lane is full, the overflow can block the through lanes, which in turn can block vehicles further back in the through lanes that want to access the left turn lane. The count volumes are used as a basis for the analysis, but the actual analysis (under oversaturated conditions) is based on demand volumes. Demand volumes are developed by adjusting count volumes in a traffic analysis model to reflect observed field conditions. Using demand volumes, the average queue length is in fact much higher, and the maximum queue length during both the AM and PM peaks exceeds the turn pocket storage length. The proposed improvements increase intersection throughput by 10%, which ultimately results in reduced delay, queueing, and vehicle emissions."

There is much that is troubling in that paragraph:

(1) Vehicle count does in fact equal demand for every interval in which the queue at the beginning of the green signal phase clears before the light changes. Maximum counts of left- and U-turning vehicles from EB Middlefield in any 15-minute period were 43 in 2017 and 49 in both 2018 and 2019, and occurred beginning at either 8:15 or 8:30 AM. Evening peak counts were considerably lower. During peak periods, there are six 2-1/2 minute signal cycles. There are more and shorter cycles off-peak, which may apply to 8:15 or 8:30. Thus, an average queue length of 7-8 vehicles in the turn pocket is reasonable. That many can clear the intersection within the 20 seconds of green time ordinarily given to protected left turns. The signal system is demand-responsive, so if there are a few more queued up than usual, a few seconds of green are added, and as many as 11 vehicles can make it through. There are no unsatisfied "demand vehicles." If there were, they would show up subsequent to the peak interval. They do not. The existing left-turn pocket can hold 10 cars, and rarely if ever hacks up into the adjacent through lane. If it does, it is not much of a problem, since through traffic has two lanes to work with, and since left turns get a green light before through traffic does and will be out of the way by the time the through lanes get green.

(2) In some occupations, substituting quasi-information fabricated by a computer model for legitimate data would be considered professional misconduct.

(3) Shoreline at Middlefield was "saturated" with pre-pandemic only because of backups from downstream intersections (Pear, Avenida, 101, 85, Terra Bella in the AM, Montecito in the PM) which brought movement to a halt and left vehicles unable to proceed through a green light -- or worse, caused vehicles to enter the intersection without being able to clear it. Without that, Shoreline would have capacity enough for considerably more traffic. There is no point in adding capacity to Shoreline at Middlefield, least of all for the puniest movement contributing to the congestion, unless the downstream obstacles are removed. Extensive work is planned to do just that on the North Bayshore side. Common sense says that those projects should be completed before wasting money and effort on solving a problem at Middlefield which does not exist and is less likely than ever to exist if the North Bayshore projects are successful.

(4) If it does not make sense to add capacity where it is not needed, it makes still less sense to take capacity away where it is needed. That is precisely what the City plans to do by converting Shoreline at Middlefield to a 'Dutch' intersection, where drivers will not be able to make right turns from the bike lanes, contrary to what the Vehicle Code tells them to do. The existing configuration of eastbound Middlefield at Shoreline allocates one lane to left and U-turns (2019 peak hour vehicle counts 138 AM, 89 PM), two to through traffic (280 AM, 497 PM), and one to right turns (96 AM, 273 PM). The 'Dutch' configuration allocates two lanes to lefts and U's (138 AM, 89 PM), two to through and rights (376 AM, 770 PM), and one to 9 cyclists in the AM, 11 in the PM). That is not likely to sit well.

Page 2 ot the staff memo for agenda item 5.3 repeats much of Director Cameron's communication to Mr. Jeans, with the addition of some dubious assertions:

(1) Traffic returning to pre-pandemic levels. That may be true in some places and at some times of day. But at Shoreline and Middlefield, peak hour traffic was about 75% Google, and with Google working from home, the intersection looks almost deserted during the former peak hours. 40% of Googlers working from home would leave traffic 30% below 2019 levels.

(2) "Staff's professional opinion" is that traffic will return to pre-pandemic levels despite hybrid work-from-home schedules. I expect Google to do whatever it wants without caring a fig about "Staff's professional opinion."

