Comments to the Draft Environmental Impact Report – "Charcot Avenue Extension Project"

File No. PP18-044

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Robin Roemer
135 Rio Robles E #405
San Jose, CA 95134
robin.roemer@ymail.com

Orchard School PTA
921 Fox Lane
San Jose, CA 95131
orchardpta921@gmail.com

"We know it's a problem when we see much higher rates of asthma in low-income communities in the eastern part of my city where we know there are neighborhoods built closer to freeways. We know it's directly resulting from transportation, particularly automobiles. We know we have much farther to go. […]

As I experience children who simply cannot engage in daily activities because of asthma, as I see premature deaths, particularly in low income communities, caused by this kind of air, it makes me furious."

(Mayor Sam Liccardo, October 29, 2019)

Executive Summary

The DEIR is in many parts inaccurate and inconsistent (see chapter I, II, VIII). Given the major impact this will have on the community, a more diligent approach and further fact finding (chapter III) is needed.

Many aspects of the environmental setting, impacts and mitigation have not been sufficiently addressed (chapter IV). Especially the transportation analysis is in many instances implausible as according to DEIR:

- Cars will travel 72 mph on the extension next to the school.
- Drivers across 880 will save on average less than 17 seconds because of the project.
- More cars will come down on one side of the overpass as are going up on the other side.
- The 2-lane extension will be used during peak hours by more cars than 8-lane Montague and still provide greater speeds than the Expressway.
- Every day, 17,000 cars enter North San José from the East only to never return.

Furthermore, the transportation analysis denies the existence of the well-established and documented effect of induced demand and does not adequately consider the impact on pedestrian safety, especially students walking to school.

Since the transportation analysis is the basis for many other aspects in the DEIR, most importantly the noise and air quality analysis, those parts of DEIR seemed to be flawed as well.

- *"For road projects, the accuracy of traffic demand forecasts are crucial to the validity of any subsequent impact assessments […]. These forecasts form the basis for estimates for a wide range of impact factors, including time savings, emissions, and noise. […] traffic demand seems to be underestimated for road projects on average."* [1]

Given the current already strained school environment near I-880 and Oakland road, it is of utmost importance to establish a true picture of current conditions. Yet, the DEIR failed to take any noise or air pollution measurements on the school site. The proposed mitigation measures "6+ feet noise barriers" raises additional concerns – which have not been adequately addressed by the DEIR.

The DEIR also fails to consider any impact of increased air pollution on student learning – a connection for which there is also well established scientific research.

Lastly and most importantly, what are we trying to achieve with this project and is it still consistent with the City's plans (chapter V and VI)? The original issue – LOS at one specific screen line – is outdated especially given recent changes from LOS to VMT. The Project will hamper Climate Smart San José by increasing VMT. There is no evidence provided that the project is needed or even helpful for the development in North San José envisioned by the City.

Although "it is not the intent of an EIR to recommend either approval or denial of a project." (DEIR, p. 1), it is clear that the project should either be cancelled or the alternative of a bike- and pedestrian-only-overpass should be considered instead (chapter VIII).

[1] Petter Næss, Morten Skou Nicolaisen and Arvid Strand (2012), "Traffic Forecasts Ignoring Induced Demand: a Shaky Fundament for Cost-Benefit Analyses," European Journal of Transport and Infrastructure Research, Vol. 12 (3), pp. 291-301; at www.ejtir.tbm.tudelft.nl/issues/2012_03/pdf/2012_03_02.pdf

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"Sept. 12 marks two years since the funeral of my 15-month-old son, Liam. He had been in a stroller, being pushed through a pedestrian crosswalk in suburban Los Angeles by my sister-in-law, who was 15 years old at the time. She had done everything right: pressed the button, waited for the lights to change and then started walking. Other cars stopped, but one didn't. Police later estimated that the car was going 35 to 40 mph as it smashed into Liam and my sister-in-law. The car was driven by a 72-year-old woman. She was drunk and behind the wheel at 3:30 in the afternoon. […]

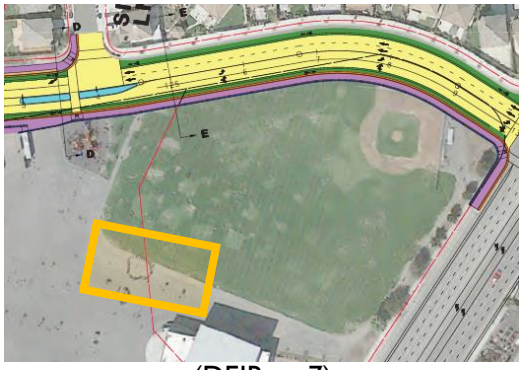
Liam's injuries were devastating. Doctors soon told my wife, Mishel, and me that our son was brain-dead."

(Marcus Kowal, "I lost my infant son to a drunk driver."
Washington Post, September 11, 2018)

I. Inaccurate statements in the DEIR

Regarding project and surrounding area

1- Outdated satellite picture is missing portable classrooms constructed in 2015



(DEIR, p. 7)

(Picture source: Google Earth, 10/2015)

The satellite photographs used in the DEIR are outdated as they do not include the portable classrooms installed next to the school's ball field.

2- DEIR describes non-existent "dense" tree planting

*"Three adjoining service buildings of Orchard School are **completely screened by existing dense tree** planting"*

(Appendix D, p. 11)

Current picture of the tree planting at the location described, school buildings on the left, future roadway on the right. This is not dense nor completely screening.

3- DEIR: "no view" of the project

*"Three adjoining **service buildings** of Orchard School are completely screened by existing dense tree planting and **have no views facing the right-of-way**."*

(Appendix D, p. 11)

Buildings described is a classroom building. Photo shows windows with views of the right-of-way.

4- *Nearest school building*

"For most school viewers, views of the project would be at a distance. The nearest school buildings with windows facing the project, for example, are 300 to 400 feet."

(DEIR, p. 21)

Statement not true (see above.) Closest school building is about 20 feet from the edge of the project, both pod as well as class rooms have windows from which the project is clearly visible.

This is also inconsistent with the response B-27:

"The classroom building for grades 4-6 is the one that will be the closest to Charcot Avenue. Based on preliminary plans, the northerly end of that building is estimated to be approximately 50 feet from the outside edge of the eastbound traffic lane on Charcot Avenue."

As shown in the photo above the building has windows facing the right-of-way.

5- *Views screened*

"Views of the right-of-way from the ball field are currently screened by a row of trees along Silk Wood Lane."

(Appendix D, p. 11)

Since the row of tree on Silk Wood Lane is sparse and needs to be removed for the project, its current impact on views is irrelevant as a means of moderation.

6- *Sidewalk south side of Silk Wood Lane*

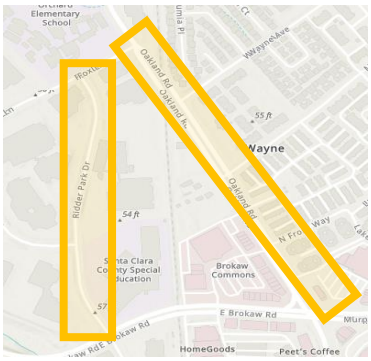
A map in the DEIR shows existing sidewalks (purple lines) on both sides of Silk Wood Lane (Appendix K, p. 12)

Silk Wood Lane currently has sidewalks only on one side.

7- *Ridder Park North of Oakland Road*

Ridder Park Dr	North of Oakland Road

The DEIR describes a roadway segment as "Ridder Park Dr – North of Oakland Road" (DEIR, p. 143)



"Ridder Park Dr" (on the left) does not intersect with Oakland Road (on the right), but runs parallel to it. There is no Ridder Park Dr that could be described as north of Oakland Road.

8- *Speed limit on Oakland Road*

		Speed (mph)	
Roadway	Location	Limit	85th Percentile
Charcot Avenue	East of First Street	40	39
Junction Avenue	North of Brokaw Road	40	38
Oakland Road	North of Silk Wood Lane	45	44
Oakland Road	South of Silk Wood Lane	45	39
Ridder Park Dr	North of Oakland Road	25	31

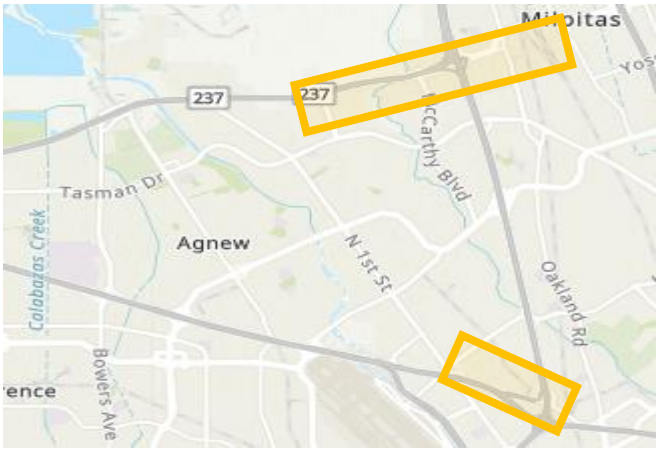
The DEIR describes the speed limit on Oakland Road as 45 mph (DEIR, p. 143)

Speed limit on Oakland Road is 40 mph. (Picture taken adjacent to Silk Wood Lane)

9- *Existing east/west connections*

"Currently, all east-west through traffic ***crossing between both sides of I-880 in the North San José Area*** *travel on the Tasman Drive overcrossing, the Montague Expressway overcrossing, or the Brokaw Road undercrossing, all of which experience congested conditions during commute periods."*

(DEIR, p. 13)



This statement omits the east-west routes of
a) the 237 freeway/Calaveras Blvd,
b)101, and the Old Bayshore Highway,
which also serve the NSJ area.

10- VTA Express Bus 321

"The extension of Charcot Avenue will provide an additional east-west route in the greater North San Jose area, which will reduce traffic volumes on parallel routes. For example, ***volumes on Montague Expressway, which is utilized by VTA Express Bus 321, will decrease. This would improve travel times for the bus."***

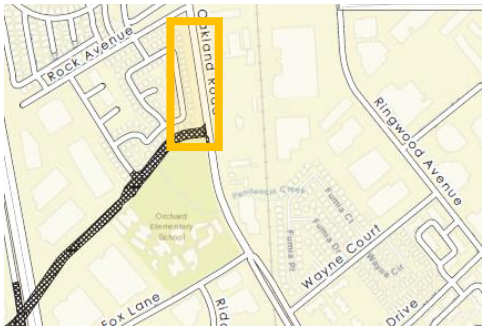
(Appendix B, Response 39.3)

The analysis has not specifically considered the usage of the HOV lane on Montague which is used by the bus. The bus currently runs only once a day per direction and each time during commute times/HOV lane usage times.[2]

Therefore travel times for the bus would remain the same as it should be expected that HOVs will not switch from Montague to Charcot as the existing HOV lanes will likely provide greater speeds than the planned extension.

11- Vicinity map

The vicinity map shows a non-existent road grid south of Charcot Ave connected to O'Toole Ave. (p. 5)



While the map shows medians on Oakland Road south of Fox, medians north of Rock Ave are omitted. (p. 5)

12- Surrounding Land Uses

"To the east of I-880, the alignment is partially developed with a loading dock area, Silk Wood Lane, and landscaping and outdoor recreation areas associated with the Orchard Elementary School site. The eastern portion also includes vacant right-of-way that has been set aside for the proposed project. Residential uses are located adjacent to the north side of Silk Wood Lane, west of Oakland Road."

(DEIR, p. 99)

The paragraph fails to clearly state that surrounding land use includes classrooms and school buildings not just recreational areas.

[2] https://www.vta.org/go/routes/321

13- Location of noise walls

The location of sound walls as shown on page 116 is incorrect as it doesn't reflect actual project boundary and shows sound wall going into classrooms at the western edge of Orchard School.

14- Right-of-way

"For many years dating back since 1994 when the City adopted its 2020 General Plan, ***the City has planned and maintained right-of-way for the proposed alignment of the Charcot Avenue extension*** *over I-880 from its current terminus at O'Toole Avenue on the west side of I-880 to the current alignment of Silkwood Lane near Oakland Road.."*

(Appendix K, p. 42/43)

The statement that the city has maintained right-of-way for the alignment since 1994 is untrue and not supported by facts. Especially, **the City does not have right-of-way for the section across I-880** as this right-of-way belongs to Caltrans.

15- Dates of local observation

"The observations [at the school] were ***conducted on September 25th and 26th 2018, which were normal school days*** *during the morning drop-off (7:30-8:30 am) and afternoon pick-up (2:15-3:00 pm) periods."*

(Appendix K, p. 47)

During the month of September, Kindergarten operates on a shortened schedule which ends at 12:25pm. No Kindergarten pick-up activity could therefore be observed on these days during the 2:15-3:00pm observation period. Kindergarten families contribute significantly to vehicle and pedestrian activity at the school.

September 26th, 2018 was a Wednesday. All of Orchard School operates on schedule where Wednesdays are minimum days schoolwide with all classes ending before 12:45. Therefore, no pick-up activity could have been observed on September 26, 2018 between 2:15 and 3:00 pm.

The statement that these were "normal school days" is untrue.

16- Crossing guards

"Crossing guards were located at both the Fox Lane/Ridder Park Drive and Fox Lane/Oakland Road intersections during drop-off/pick-up periods."

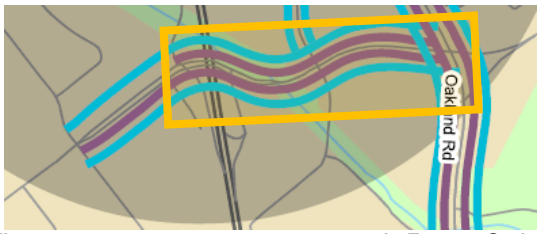
(Appendix K, p. 48)

Although eligible for school crossing guards at the Fox Lane/Ridder Park intersection since 2018, crossing guards only started working at this intersection with the 2019/2020 school year. It is unclear how the traffic consultant was able to observe crossing guards in 2018.

17- Existing Bicycle and Pedestrian Facilities

"Pedestrian and bicycle facilities on each of the roadways are limited and discontinuous between Oakland Road and O'Toole Avenue."

(Appendix K, p. 11)



This statement is inconsistent with Figure 3 that shows continuous pedestrian and bicycle facilities between Oakland Road and O'Toole Avenue on Brokaw Road.

Regarding the City of San José

18- Lead Agency

10.1 LEAD AGENCY

Department of Transportation

John Ristow, Acting Director
Zahir Gulzadah, Division Manager
Thuy Nguyen, Senior Engineer
Josephine Kimura, Project Manager

(DEIR, p. 205)

John Ristow is the current Director of the Department of Transportation, not "*Acting*" Director. [3]

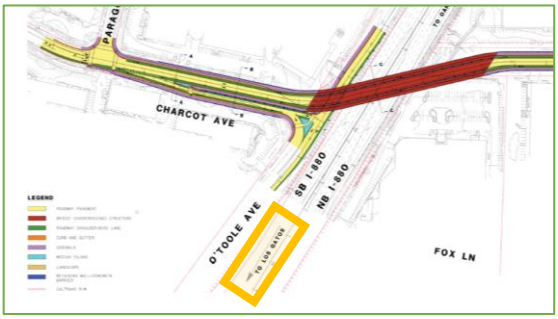
19- Greenprint

"The City is currently in the process of another revision to the plan known as Greenprint Update 2018."

(DEIR, p. 129)

The current Greenprint Update is known as "Activate SJ".[4]

20- Description I-880 southbound



(DEIR, p. 7; Appendix K, p. 3)

Southbound I-880 is currently described in the DEIR as "to Los Gatos".

A more relevant and appropriate description would be "to San José Airport" or "to Downtown San José".

21- Truck Ban

"Truck Ban: The City's ban on select trucks over a certain tonnage is only applicable for residential streets"

(Appendix B, Response 34.2)

Statement is inconsistent with San Jose Municipal Code 11.96.010-100[5] which restricts truck traffic on a number of non-residential streets including McKay in close proximity to the project. Also Santa Clara Street next to City Hall seems to be restricted to truck traffic according to the Municipal Code.

[3] https://www.facebook.com/CityofSanJose/posts/join-the-city-in-welcoming-the-new-director-of-the-department-of-transportation-/10156939724360450/
[4] http://www.sanjoseca.gov/index.aspx?NID=6331
[5] https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId=TIT11VETR_CH11.96LAVERO

General Plan Transportation Diagram

Photo of truck ban sign on McKay Dr

22- Conflicts with greenhouse gas (GHG) emission plans and policies

"Further, the proposed roadway extension is included in the adopted Envision San José 2040 General Plan roadway network and the planned roadway network for the North San José Area Development Policy, both of which are consistent with the City's GHG Reduction Strategy." (p. 80)	*Climate Smart San Jose assesses "the climate implications of building out the General Plan and finds that the General Plan alone is not enough to meet the [City's or] State's carbon commitments, let alone align with the decarbonization rates implied by the Paris Agreement"*[6]

Statement is inconsistent with staff memo for City of San José Transportation and Environment Committee October 7, 2019.

[6] https://sanjose.legistar.com/View.ashx?M=F&ID=7740265&GUID=BDA753CC-B484-4112-BA30-0F346E4D1F96

Regarding State and Federal regulation

23- Lane Width

"10-Foot Wide Lanes: A 10-foot wide traffic lane would narrow the project's footprint. However, ***10-foot wide lanes are not allowed, per Caltrans design standards****, which require a minimum of 11-foot wide lanes. Therefore, a width of 10 feet for the lanes would not be feasible."*

(Appendix B, Response 34.2)

*"****Where a local facility****, not on the NHS [national highway system], within the State right of way crosses over or under a freeway or expressway but* ***has no connection to the State facility, the minimum design standards*** *for the cross section of the local facility within the State's right of way* ***shall be the local agency adopted standards****."*

(Caltrans design standards section 308.1)[7]

"Lane widths of 10 feet are appropriate in urban areas and have a positive impact on a street's safety without impacting traffic operations." (NACTO, "Urban Street Design Guide")[8]

Even 9 foot wide lanes are generally able to accommodate truck traffic.[9]

24- California standards for motor vehicle emissions

"California also has the ability to set motor vehicle emission standards and standards for fuel used in California, as long as they are the same or more stringent than the federal standards."

(Appendix K, p. 8)

"Trump to Revoke California's Authority to Set Stricter Auto Emissions Rules -
The Trump administration is expected on Wednesday to formally revoke California's authority to set auto emissions rules that are stricter than federal standards"

(New York Times, 09/17/2019)[10]

California currently does not have the ability to set motor vehicle emission standards.

25- Fuel for Motor Vehicles

"In 2012, the federal government raised the fuel economy standard to 54.5 miles per gallon for cars and light-duty trucks by Model Year 2025. (Source: National Highway Traffic Safety Administration. Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards. August 28, 2012.)" (p. 65)

Given recent developments on the federal level statement needs to be reevaluated.[11]

[7] https://dot.ca.gov/-/media/dot-media/programs/design/documents/hdm-complete-14dec2018.pdf#page=211
[8] https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/
[9] https://twitter.com/tjhfx/status/1163503124885180421
[10] https://www.nytimes.com/2019/09/17/climate/trump-california-emissions-waiver.html
[11] https://www.vox.com/2019/4/6/18295544/epa-california-fuel-economy-mpg

II. Internal inconsistencies in the DEIR

26- Reduction in automobile trips

*"The **proposed roadway project will […] reduce automobile trips** in the project area consistent with the Envision 2040 General Plan goals and policies."*

(Appendix K, p. 15)

Total Daily Trips (ADT)
in the project area

Without the project:	***With the project:***
813,600	**828,200**

This is an increase of 1.79%, not a reduction.

(DEIR, p. 157)

27- VMT data used in traffic analysis and air quality analysis

Comparing the data in Appendix K – Transportation analysis with the data used in Appendix E – Air Quality Analysis shows major discrepancies for example for VMT, VHT, Speed, Peak AM and Peak PM traffic data.

No Project	VMT 2025	VHT 2025	Speed 2025	VMT 2040	VHT 2040	Speed 2040
Transportation Analysis	1,821,479	104,144	25.22	2,659,078	185,249	14.35
Air Quality Analysis	4,789,277	209,093	22.90	6,080,580	340,160	17.88
Project	**VMT 2025**	**VHT 2025**	**Speed 2025**	**VMT 2040**	**VHT 2040**	**Speed 2040**
Transportation Analysis	1,823,272	103,460	25.28	2,661,463	183,620	14.49
Air Quality Analysis	4,787,047	205,279	23.32	6,092,019	336,012	18.13

Cars/h	Peak AM 2025	Peak PM 2025	Peak AM 2040	Peak PM 2040
Transportation Analysis	1240	1250	1490	1720
Air Quality Analysis	776	818	1026	1082

28- Criteria for alternatives

"The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project,
***even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly**."*

(DEIR, p. 183)

"In conclusion, it has been determined that Alternative B, the widening of Montague Expressway or Brokaw Road, is
not feasible for the following reason:
From an economic/funding perspective, there would be
significant right-of-way costs
associated with the widening of Montague Expressway or Brokaw Road."

(DEIR, p. 187)

According to DEIR (p. 183) alternatives shall not be considered infeasible because of costs, yet a few pages later, the DEIR does exactly that.

29- Alternative E - Impact of improved bike and pedestrian facilities

*"**Traffic circulation** for the Bicycle/Pedestrian Overcrossing Only **would be the same as for the No Project Alternative** under existing, year 2025, and year 2040 conditions"* (DEIR, p. 189)	*"**By providing improvements that will facilitate bicycle and pedestrian use, the operational phase would reduce vehicle trips**"* (DEIR, p. 67)

If traffic circulation is the same as no project alternative than providing improvements that will facilitate bicycle and pedestrian use aren't actually reducing vehicle trips.

30- Response 21.1

*"This comment states the opinion that building and planning should stop as it **is not safe or healthy for children** attending Orchard School. The comment is noted for the record and will be considered by the City Council as part of its decision-making process on the project. No further response is required as **the comment does not raise any environmental issues.**"* (Appendix B, Response 21.1)	This statement is in itself inconsistent: the health of children is an environmental issue.

31- Response 31.1

*"This comment states the opinion that **the project should not utilize land that is part of Orchard School.** The comment is noted for the record and will be considered by the City Council as part of its decision-making process on the project. **No further response is required as the comment does not raise any environmental issues."*** (Appendix B, Response 31.1)	*"While the implementation of MM REC-2.1 would mitigate the project's impact on the school's recreational facilities, it would not replace the lost parkland/recreational acreage. Further, there is no vacant land available contiguous to Orchard School that could be purchased and added to the school. Therefore, **the loss of 0.44 acre of recreational land would constitute an unavoidable effect of the project.*** ***Conclusion: Significant Unavoidable Impact"*** (DEIR, p. xii)

The comment raises issues of impact to recreational land ("Please don't take away a piece of land from Orchard School that my children attend because they need the space to play to regain physical and mental health to be productive.") which the EIR itself considers a Significant, Unavoidable Impact. The response given is inconsistent with the findings of the DEIR.

32- Cumulative Impact – Efficiency of vehicle travel

*"By providing an additional east-west route in the greater project area, the project will improve the **efficiency** of vehicle travel, thereby reducing energy consumption."* *(p. 67)*	*"the TDF model is designed to reflect driver's behavior by minimizing the travel time of motorists rather than travel distance. Since the roadways in the area are congested during the morning and afternoon peak periods, **commuters will drive longer distances to shorten their travel time**." (Appendix K)*

Statement inconsistent with the result of the traffic analysis that shows commuters driving longer distances than before, which is less efficient.