One final note: The most recent traffic study of the area was included in the Transportation Impact Analysis for the 555 West Middlefield housing project. It showed left-turn vehicle counts at EB Middlefield/Shoreline to be stable and not to increase appreciably for the foreseeable future. The consultant on that study did field observations and noted excessive left-turn queues on NB

and SB Shoreline and WB Middlefield, but not on eastbound Middlefield. That doesn't seem to have penetrated DPW's consciousness. Very little does.

Thank you for your attention.

Heat waves hit low-income Bay Area neighborhoods harder due to less trees, shade

By Dan Ashley, Lindsey Feingold and Tim Didion, Grace Manthey
Wednesday, June 30, 2021

It may be the same sun beating down on the Bay Area, but the surface temperature it triggers during a heat wave can vary neighborhood by neighborhood.

SAN FRANCISCO (KGO) -- It may be the same sun beating down on the Bay Area, but the surface temperature it triggers during a heat wave can vary dramatically neighborhood by neighborhood. A big reason for the difference is shade and the canopy of trees that line some sidewalks but not others.

"It's a clear pattern where you can see some neighborhoods, especially the richer and whiter ones have a lot of beautiful trees, and in other neighborhoods there's barely any at all," explains National Geographic environmental reporter Alejandra Borunda.

RELATED: Climate Watch Resources: How to be ready for wildfires, heat waves, drought and power outages

Borunda spent near two years researching the shade divide for the magazine's July issue.

While she focused on Southern California, ABC7's data journalism team analyzed data from the California Health Places Index, which turned up similar divides in the Bay Area. Tree canopy density ranged from roughly 5% in neighborhoods with average incomes of $40,000 or less to nearly triple that at $120,000 and up.

The problem isn't limited to one or two neighborhoods. Looking at any part of the Bay Area, one can find similar differences in tree cover. As we discovered during a quick driving tour, often the dividing line is as clear as a freeway.

In Oakland, we started in a dense, predominantly less white neighborhood near Lake Merritt and watched as sparse tree cover steadily gave way to lush green yards as we passed under Interstate 580 toward statistically whiter neighborhoods near the Oakland Hills. The difference is easily noticeable by drone.

Central San Jose has the same pattern as you pass from older tree-lined streets over Highway 101 into less affluent neighborhoods, as does cruising University Avenue in Palo Alto, also past 101, into the sparser blocks of East Palo Alto.

Researchers like Dr. Laura Feinstein of the nonprofit SPUR say when it comes to trees, the roots of the disparity stretch back decades.

"So there were a lot of factors at play," she says. "Part of it was that banks strategically decided not to lend mortgages in areas that had a high number of African American and immigrant families. So they would only lend mortgages to people who were white and wealthier."

In addition, according to Feinstein, wealthier areas zoned for single-family homes typically attracted more city services, like wide sidewalks and trees. Fast forward

to the present day and that disparity becomes more than a matter of aesthetics. Experts say shade and water evaporation from trees can lower surrounding air temperatures by six degrees or more.

And while it may seem obvious that shade from a tree canopy will help keep the ground temperatures cooler, as climate change continues to affect the Bay Area, the stakes are likely to get higher. And some believe that in certain cases that shade could be the difference between life and death.

"People die during heat waves," says Dr. Feinstein. "Not young healthy people but elderly people and disabled people. And we can see that just an extra degree during a heat wave increase mortality 2-3 percent."

ABC7 News meteorologist Drew Tuma warns with global warming, seasonal heat waves are already becoming more of a threat.

"We've seen here that some of the hottest years, the seven hottest on record have happened in the last seven years since 2014, so that's incredible what we're seeing," he added. "And these heat waves are becoming more dangerous."

But while the threat is growing, so is local action. Urban Forester Uriel Hernandez has been organizing tree plantings for the group, Canopy, in East Palo Alto, where concerned neighbors joined in.

"Just because of the history of disenfranchisement here there's definitely been a pushback," says Hernandez.

East Palo Alto resident Luis Guzman helped organize his neighbors for the tree planting.

"I think we got a lot of response. People were really, really, interested in getting trees for their houses," he says.

Meanwhile, nonprofits like SPUR and the San Francisco Estuary Institute have produced detailed roadmaps for greening programs in partnership with Santa Clara Valley Open Space Authority and elsewhere. Groups like Save the Bay have also been active in lobbying for tree planting, citing its benefits for the Bay shoreline. Most counties around the Bay Area have also prioritized greening efforts over the last decade.