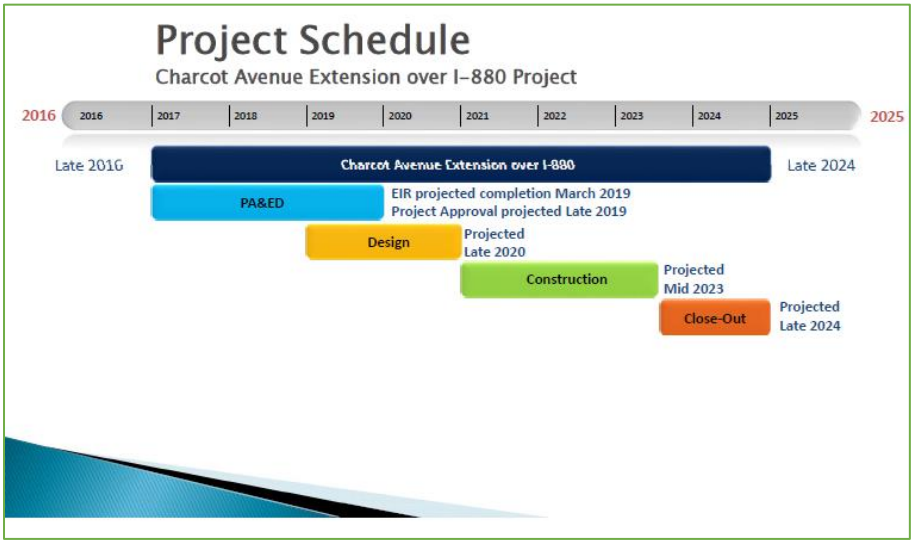
33- Electricity consumption associated with the project

*"Electricity consumption associated with the project would be **limited to power for new streetlights and traffic signals**."* (p. 174)	*"Existing electricity use associated with operation and maintenance of the project alignment primarily consists of **electricity used to power electric vehicles and streetlights**."* (p. 64)

34- Number of workdays

*"The provided project schedule and equipment usage assumptions are that the project would be built out over a period of approximately 10 months beginning in 2019, or an **estimated 220 construction workdays**"* (Appendix E, p. 16)	"*Construction is anticipated to occur **over a total period of 130 days**.*" (Appendix J, p. 28)

Statement also seems inconsistent with timetable provided by the City as response to request for public records, which shows construction lasting longer than two years.



35- Existing CO2e Emissions

"Under existing conditions, […] ***existing GHG emissions are considered nonexistent****."* (Appendix E, p. 30)	*Table 8.* ***Existing CO2e Emissions****:* ***598,123*** *Metric Tons per Year* (Appendix E, p. 31)

36- Reduction in VHT

Table 11 *Percentage change in daily VHT* *2015:* ***-0.1%*** *2025:* ***-0.7%*** *2040:* ***-0.9%*** (Appendix K, p. 40)	*"The model results show that VHT would decrease by approximately* ***1 to 2 percent*** *in the project area."* *(Appendix K, p. 31)*

37- Increase in travel speeds

Table 11 *Percentage change in average speed* *2015:* ***0.2%*** *2025:* ***0.8%*** *2040:* ***1.0%*** (Appendix K, p. 40)	*"The Charcot Avenue extension also would increase the travel speeds on the roadways within the area by approximately* ***1 to 2 percent****."* *(Appendix K, p. 40)*

38- Parking on Silk Wood Lane

*"****The project will not take away any parking*** *from this area.* ***The portion of Silk Wood Lane*** *adjacent to Orchard School is not a designated drop-off and pick-up location and* ***is signed as a "No Stopping Any Time" zone****"* *(Appendix B, Response 17.1, similar: Responses 15.1, 34.8, 44.1, 45.4, 48.3, 51.1, 51.2)*	*"The* ***north side of Silkwood Lane provides on-street parking.****"* (DEIR, p. 147) *"****The project will remove the existing on-street parking along the north side of Silkwood Lane****."* (Appendix K, p. 50)

39- Impact of parking Silk Wood Lane II

*"**The Charcot extension will have no effect on the school's access points, drop-off/pick-up areas, and/or parking lots that are located on Fox Lane and Oakland Road**."*
(Appendix K, p. 50)

*"These changes will substantially curtail this informal use of Silkwood Lane for student drop-off/pick-up because the only remaining on-street parking will be along the north-south segment of Silkwood Lane that connects to Rock Avenue. **This, in turn, will result in a greater use of the official Oakland Road and Fox Lane drop-off/pick-up areas**."*
(p. 50)

The quantitative traffic analysis (p. 34-36) shows no impact to Fox Lane as traffic volume will supposedly stay the same as without the project, which is inconsistent with *"greater use"*.

Table 8
Existing and Existing Plus Project Roadway Segment Traffic Volumes

#	Roadway	Location	AM				PM				ADT	
				Existing+	Change			Existing+	Change			Existing+
			Existing	Project	Volume	Percent	Existing	Project	Volume	Percent	Existing	Project
18	Ridder Park Drive	North of Oakland Road	730	730	0	0%	500	500	0	0%	6,700	6,700
19	Fox Lane	West of Oakland Road	620	620	0	0%	440	440	0	0%	6,100	6,100

40- Access

"Access to adjacent properties along Charcot Avenue between Paragon Drive and Silkwood Lane will not be provided.".

*"To enhance pedestrian access to/from Orchard Elementary School, the width of the **sidewalk on the south side of Charcot Avenue at Silk Wood Lane would widen to 11 feet**. In addition, a 9-foot wide paved pedestrian path would be constructed next to the 11-foot wide sidewalk to **connect to a gate at the school playground**."* (DEIR, p. 10)

The project map on page 7 seems to indicate openings/access for pedestrian towards Super Micro on the north side of the project. The map showing the proposed soundwalls is inconclusive in this regard.

"Two days ago, a driver took the life of a four-year-old girl named Alessa.

Alessa's mother was walking her daughter to preschool. A left-turning driver crashed into them as they walked across Olympic Boulevard at Normandie Avenue in the city of Los Angeles' Koreatown neighborhood. Alessa was pronounced dead at Childrens Hospital."

("Driver Killing Koreatown 4-Year-Old Sparks Protest Push For Vision Zero",
Streetsblog LA, October 18, 2019)

III. Further fact finding required

41- Length of the project

Please provide the total length of the project in feet. The DEIR states the length of the project as 0.6 miles. Measurements taken indicate a length of approximately 0.5 miles instead. Please also provide detailed measurement for the length of the existing roadway segments in the alignment. An accurate measurement is important for the VMT analysis.

42- Roadway capacity

Please provide maximum capacity for all roadway segments analyzed.

43- Creation of new impervious surfaces

Please state the amount of new impervious surfaces created by the project.

44- On-site measurements - Noise

The EIR fails to include any actual measurements taken on school grounds for all of the noise receptor locations. This needs to be corrected.

45- On-site measurements – Air quality

The EIR fails to include any actual measurements for current air pollution in the area. This needs to be corrected. See Attachment E – "Air Quality Measurements taken at school site" for a snapshot of measurements taken in the area.

46- New significant developments since traffic data was taken in 2018

Local developments in the area (e.g. Lumentum moving their corporate headquarter to a previously vacant office building)[12] have potentially resulted in significant changes to traffic volumes on some of the roadway segments analyzed. An updated count as input for the traffic analysis is required.

It should also be noted that in the very near future and likely before the final approval of the EIR, the BART extension to Milpitas and Berryessa will open. This is likely and intended to again alter traffic patterns in the area. This would require another update of the data after new traffic patterns have established itself.

Similarly the City plans signal re-timing along Brokaw Road in order to *"reduce travel delay along major commute corridors reduces vehicle emissions and improves traveler experience."*[13] This is likely to affect traffic volumes and patterns as well.

47- 2.5 Additional permits required

The EIR should clearly acknowledge any additional permits required for the project such as the many tree removal permits or the National Pollutant Discharge Elimniation System Construction General permit required for the project.

[12] https://www.mercurynews.com/2019/05/22/lumentum-buys-big-north-san-jose-office-park-where-it-will-move-hq/

[13] http://www.sanjoseca.gov/DocumentCenter/View/86326, p. V - 838

"My 12-year-old son was killed in a crash in front of our home on Oct. 8, 2013.

Sammy kissed me goodbye and said, "I love you Mommy."

I never imagined those would be his last words. Sammy was bright, kind, athletic and had a huge heart. We miss him every day."

(Amy Cohen, as quoted in
"Cars Are Death Machines. Self-Driving Tech Won't Change That."
New York Times, October 4, 2019)

IV. Comments to environmental setting, impacts, and mitigation

Land Use and Planning

48- Division of Established Community (1)

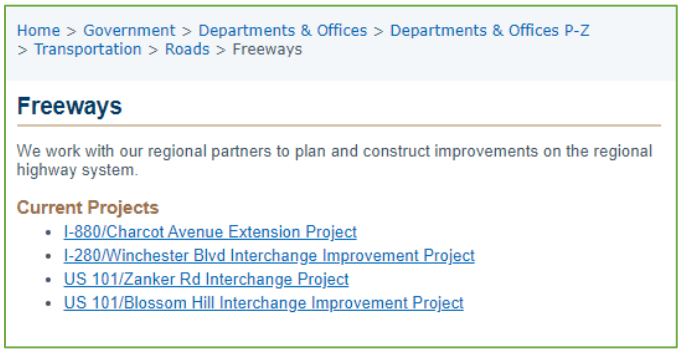
"In the project area, I-880 currently physically divides the community." (p. 99)

The community is also divided by Oakland Road (a major arterial street) and the UPPR rail road tracks (railroad line). Other major barriers in proximity to the project site are for example Coyote Creek and the BART tracks. Statement needs to be amended.

Major barriers (i.e. ± 1 mile between crossings) and at-grade rail crossings between Berryessa, North San Jose and employment centers further west after Charcot is extended over 880.

"Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. […]The proposed roadway is not a new freeway, highway, or major arterial." (p. 99)

Even if the proposed roadway is not among the examples the report chose to enumerated, that doesn't exclude it from dividing a community. The project is classified as a highway project on the City's website and a highway interchange project under VTA measure B.



Home > Government > Departments & Offices > Departments & Offices P-Z > Transportation > Roads > Freeways

Freeways

We work with our regional partners to plan and construct improvements on the regional highway system.

Current Projects

- I-880/Charcot Avenue Extension Project
- I-280/Winchester Blvd Interchange Improvement Project
- US 101/Zanker Rd Interchange Project
- US 101/Blossom Hill Interchange Improvement Project

49- Division of Established Community (II)

"The proposed project would not divide an established community." (p. 99)

Statement not supported by facts and inconsistent with staff statement:

"The applicant's proposal to have the residential development and the park separated by the future extension of Charcot Avenue is not supported by staff." (SJ City Staff memo to SJ City Council, March 10, 2004)

The statement that the land purchase for Orchard School was approved in anticipation of the proposed Charcot Avenue is not supported by the evidence presented.

A consideration of the planned Extension in the development adjacent to it, does not necessarily imply that the Extension is not dividing a community.

It would even be illogically for those developments mentioned to consider the potential division of the community by the Extension project as:

- *"The California Supreme Court in a December 2015 opinion in California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369 (BIA v. BAAQMD) confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing [or potentially planned] environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards." (DEIR, p. 16)*

It should also be noted that the housing along Silk Wood Lane was approved to improve connections throughout the neighborhood:

- *"In urging council members to vote for the conversion, Reed said the most important reason to support it is that the new neighborhood would connect Orchard School with the Casa del Lago Mobile Home Park. The new homes also would supply the school with more students, and the developer would build a park for the area on school district land. "Our school is ready to support the students that would come from these homes," said Ken Riley, Orchard school board president. "And the kids from the mobile home park wouldn't have to walk on Oakland Road." (Mercury News, San Jose Approves Developer's Proposal, 7 April 2004)*

The division of the community is a significant, unavoidable impact.

50- Division of Established Community (III)

The division of the community <u>during construction</u> needs to be evaluated as well.

51- Conflict with plans, policies and regulations

According to staff memo building out the General Plan will not comply with the City's goals as set in "Climate Smart San Jose".

- *"Climate Smart San Jose (Climate Smart) builds on and furthers the General Plan's vision. It assesses the climate implications of building out the General Plan and finds that the General Plan alone is not enough*

to meet the [City's or] State's carbon commitments, let alone align with the decarbonization rates implied by the Paris Agreement. With 63% of San Jose emissions coming from transportation, Climate Smart doubles down on the importance of focused land use growth and a robust multi-modal transportation network to set the City on a path to meeting the Paris Agreement's emissions reduction goals."[14]

By increasing VMT per capita the project violates Climate Smart San Jose.

This is a significant, unavoidable impact.

52- Cumulative Land Use Impacts

As shown above the project has several significant impacts on land use.

"The City of San José prepared and adopted the North San José Area Development Policy to support the implementation of the City's vision for the North San José Area, such vision consisting of compact, in-fill uses. The Area Development Policy establishes a specific procedure for the allocation and timing of development capacity within the policy area. The policy identifies major transportation improvements needed to serve the development in the North San José Area, including the extension of Charcot Avenue to Oakland Road." (p. 98)

Based on the EIR for the NSJADP building the planned improvements will significantly increase VMT and GHG and therefore violate the Climate Smart San Jose plan.

This is a significant, unavoidable cumulative Impact

[14] https://sanjose.legistar.com/View.ashx?M=F&ID=7740265&GUID=BDA753CC-B484-4112-BA30-0F346E4D1F96

""We can't stay being a car-oriented community any longer"

(Councilmember Lan Diep, November 1, 2019)

Transportation

Existing conditions

53- Existing conditions

Although traffic counts were supposedly collected in September 2018 (p. 8). The analysis often refers to 2015 as base line year, e.g. on the same page. For example in Table 11 on page 40, the baseline and data for the traffic analysis is from four years ago (2015) and therefore outdated.

"Hexagon utilized the recently updated City of San Jose Travel Demand Forecasting (TDF) Model to forecast traffic volumes, daily VMT and VHT values as well as average travel speeds with and without the implementation of the proposed Charcot Extension under baseline (year 2015), Year 2025, and Year 2040 General Plan conditions." (Appendix K, p. 8)

The discrepancy needs explanation.

54- Existing roadway network

The description of the existing roadway network and *"roadways in the vicinity of Charcot Avenue that would be directly affected by the proposed Charcot Extension"* (Appendix K, page 10) is inconsistent with the traffic analysis.

- Paragon Dr and O'Toole not described
- Other roads affected by the project include for example Fox Lane, Ridder Park, McKay, Wayne, Trade Zone
- First Street is included and therefore deemed "directly affected", yet the roadway segment analysis doesn't include First Street

55- Regional access to the project area

"Regional access to the project area is provided by Interstate-880 (I-880)." (p. 10).

According to the description further down regional access is also provided by Montague Expressway, Trimble Road and Brokaw Road. Please ensure consistency throughout the DEIR

56- Charcot Avenue

"Segment east of North First Street functions as a two-lane collector street providing access to adjacent employment areas."

It should be noted that Charcot in this section has a middle two-way lef turn lane and that this section is designated in the North San Jose design guidelines to become a Parkway.

57- Montague Expressway

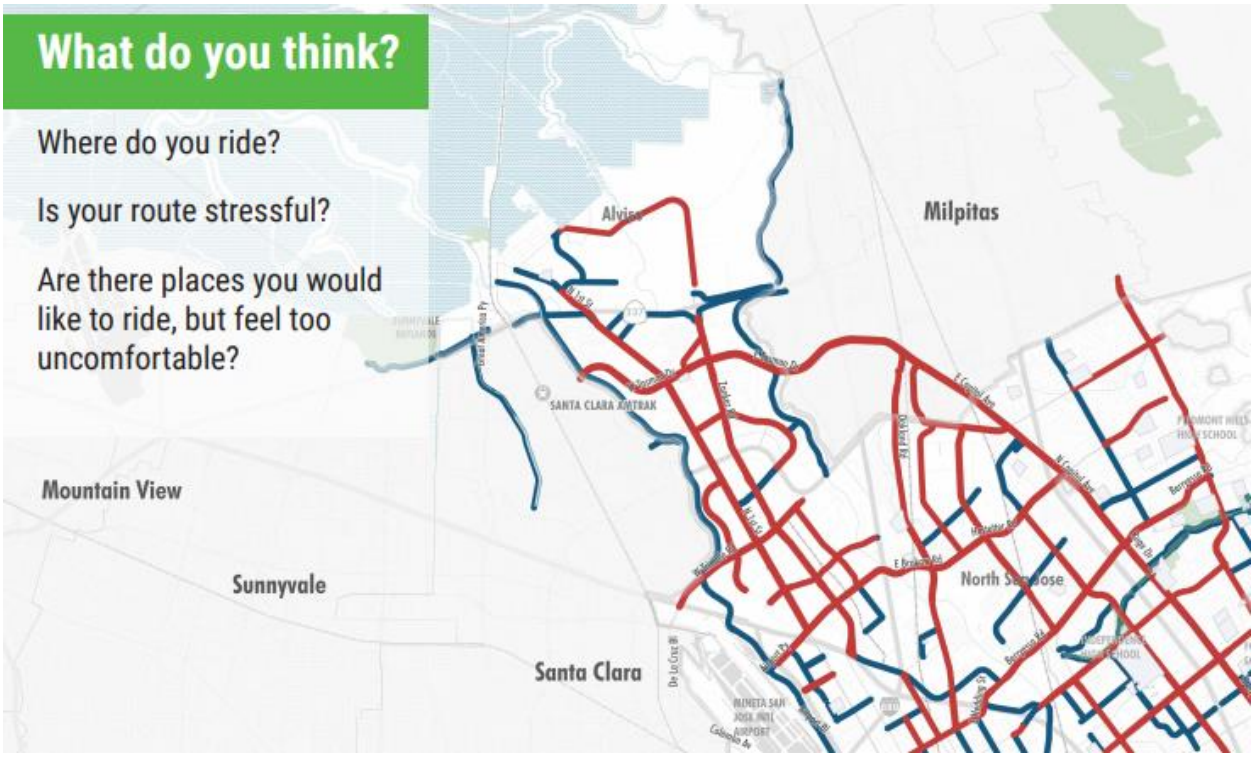
It should be noted that the HOV lanes on Montague Expressway are not continuous and that its transition from 8 to 6 lane is in the project area between Oakland Road and O'Toole Avenue.

58- Existing Bicycle and Pedestrian Facilities on Montague and Brokaw

"The large traffic volumes and congestion on the roadways are not conducive to pedestrian and bicycle travel."

The main barrier for pedestrian and bicycle travel on these roadways is the current roadway design and sub-standard bike and pedestrian facilities currently provided on these roadways.

It should also be noted that Charcot is also a "high stress" road for bicyclists similar to Brokaw or Trimble.[15]



59- Existing Bicycle and Pedestrian Facilities on Silk Wood Lane

Figure 3 (Appendix K) shows existing sidewalks on the south side of Silk Wood Lane. This is incorrect as only one side has sidewalks currently.

60- Sidewalks on Charcot Avenue

"There are no sidewalks along either side of Charcot Avenue under existing conditions. Similarly, there are no sidewalks along either side of O'Toole Avenue north of Charcot under existing conditions."

Statement inconsistent with response 36.3

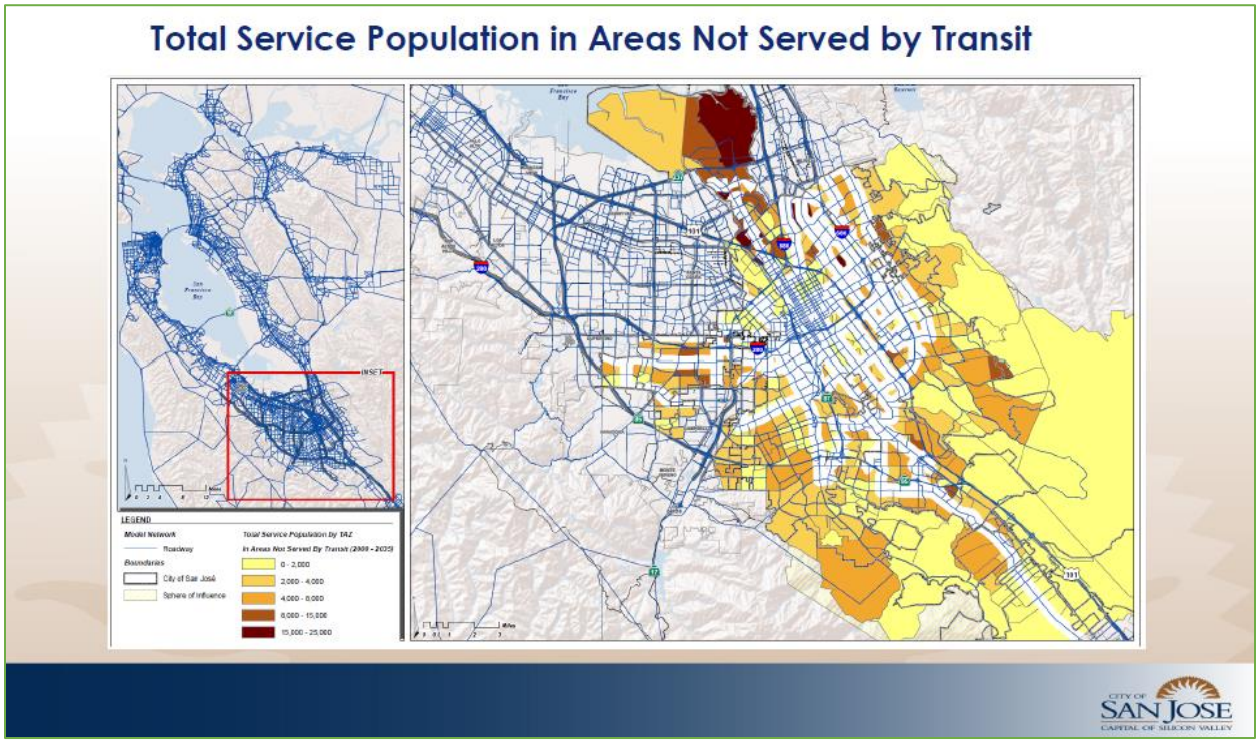
"The proposed design retains the current sidewalk circulation from Charcot Avenue to O'Toole Avenue south of Charcot."

[15] Montague as a County Expressway was not evaluated. Source: San Jose Bikeplan 2025 documents: https://static1.squarespace.com/static/5b85b16db40b9d1dd2ad6421/t/5c12c093aa4a99d17f4deb37/1544732839253/Level+of+Traffic+Stress.pdf

61- Transit Facilities

The description of transit facilities should include a discussion of the approved VTA new transit plan since the transit plan is likely to be in force before construction of the project starts. Both bus and light rail lines will see significant changes.

It should also be noted that significant parts of the area are not served by transit according to City data.



Source: Modernizing Transportation Review, City of San Jose, AEP Conference, May 19, 2017, San Francisco

62- Existing congestion

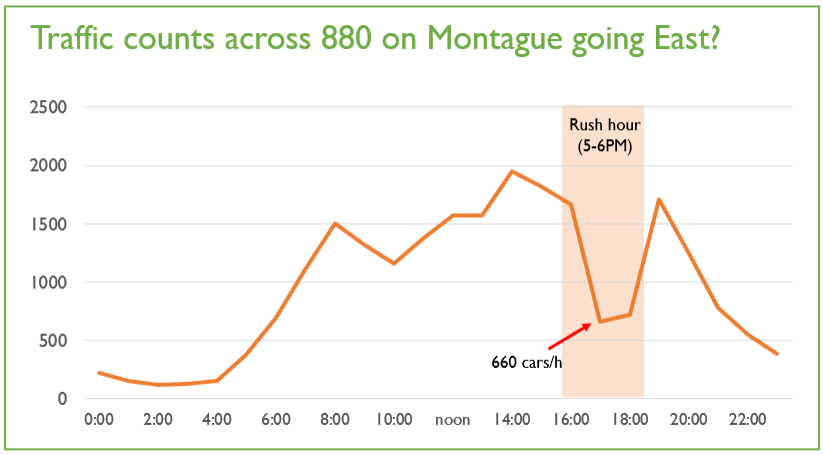
"There is a need to […] reduce the congestion on the adjacent interchange" (Appendix I, p. 6)

The most recent VTA CMP 20180 report does not identify any significant congestion on the Montague/880 intersection and Brokaw/880 operates on acceptable to good LOS B/D. It needs to be clarified what data the statement is based on.

63- Congestion

"The roadways [Montague and Brokaw] currently experience traffic congestion due to the large traffic volumes and reduced travel speeds and congestion along both roadways is projected to increase due to the planned development growth in the North San Jose area." (p. 42).

Traffic volumes especially on Montague during commute hours in commute direction is less than 700 cars/h total. Why is this considered large?



Benefit of the project

64- 30 seconds

"Travel times between the selected origins and destinations were projected assuming that it would take approximately 30 seconds to travel between Oakland Road and O'Toole Avenue via the proposed extension."

Given the length of the extension of 0.6 miles (DEIR p. vi) **this suggests that cars will go on average an unlikely 72 mph[16] on the Charcot extension –through the school zone and during commute hours**.

Google Maps shows the distance between Oakland Rd and O'Toole Ave as shorter (~2200 ft). This would still equal to an average speed of ~50mph not considering time needed to stop at a crosswalk or to then accelerate to 50+mph.

This seems unlikely and should be corrected.

Staff has indicated in the time since the publication of the DEIR that this is a typo. Please provide any calculations that are potentially affected by this assumption, especially but not limited to underlying calculations for table 3.17-11. DEIR so that it can be verified that there are no other "typos" in these calculations.

[16] 0.6 miles / .5 min = 1.2 miles / min = 72 miles / 60 min = 72mph

65- Travel time analysis

Table 12 "Reduction in Travel Times Due to Charcot Extension" should include travel times for bicycle use in order to allow for a multi-modal comparison and the impact of a mode shift on congestion.

- *"Walking and e-scooters can be good options for trips between a half and one mile long, while bikes are frequently used for trips between one and three miles long. The problem in most cities is that infrastructure is lacking because investments have favored car travel, making bike and scooter networks disconnected and potentially dangerous for people who would opt for these modes.*
- *But if some of those short trips could be switched from cars to bikes or scooters, cities would benefit greatly. And not all drivers, or even very many, would need to switch. Past studies, including of the London congestion zone when it was first implemented, have shown that a small mode shift of four to five percent could cut congestion by as much as 25 percent."*[17]

66- Google Maps

"The evaluation utilized Google Maps navigation to estimate current travel times during the morning and evening commute periods."

The use of Google Maps for the evaluation is surprising and does not meet necessary standards for an EIR. The City's traffic model should be used instead.

67- Reduction of congestion

"Decrease [in GHG] is the result of the reductions in congestion" (p. 79)

No data in the DEIR allows for the conclusion that the project would lead to a reduction in congestion. Statement needs to be substantiated. It also inconsistent with research.[18]

68- Reduction in automobile trips

"The reduction in length of travel routes will provide the opportunity to utilize walking and bicycling as an alternative travel mode and reduce automobile trips in the project area." (p. 42)

Please provide supporting facts for this statement. It does not seem to be supported by the data from the transportation analysis and given the fact that sidewalks are either missing or inadequate in many parts of the area.

69- Mode share

"The Extension includes bicycle and pedestrian improvements, including a new bike/ped connection over I-880, which will facilitate those modes of travel. Trips made by non-motorized modes instead of by motor vehicle have a direct benefit in terms of fewer GHG emissions." (p. 79/80)

The impact of the project on mode share has not been analyzed.

[17] https://cal.streetsblog.org/2019/09/16/bikes-and-scooters-could-replace-a-lot-of-car-trips-in-u-s-cities/
[18] http://cityobservatory.org/urban-myth-busting_idling_carbon/

70- Reduced congestion and reduced travel time

"The proposed Charcot Avenue extension will […] ***reduce traffic congestion*** *during peak commute periods […and] would* ***reduce travel time****." (Appendix K, p. 5).*

The analysis also recognizes on the same page:

"the State of California has recognized the limitations of measuring and mitigating only vehicle delay at intersections and in 2013 passed Senate Bill (SB) 743, ***which requires jurisdictions to stop using congestion and delay metrics****."*

It further writes:

"In adherence to SB 743, the City of San Jose has adopted a new Transportation Analysis Policy, Council Policy 5-1. The policy replaces its predecessor (Policy 5-3) and establishes the thresholds for transportation impacts under the CEQA based on vehicle miles traveled (VMT) instead of levels of service (LOS). ***The intent of this change is to shift the focus of transportation analysis under CEQA from vehicle delay and roadway auto capacity to a reduction in vehicle emissions, and the creation of robust multimodal networks that support integrated land uses****."*

Given the new focus of the State of California and of the City of San José, the analysis fails to explain why the noted reduction in congestion or travel time should be relevant or is beneficial under CEQA.

71- Use of the extension outside of a two-mile radius

"The use of the proposed extension is expected to be minimal outside of a two-mile radius" (p. 44)

This statement requires further explanation. Use of the extension is obviously difficult for someone who is two miles away.

Assuming the statement is meant to mean that drivers with start and end points that are more than two miles from the project will not use the extension, this would be inconsistent with statement made previously in the analysis that:

"Since the roadways in the area are congested during the morning and afternoon peak periods, commuters will drive longer distances to shorten their travel time."

And this would be true even for drivers coming from a longer distance. As more and more drivers are guided mobile driving apps such as Google Maps and Waze, which are also optimizing VHT not VMT, it seems logical that any driver in the area regardless of origin or destination will potentially use the Extension as long as it provides time-savings compared to Montague or Brokaw. Meaning usage of the Extension will increase till it is similarly congested as those roadways. [19]

72- Extension will reduce congestion

"The proposed Charcot Avenue extension will […] reduce traffic congestion during peak commute periods on Brokaw Road, Trimble Road, and Montague Expressway that currently serve as the primary east-west roadways and run parallel to the Charcot Avenue extension." (p. 6/8)

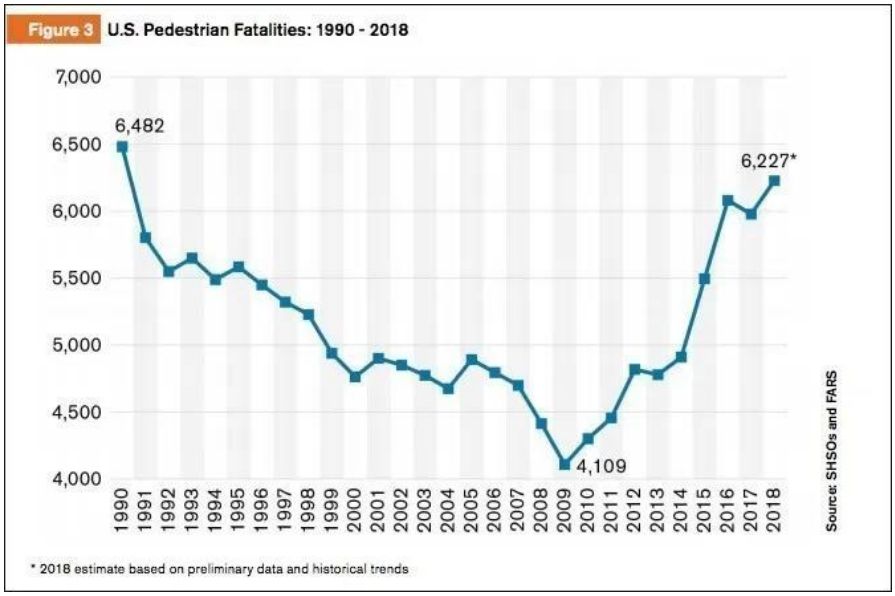
Statement is not substantiated as travel speeds on these roads are not included in the analysis.

[19] See also: https://www.theatlantic.com/technology/archive/2018/03/mapping-apps-and-the-price-of-anarchy/555551/

Pedestrian and bicylists impact

- *"A global status report[20] shows that road traffic injuries are now the single biggest cause of death for children and young adults"[21]*

- *"When we design streets to move cars as quickly as possible instead of prioritizing the safety of all people, the consequences can be deadly, especially for people walking. Between 2008 and 2017, drivers struck and killed 7,127 people walking in California. Over the past decade, the number of people struck and killed by drivers while walking increased by 35.4 percent nationwide, and in California, pedestrian deaths increased by 38.4 percent during this time period." (Deadly by Design)[22]*



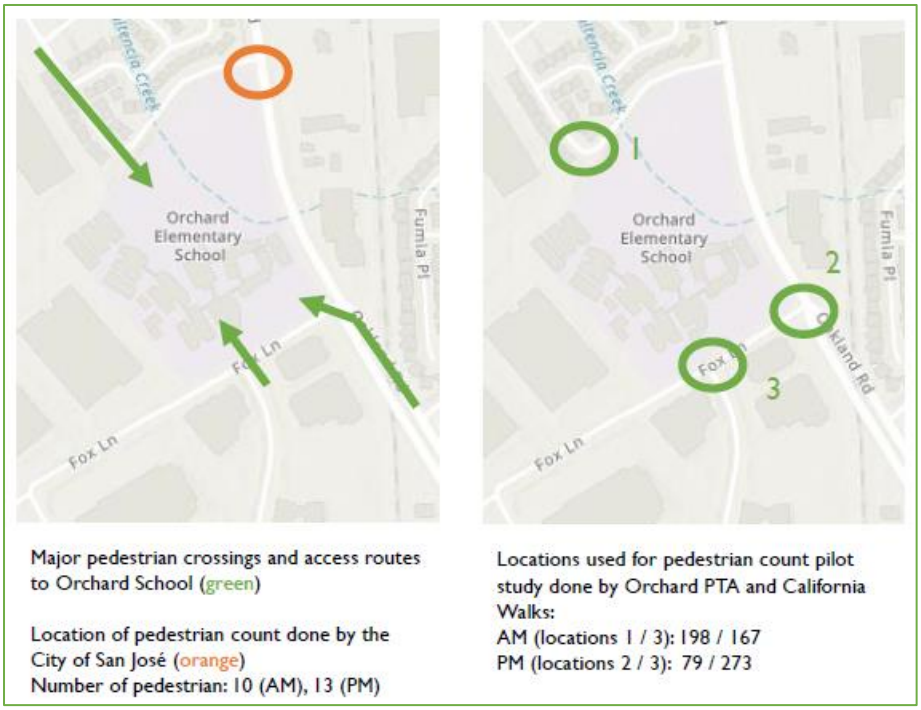
- *Source: "City to State: 'Distracted Pedestrians' is Not a Thing", September 2019[23]*

Given San José is a Vision Zero city, the impact on the safety of pedestrians and bicyclists in particular has to be considered in detail in the DEIR.

73- Pedestrian Counts

The location for the pedestrian counts (p. 148) is inconsistent with the area of heavy pedestrian activity described in the report (ie Fox Lane, Oakland Road south of Fox Lane, Silk Wood Lane near the school gate). A recent count at the school showed significantly higher pedestrian activity than what is disclosed in the report. A recent survey among students (October 2019) showed over 170 students walking to school.

[20] https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/
[21] https://theconversation.com/why-us-cities-are-becoming-more-dangerous-for-cyclists-and-pedestrians-111713
[22] https://smartgrowthamerica.org/app/uploads/2019/06/Dbd2019_State_CA.pdf also see: https://cal.streetsblog.org/2019/06/19/state-specific-data-shows-high-risk-for-california-pedestrians/
[23] https://nyc.streetsblog.org/2019/09/02/city-to-state-distracted-pedestrians-is-not-a-thing/



Major pedestrian crossings and access routes to Orchard School (green)

Location of pedestrian count done by the City of San José (orange)
Number of pedestrian: 10 (AM), 13 (PM)

Locations used for pedestrian count pilot study done by Orchard PTA and California Walks:
AM (locations 1 / 3): 198 / 167
PM (locations 2 / 3): 79 / 273

For a detailed discussion of pedestrian count methodology please refer to Attachment B – "Pedestrian Count".

74- Multi-modal traffic analysis / traffic analysis for bike-/pedestrian only overcrossing

The DEIR does not provide a multi-modal traffic analysis / traffic analysis for bike-/pedestrian only overcrossing. This is insufficient.

75- Pedestrian safety

"The installation of a traffic signal at the Paragon Drive and Charcot Avenue intersection will result in queues along westbound Charcot Avenue that may not be clearly visible to drivers travelling westbound along Charcot Avenue. Therefore, it is recommended that safety measures be implemented along with the new traffic signal at the Paragon Drive and Charcot Avenue intersection. The safety measures could include advance warning flashing beacons and signage that provide drivers with advance warning of the upcoming signal. In addition, the signal design should consider signal head placement and size to improve its visibility to drivers." (p. 21)

Since the analysis is ableto evaluate safety of vehicle users along the planned extension, the analysis should also include an analysis of the safety of pedestrians and bicyclists along the extension and include additional safety measures as described on p. 21:

And as demanded by the City's Transportation Analysis Handbook:

- *Private schools, community centers, libraries, parks, and other high pedestrian generators should be evaluated for pedestrian activities. These projects may be required to collect data on adjacent neighborhood streets and propose pedestrian crossing improvements, electronic speed limit signs, or other improvements if appropriate. These high pedestrian generators should also be evaluated for safe pedestrian access. Projects that add traffic to the adjacent streets may be required to implement improvements to*

improve pedestrian access to and from these community facilities" (Transportation Analysis Handbook, p. 31)

Especially since,

- *"new safety technologies in cars today have so far fallen short in protecting many outside the vehicle."*[24]

76- Pedestrian safety - visualizations

Based on the visualizations provided, it seems that the signs on the median at Silk Wood will restrict view of pedestrians.

How would slow moving pedestrian that are caught on the median activate the HAWK to continue crossing safely?

The visualization shows no pedestrian signals.

The visualization underlines the pedestrian safety challenges of the project as even in the drawing the two(!) pedestrians in crosswalk are not clearly visible.

77- Pedestrian crosswalk not visible for cars travelling on eastbound Charcot

"The extended queue along eastbound Charcot Avenue may not be clearly visible to drivers travelling eastbound along Charcot Avenue due to the vertical alignment of the Charcot Avenue overcrossing of I-880." (p. 195)

Queue for all alternatives would lead back to crosswalk. The statement implies that similarly pedestrians in the crosswalk would not be clearly visible to drivers travelling eastbound along Charcot Avenue due to the vertical alignment of the Charcot Avenue overcrossing of I-880. This is further supported by the DEIR statement:

[24] https://www.wsj.com/articles/u-s-roadway-deaths-decline-for-second-straight-yearin-2018-11571746206?mod=e2tw

"Due to the large projected traffic volumes and limited sight distance along Charcot Avenue, an uncontrolled crosswalk on Charcot Avenue at its intersection with Silkwood Lane is not recommended." (p. 30)

78- ADA compliance

The DEIR fails to address if slope on the overpass is ADA compliant.

The visualization shows a crosswalk across Silk Wood Lane that is not ADA compliant.

79- Response 34.22

"Irrespective of traffic volumes, pedestrians will continue to use the existing sidewalks along Oakland Road."

The response to the comment does not adequately address the concerns mentioned in the comment.

The comment asks for a measure of walkability similar which includes factors such as safety and place-making as referenced in the "San Jose Complete Streets Design Standards and Guidelines", "NACTO Urban Street Design Guide" [25], EPA's "Guide To Sustainable Transportation Performance Measures"[26] or as described by the graph below from Transport for London.[27]

80- Sidewalk circulation O'Toole

"The proposed design retains the current sidewalk circulation from Charcot Avenue to O'Toole Avenue south of Charcot." (Appendix B, Response 36.3)

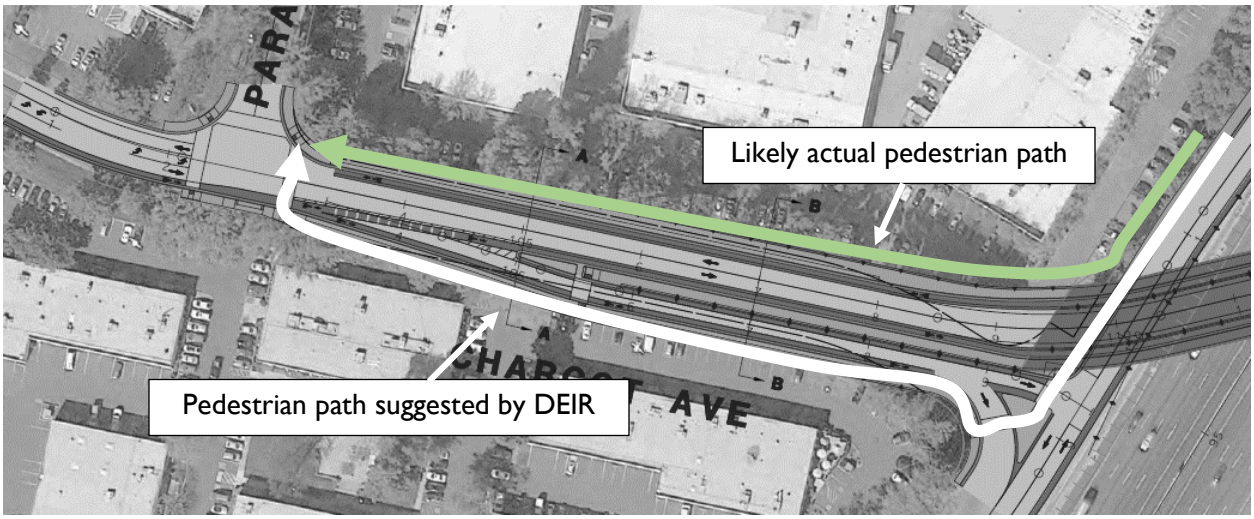
There is no sidewalk currently on Charcot Avenue.

[25] https://nacto.org/publication/urban-street-design-guide/design-controls/performance-measures/
[26] https://www.epa.gov/sites/production/files/2014-01/documents/sustainable_transpo_performance.pdf
[27] From: https://nyc.streetsblog.org/2019/11/01/exclusive-dot-will-track-road-carnage-caused-by-suvs/

Not providing a direct sidewalk connection from O'Toole southbound to Charcot westbound as mentioned in the comment to this response seems to violate General Plan policies and San Jose Street Design Guidelines.

The assumption that Pedestrians traveling southbound on O'Toole would use

"the new westside sidewalk, would cross under Charcot, and would continue southbound using the existing westside sidewalk along O'Toole" (response 36.7 – orange path in map below) instead of crossing through the business parking lot (green path in map below) to go west on Charcot seems not informed by any pedestrian experience.



81- Bike lanes on Brokaw

"Bicyclists, in particular, would be able to utilize existing bike lanes along Charcot Avenue as a faster alternative to bike lanes along Brokaw Road."

Why bicyclists, in particular? Which other users should be expected to use the bike lanes along Brokaw Road?

82- Bicycle and Pedestrian Circulation

"The current crossing of I-880 provided by Montague Expressway and Brokaw Road require lengthy travel routes from destinations within the immediate project area."

It should then also be noted that the new crossing of I-880 requires lengthy travel routes from destinations along Montague Expressway or Brokaw Road.

The only thing that the analysis provided in figure 14 proves is that the shortest distance between two points is a straight line. It should be replaced with a more detailed bike- and pedestrian usage analysis in the project area and for example include travel patterns from Oakland/Brokaw to Junction/Brokaw and Oakland/Montague to Montague/Seely.

"The travel route across I-880 would be reduced by only ¼-mile with the Charcot Avenue extension." (p. 40).

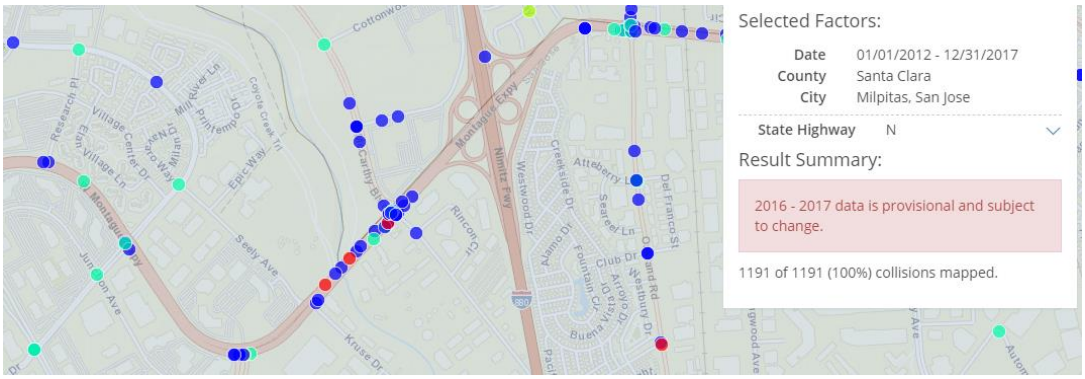
Please explain how the ¼ mile was calculated, figure 14 seems to indicate a reduction of 1.1 miles.

83- Mass access points to NSJ

"The three existing crossings also interchange with I-880, resulting in mass access points of regional traffic that make crossings for local traffic, bicycles, and pedestrians less ideal." (p. 13)

This reasoning that "access to I-880" makes the crossings less ideal is questionable as the volume and ease of use for bicyclists and pedestrians on these roads is much more likely a result of the roadway design: 6-8 lane wide fast moving arterial roads with limited space provided to bicyclists and pedestrians.

Based on data of past crashes recorded in the vicinity of the Montague/880, it seems that adjacent intersections are much more dangerous for all roadway users than the actual interchanges. Crashes seem to occur more frequently on road intersection similar to how the future intersections at Silk Wood/Charcot and Charcot/Oakland would be designed.



Source: Transportation Injury Mapping System (TIMS) by SafeTREC at UC Berkeley[28]

84- Pedestrian improvements

"A new pedestrian-only signal such as a HAWK beacon, would be installed along Charcot Avenue at Silk Wood Lane." (p. 10).

What other pedestrian-only signals are under consideration?

85- HAWK signal

*"Studies have shown that **97% of drivers comply** and yield to pedestrians at HAWKs" (San Jose Streets Smart "HAWK Pedestrian Signal Guide", p1)*

This means in turn **3% of drivers do not comply and yield to pedestrians**. Given that 13,900 cars will use Charcot every day by 2040 (DEIR, p. 157), this **equals to 417 cars per day[29] that will not comply with the HAWK signal and yield to pedestrians** in this school crossing. Does the EIR concur with this conclusion?[30] Other studies have seem to have shown even lower compliance rates.[31]

[28] https://tims.berkeley.edu/ also see: https://www.henshawhenry.com/san-joses-most-dangerous-intersections/
[29] (13,900 cars/day * .03 = 417)
[30] Also see: Godavarthy, R.P., Russell, E.R., Study of pedestrian hybrid beacon's effectiveness for motorists at mid-block pedestrian crossings, Journal of Traffic and Transportation Engineering (English Edition) (2016), doi: 10.1016/j.jtte.2016.01.007 ;
FHWA: Safety Effectiveness of the HAWK Pedestrian Crossing Treatment https://www.fhwa.dot.gov/publications/research/safety/10042/10042.pdf
[31] Federal Highway Administration "Pedestrian Hybrid Beacon Guide– Recommendations and Case Study", https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa14014/fhwasa14014.pdf

- *"One truck barreled on through the red light at the HAWK traffic signal that had been activated by pushing a button around 11 a.m. Thursday, signaling that all vehicles should stop for a pedestrian to cross the street near the Pittsburg County Courthouse. While other drivers stopped, the driver of the truck didn't even slow down. A similar situation occurred at the site of a second HAWK traffic signal on Carl Albert Parkway."*[32]

How will the HAWK signal be visible to drivers going South on Silk Wood Lane and turning right into Charcot?

NOTE: The HAWK signal is only activated when pedestrians are present.

86- Response 34.18

"If pedestrians activate the "walk" portion of the signal cycle, traffic is held until that phase is completed. At most intersections, activating the "walk" cycle results in an increase in traffic delay, as compared to when the "walk" signal is not activated."

Please explain at which intersections activating the "walk" cycle would not result in an increase in traffic delay. How much delay can be expected during AM peak and school start between 8 and 9 AM?

Please provide estimate pedestrian crossing times for all lane-configuration alternatives as:

- *"There are plenty of reasons not to widen roads. Not the least of which, as Klipp points out, is that wider roads mean drivers have to wait longer at intersections while pedestrians get across. Theoretically, road widening is supposed to add car throughput and capacity, but the increased time to walk further across negates this supposed advantage. In an email, Klipp stated "road widenings may do about as much harm to their intended purpose as any good, but they do certainly give people free license to drive faster in between signals, which makes streets less safe."*[33]

87- Detailed analysis of pedestrian and bicycling situation at the school

For an in-depth assessment of the pedestrian and bicycling situation at the school please refer Attachment H – "Report Orchard School Community Pedestrian and Bicycle Safety Training".

[32] https://www.mcalesternews.com/news/hawk-pedestrian-crossings-installed-some-drivers-ignoring-signals/article_e97b71fc-9995-11e7-a0be-c319d82642f6.html

[33] https://la.streetsblog.org/2018/08/28/luke-klipp-pedestrian-beg-buttons-exist-to-serve-people-in-cars

"The 'fundamental rule' of traffic: building new roads just makes people drive more"

(Joseph Stromberg, Vox.com, May 18, 2015)

Induced demand

88- Longer distances for shorter travel times

"The slight decrease in VHT and minimal increase in VMT is not abnormal since the TDF model is designed to reflect driver's behavior by minimizing the travel time of motorists rather than travel distance. Since the roadways in the area are congested during the morning and afternoon peak periods, commuters will drive longer distances to shorten their travel time." (p. 31/40).

The analysis should note that this behavior is exactly what the City of San José – with its focus on VMT – is trying to discourage.

The DEIR does not disclose if the traffic model incorporates changes brought upon by apps such as Waze which multiply the magnitude of the issue.[34]

89- Induced demand

"It is important to note that roadway improvement projects, unlike development projects, typically do not generate new vehicle trips that are added to the roadway system. Rather roadway improvement projects, such as the proposed project, provide additional roadway system capacity to accommodate traffic that is currently and projected to be on the roadway system regardless of the contemplated roadway improvement project." (p. 31)

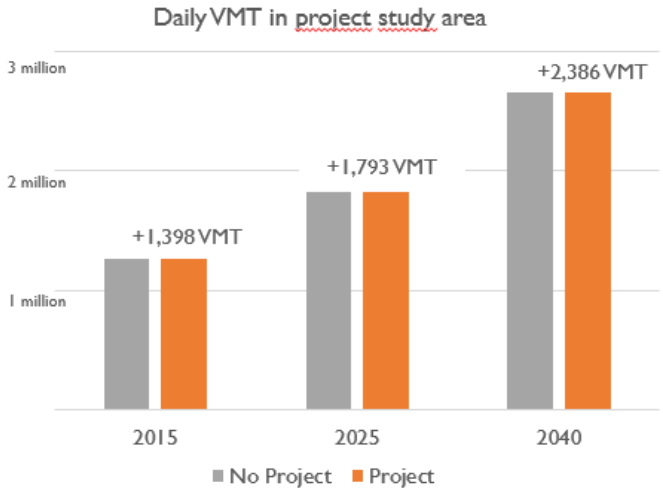
Charcot will increase daily cars usage measured in vehicle miles travelled (VMT) by ~1,400/day today and up to ~2,400/day in 2040.

This adds up to a total of ~16 million additional VMT driven between now and 2040.

NOTE:

City goal: Overall decrease of 40% in VMT/capita by 2040, Climate Smart furthers the goal to a 57% reduction by 2050

Traffic Analysis projects an increase by about ~1.4 million daily VMT (increase of 111% over 2015) for the area in the vicinity of the project alone.



This statement is not supported by the projects own traffic analysis (showing an increase in trips across 880 as well as in VMT), the City's traffic impact analysis handbook[35] nor extensive scientific research[36]:

[34] See "Google Apps Are Causing Gridlock" (Mercury News, 2 June 2018) or https://www.lamag.com/citythinkblog/waze-los-angeles-neighborhoods

[35] „*However, most other roadway projects, including building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future, may or may not induce additional vehicle travel. For example, adding an extra lane to an especially critical and congested link may leverage VMT growth far beyond that link, increasing VMT to a greater degree.*" (Transportation Impact analysis handbook)

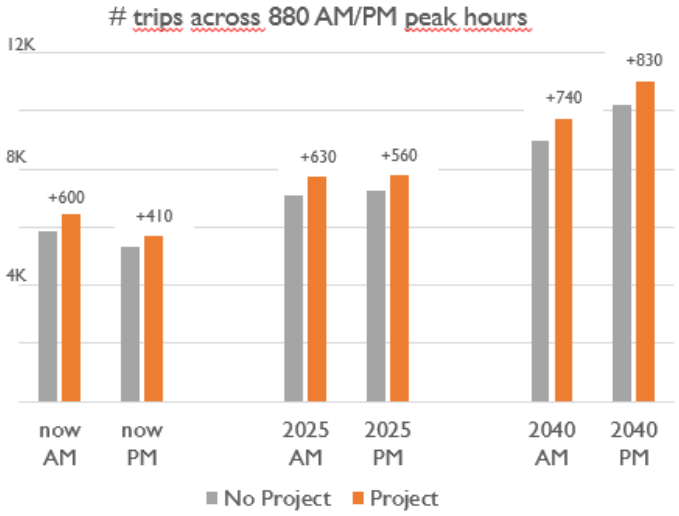
[36] https://www.vox.com/2014/10/23/6994159/traffic-roads-induced-demand

By evaluating traffic volumes on road segments crossing 880 with or without the Charcot Extension, induced demand from the project can be calculated.

"No project" represents crossings of 880 on Montague (segment 7 in the analysis) and Brokaw (segment 11).

"Project" represents crossings on Montague, Brokaw and Silk Wood/Charcot (segment 4).

The Charcot Extension will induce new trips which in turn is likely to create adverse impacts (e.g. additional GHG from additional trips)



Source: DEIR – Appendix K "Transportation Analysis", pages 34-36

19

San José DOT Transportation Impact Analysis guidelines state:

- *"**Shortly after the project becomes operational, induced VMT may occur where road users respond to an initial appreciable reduction in travel time. With lower travel times, the modified facility becomes more attractive to travelers, resulting in four short-run trip-making changes: (1) longer trips; (2) changes in route choice; (3) changes in mode choice; and (4) newly generated trips.** Longer trips may occur because the ability to travel a long distance in a shorter time increases the attractiveness of destinations that are further away, increasing trip length and VMT. Changes in route choice may occur immediately when faster travel times on a path attract more drivers to that path from other paths, which can increase or decrease VMT depending on whether it shortens or lengths trips. Changes in mode choice may also occur in the near-term when travelers respond to a reduction of personal motorized vehicle travel time by shifting toward personal motorized vehicle use from other modes. Newly generated trips may occur when an individual who previously did not have a travel need might have one because of increased speed and decreased travel time. The short-run effect of a project on induced VMT, measured in percent change in total VMT, is evaluated for a project." (TIA, p. 49)*

As Mayor Liccardo writes:

> *"Building fewer cars may well reduce traffic, but building more roads won't. Why? What economists call "induced demand" governs behavior of motorists with an iron fist: by providing more of a public good — i.e., a road — without charging for its use, consumers will happily use more of it. The outcome: more traffic. In 2014 for example, Los Angeles spent more than $1 billion on a five-year project to widen the 405 freeway to add a lane, only to learn that traffic moved one minute slower as a result. Beyond the inefficacy of freeway expansions, the more obvious cost and physical constraints pose sufficiently formidable barriers to road-widening projects — "they're not making any more land," according to Mark Twain — to send us looking for alternatives.*
>
> *Alas, all good intentions of city building and traffic planning bump up against this seeming paradox: we can't simply build our way out of a traffic congestion problem. That isn't to say we don't need to invest in*

our roads; indeed, we can make our roadways more efficient and effective for all modes of travel, and Measure B will provide some relief in key intersections and freeway interchanges that create choke-points. We can also certainly improve our roads' maintenance, reliability, and safety. ***But more freeway lanes and bigger roads consistently fail to deliver much relief to aggrieved commuters, and worst of all, they fail at a high cost.***"[37]

And research agrees:

- *"Reduced congestion leads to more driving, and that induced and suppressed demand "are critical considerations when assessing the emissions effects of capacity-based congestion mitigation strategies. Capacity expansions that reduce marginal emissions rates by increasing travel speeds are likely to increase total emissions in the long run through induced demand." ("Congestion and emissions mitigation: A comparison of capacity, demand, and vehicle based strategies")*[38]

- *"The fundamental reason is that state and local governments often only view new or wider roads as the right intervention to improve LOS. Major urban road mileage rose by 77 percent from 1980 to 2014 (a total of 169,153 lane miles), compared to 41 percent growth in U.S. population. As the number of lane miles grew, urban residents drove more, and vehicle miles traveled (VMT) on major urban roads grew by 146 percent over the same period. This phenomenon is best explained by the concept of "induced traffic," which states that more roadways just means more miles traveled via car." ("Stop trying to solve traffic and start building great places", Brookings Institute)*[39]

> Induced travel does not necessarily result from people making more or more frequent *trips*. Rather, the term refers to the overall amount of travel that is undertaken. Lay-people and transportation professionals often refer inadvertently to changes in "trip-making" when discussing induced demand (*e.g.* "induced trips"). At best, such references are a kind of shorthand used by professionals who may thoroughly understand the issue, but find such terminology easier to manage in discussions among themselves. More commonly, though, use of such terminology may suggest that the user does not have a good grasp of the subject. For example, one frequently hears the notion expressed "I don't believe induced travel is real, because it defies logic that people will make more trips simply because travel time is reduced." Such an expression shows that the speaker confuses induced travel as a phenomenon of discrete trips, rather than aggregate travel.

Source: Gorham, R. Demystifying Induced Travel Demand. Sustainable Urban Transport Document #1

Also see:

- *"Generated Traffic and Induced Travel Implications for Transport Planning" 18 March 2019 Todd Litman Victoria Transport Policy Institute (https://www.vtpi.org/gentraf.pdf)*
- *Cervero, Robert, and Mark Hansen. 2002. "Induced Travel Demand and Induced Road Investment." Journal of Transport Economics and Policy, 36(3): 469–90*
- *Research Brief: Effects on VMT of adding roadway capacity (Caltrans/National Center for Sustainable Transportation, 2p): Increasing Highway Capacity Unlikely to Relieve Traffic Congestion*

[37] https://medium.com/@SamLiccardo/one-look-back-four-years-forward-transportation-f0f13f069995
[38] https://www.sciencedirect.com/science/article/pii/S1361920912000727
[39] https://www.brookings.edu/blog/the-avenue/2019/03/20/stop-trying-to-solve-traffic-and-start-building-great-places/

http://www.dot.ca.gov/research/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf

- *Research Brief: Effects on VMT of adding roadway capacity (CA Air Resources Board, 10p): Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions Policy Brief https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf*
- *Research Brief Technical Background Document: Effects on VMT of adding roadway capacity (CA Air Resources Board, 10p): Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions Technical Background Document https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_bkgd.pdf*
- *Fulton, L.M., R. B. Noland, D.J. Meszler, J.F. Thomas. 2000. A Statistical Analysis of Induced Travel Effects in the U.S. Mid-Atlantic Region. Journal of Transportation and Statistics, 3(1): 1-14*
- *Cervero, R. 2002. Induced Travel Demand: Research Design, Empirical Evidence, and Normative Policies. Journal of Planning Literature, 17: 3-20.*
- *Cervero, R., J. Kang, and K. Shively. 2009. From Elevated Freeways to Surface Boulevards: Neighborhood and Housing Price Impacts in San Francisco. Journal of Urbanism, 2(1): 31-50*
- *Hunt, J.D., A.T. Brownlee, and K.J. Stefan. 2002. Responses to the Centre Street Bridge Closure: Where the "Disappearing" Travelers Went. Transportation Research Record, 1807: 51-58.*
- *Noland, R.B. and L.L. Lem. 2002. A review of the evidence for induced travel and changes in transportation and environmental policy in the US and the UK. Transportation Research D, 7: 1-26.*
- *Alison Cassady, Tony Dutzik and Emily Figdor (2004), More Highways, More Pollution: RoadBuilding and Air Pollution in American's Cities, U.S. PIRG Education Fund*
- *Phil Goodwin and Robert B. Noland (2003), "Building New Roads Really Does Create Extra Traffic: A Response to Prakash et al.," Applied Economics*
- *David T. Hartgen and M. Gregory Fields (2006), Building Roads to Reduce Traffic Congestion in America's Cities: How Much and at What Cost? Reason Foundation*
- *Martin Mogridge (1997), "The Self-Defeating Nature of Urban Road Capacity Policy; A Review of Theories, Disputes and Available Evidence," Transport Policy, Vo. 4, No. 1, pp. 5-23*
- *Han van der Loop (2014), The Latent Demand In Road Traffic, KiM Netherlands Institute for Transport Policy Analysis*
- *"What's Up With That: Building Bigger Roads Actually Makes Traffic Worse" Wired, June 2014*[40]

The resulting additional use of energy because of the project should be considered a significant unavoidable impact.

[40] https://www.wired.com/2014/06/wuwt-traffic-induced-demand

90- City of San Jose Travel Demand Forecasting Model (TDF)

"The model has the ability to estimate the diversion of traffic and change in traffic patterns due to roadway/transit system changes similar to those proposed by the Charcot Extension." (Appendix K, p.8)

Does the TDF have the ability to simulate and estimate "induced demand" as described in the TIA or does it only account for diverted traffic[41]? City staff at the community meeting indicated it might not account for induced demand.

Does the model incorporate higher VMT from increased TNC usage?[42]

Does the model address issues arising from the Braess Paradox?[43]

Source: "Inside the Blackbox – Making Transportation Models Work for Livable Communities"

According to the CA OPR:

- *"Whenever employing a travel demand model to assess induced vehicle travel, any limitation or known lack of sensitivity in the analysis that might cause substantial errors in the VMT estimate (for example, model insensitivity to one of the components of induced VMT described above) should be disclosed and characterized, and a description should be provided on how it could influence the analysis results. A discussion of the potential error or bias should be carried into analyses that rely on the VMT analysis, such as greenhouse gas emissions, air quality, energy, and noise."*[44]

The DEIR fails to disclose any limitations or sensitivity of the model as described above or for example in:

- *Edward Beimborn, Rob Kennedy and William Schaefer (1996), Inside the Blackbox: Making Transportation Models Work for Livable Communities, Center for Urban Transportation Studies University of Wisconsin-Milwaukee*[45]
- *Petter Næss, Morten Skou Nicolaisen and Arvid Strand (2012), "Traffic Forecasts Ignoring Induced Demand: a Shaky Fundament for Cost-Benefit Analyses," European Journal of Transport and Infrastructure Research, Vol. 12 (3), pp. 291-301*

[41] "Highway expansion advocates generally ignore or severely understate generated traffic and induced travel impacts. For example, Cox and Pisarski (2004) use a model that accounts for diverted traffic (trips shifted in time or route) but ignores shifts in mode, destination and trip frequency." https://www.vtpi.org/gentraf.pdf, p. 24

[42] https://www.citylab.com/transportation/2019/08/uber-lyft-traffic-congestion-ride-hailing-cities-drivers-vmt/595393/

[43] https://en.wikipedia.org/wiki/Braess%27s_paradox

[44] [44] See "Technical Advisory - On Evaluating Transportation Impacts In Ceqa", OPR April 2018

[45] https://www4.uwm.edu/cuts/blackbox/blackbox.pdf

91- Self-driving vehicles

In the context of a potential future of fleets of automated vehicles the impact of providing additional roadway capacity for empty cars has not been evaluated and is likely not yet integrated in the City's traffic model.

- *"New research shows that semi-automated technology like Tesla's autopilot is already increasing travel. Immediate intervention is necessary to ensure this technology benefits the public. In a worst-case scenario, researchers and transportation experts fear a future where self-driving cars are mostly privately owned, powered by gasoline, and priced for only upper-income populations. Automated vehicle owners might move further out of the urban core, worsening gentrification and urban sprawl. They would likely send empty cars home to park rather than paying to park at their destination, resulting in increased traffic congestion and pollution. Middle and low-income populations might become further disadvantaged in accessibility to transportation if private driverless cars are unaffordable." (Kelly L. Fleming, policy analyst at UC Davis in the Policy Institute for Energy, Environment, and the Economy, and a 2019 alumni of the Clean Energy Leadership Institute Fellowship Program)*[46]

[46] https://earther.gizmodo.com/uber-and-lyft-induced-congestion-give-a-preview-of-driv-1838489742 also see: https://theconversation.com/safe-efficient-self-driving-cars-could-block-walkable-livable-communities-103583

VMT analysis

92- VMT Screening

The DEIR determines:

"Per San Jose Transportation Analysis Policy 5-1, the project is presumed to have less-than-significant transportation impact and is screened from a detailed CEQA transportation analysis."

This determination is omitting key parts of the policy and misreading the parts it applies.

The policy exception seemingly applied by the analysis is the following

"Through Lanes: Addition of roadway capacity on local or collector streets provided the project substantially improves conditions for pedestrians, cyclists, and/or transit" (Appendix K, p. 7).

Yet, the policy only speaks of roadway capacity <u>on</u> [meaning existing] streets. As the analysis itself state, the project will provide a new connection, not add on to an existing (also see discussion of Alternative B – widening of Montague or Brokaw). Considering the building of a new connection as adding capacity on a local or collector street is false interpretation of the policy.

Further the City policy itself states:

- *"However, most other roadway projects, including* ***building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future,*** *may or may not induce additional vehicle travel. For example, adding an extra lane to an especially critical and congested link may leverage VMT growth far beyond that link, increasing VMT to a greater degree. […]Therefore, projects that* ***will likely lead to additional vehicle travel should not be presumed to have less-than-significant impacts.****" (Transportation Impact Analysis Handbook).*

In conclusion, the project needs to include a complete VMT analysis under CEQA based on City guidelines and is not screened for a detailed CEQA transportation analysis.

93- Sphere of Influence

- "The sphere of influence of a project is defined as the area in which driving patterns are expected to change due to the project." *(City of San José Transportation Analysis Handbook, p. 53)*

There is no explanation why a 1.5 mile radius was chosen as a sphere of influence. It seems to argue that the project will have no impact on travel from Berryessa to North San José or beyond the radius into Santa Clara. There is no evidence to support this assumption.

VMT analysis Sphere of Influence analysis seems to include highways 101 and 880. There is no explanation on why traffic on these highways is relevant to the project.

The analysis itself later assumes a 2 mile radius as Sphere of Influence. (p. 44)

It should also be noted that the threshold for general plan amendments is any increase in "VMT per service population over current 2040 General Plan conditions".

- *State guidance on VMT analysis seems to indicate that using a "multiplier" would be a more appropriate way of determining additional VMT than the transportation demand model (TDM) used here. "OPR recommends applying elasticities directly from the academic research in order to assess induced*

VMT. Doing so not only bypasses the model noise and impact area dilemmas described above, it also captures the effects of land use change as required by CEQA and which travel demand models cannot capture." (California Senate Bill 743 Implementation Assistance Project Using Vehicle Miles Traveled to Evaluate Transportation Impacts in CEQA: Case Study Examples and Insights - Summary of SR 210 Case Study, p5)

94- Lane miles added

Please explain how the 1.0 lane miles were calculated. As discussed above, the length of the total project seem to be closer to 0.5 than 0.6 miles. Since roadway already exists between Paragon and O'Toole as well as on Silk Wood Lane. The actual lane miles added seem to be about 0.56 miles.

95- Total lane miles added

Please provide a source for the statement that Santa Clara County will add 170 miles of roads.

96- Increase for roadways in Santa Clara County

The analysis fails to analyze the impact on roadways in Santa Clara County as demanded by Transportation Analysis Policy. The VMT analysis should cover both Sphere of influence Total VMT and the Countywide Total VMT.

97- Total lane-miles within a 1.5-mile radius

The report needs to specify which lane miles exactly were counted, e.g. was internal circulation in Casa del Lago counted for this purpose and why would that be relevant to the analysis.

98- Negligible increase in VMT

"The model results show that the proposed Charcot extension would result in only a ***negligible*** *increase"* (p. 16).

Please define negligible as the project will add approximately 16 million VMT to San José's street between now and 2040.

99- Significance criteria in City of San José Transportation Analysis Handbook

The VMT significance criteria used for the project are based on the SJ Transportation Analysis Handbook. The criteria in the TA handbook are based on "*Plan Bay Area 2040, the long-range Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) for the San Francisco Bay Area*"[47]

The California Air Resource Board "*Staff Report on Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets*" illustrates that Regional Transportation Plans and Sustainable Communities Strategies will fall short of achieving the GHG reductions research says are needed to achieve climate stabilization, so OPR recommends not basing transportation project thresholds on those documents.[48]

The significance criteria used in the DEIR therefore might not comply with state goals for GHG reductions.

[47] http://www.sanjoseca.gov/DocumentCenter/View/76537, p. 52

[48] See "TECHNICAL ADVISORY - ON EVALUATING TRANSPORTATION IMPACTS IN CEQA", OPR April 2018

Roadway segments

100- Roadway segment analysis

The analysis needs to be finer grained so that the impact of the project can be adequately assessed. Traffic volumes for the following roadway segments are missing:

- Montague between Trimble and Seely
- Brokaw east and west of Ridder Park
- Brokaw Montague east west of 880
- Dado street

The HOV lane on Montague should be analyzed independently of the general purpose lanes as speed, vehicle and passenger volumes are likely to be different.

101- Traffic east of Oakland

The analysis fails to include any evaluation on the impact of the roadway network east of Oakland Road for example Ringwood, Wayne, McKay, Trade Zone. Some of these roads were even included in the traffic counts but excluded from the further analysis without explanation.

102- Roadway connections outside of the immediate area

A comparison of ADT by travel direction on parallel roadways suggests that each day many more people travel westbound than eastbound.

	westbound ADT	eastbound ADT	Diff
Charcot east of Junction	5,100	2,500	**2,600**
Brokaw east of Junction	21,700	15,100	**6,600**
Trimble east of Junction	12,700	10,900	**1,800**
Montague east of Seely	29,600	23,000	**6,600**
Total	**69,100**	**51,500**	**17,600 (25%)**

It is improbable that every day 25% of the vehicles who enter North San José from the East don't return. It is more likely that they use alternative travel routes such as Tasman Dr, 237, 101 to return. This shows that travel patterns are much more regional than suggested by the traffic analysis.

This further means that drivers who currently use Tasman to travel eastbound might switch back to Charcot if it improves their travel time. Therefore, a much wider area of roadway segments needs to be analyzed to understand the full impact of the Project.

103- Charcot between SR 87 and N 1st

"The information about project-related changes in traffic volumes along all segments of Charcot Avenue is contained in Section 3.17, Transportation" (Appendix B, Response 22.1)

Statement is not true. The segment of Charcot Avenue between SR 87 and N 1st street (as addressed in the comment *"Can you comment on additional traffic connecting Charcot using this extension coming from 87 (the other end of Charcot)."* is not contained in Section 3.17, Transportation.

104- Freeway on ramps

"The improvement of access to and from I-880 also would provide minimal benefit to operations along Brokaw Road and Montague Expressway due to congestion on the freeway mainline that restricts flow onto the freeway." (Appendix K - p. 43)

There seems to be no evidence in the project's traffic study, VTA CMP reports, CalTrans data, Google Map data or personal observation that freeway on-ramps to 880 from Montague or Brokaw are close to being congested to a point where it would restrict traffic on those roads. Please provide data to support this statement.

It should also be noted that congestion on freeway on ramps might be caused by outdated design standards not compatible with current higher speed limits.[49]

105- Impact on 880

Since a main purpose of the project is to improve traffic flow across as well as to and from and 880, segments of 880 including on- and off-ramps need to be included in the roadway segment analysis.

106- Segment 11

Segment 11 is described as Montague Expressway between I-880 and Oakland Road. Figure 10 indicates the measurement as taken at the I-880 location – not east of it. This traffic count could be significantly affected by merging and on- and off-ramp movements and measurements need to be re-taken at a more appropriate location in that segment.

107- Inconsistency with Traffic Analysis for San José General Plan

The traffic analysis for the Charcot Extension states an ADT of 45,200 for Brokaw Road west of Oakland Road in 2040 (p. 36).

In the traffic analysis prepared for the 2016 General Plan update (http://www.sanjoseca.gov/DocumentCenter/View/62223) the same segment (there described as Brokaw Road between I-880 and Ridder Park) is estimated to have an ADT of 81,500 (p.16). This is inconsistent and requires further explanation. Other roadway segments analyzed in both documents show similar inconsistencies.

108- Inconsistency with other traffic studies

The traffic analysis for the Charcot Extension states an ADT of 23,500 for Oakland Road between Brokaw Road and Silk Wood Lane.

A 2019 traffic study states ADT for Oakland north of Brokaw as 24,500.[50] This is a difference of almost 5%. If traffic volumes are indeed 5% higher than stated on all road segments this would also influence other parts of the EIR especially noise and air quality. The discrepancy needs to be further examined.

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[49] "I'll say that most interchanges in San Jose are horribly designed. they were all designed for a time when we had 80% less people and 40mph speed limits. that means inefficient cloverleafs, short merges, quick exits after interchanges, etc. they're all bad here", https://www.reddit.com/r/SanJose/comments/crwtik/worst_freeway_merge_in_bay_area/exab7p9/

[50] https://sanjose.legistar.com/View.ashx?M=F&ID=6991589&GUID=4162B631-2102-40B8-817A-985D33F1002A, p. 9

109- Year 2025 Conditions (p. 8)

"The Year 2025 traffic volumes were developed via interpolation of existing and forecasted Year 2040 General Plan Buildout traffic volumes."

Please describe the interpolation used in detail. The data in the analysis seems to suggest that a non-linear interpolation was used.

110- Peak hour volumes

The analysis uses arbitrary peak volume numbers for e.g. Montague. The volume chosen is neither during the most congested time nor the highest volume during the day.

111- Focus on peak hours

The focus of the traffic analysis on peak hour traffic is inadequate according to SJ Streets Design Guidelines:

- *"Additionally, designing to accommodate only peak hour delay should be used carefully since it can result in intersections* ***being overdesigned for the other non-peak hours of the day*** *and weekends when there are lower levels of traffic and, often, higher levels of walking and biking activity. For delay analysis, peak period (not peak hour) and off-peak period traffic movements should be analyzed. In addition, multimodal factors of person delay, reliability, safety, and comfort shall be analyzed."*

The Project for Public Spaces writes:

- *"Worse yet, many designers size a road or intersection to be free-flowing for the worst hour of the day. Sized to accommodate cars during the highest peak hour, such streets will be "overdesigned" for the other 23 hours of the day and will always function poorly for the surrounding community."*[51]

112- Direction of travel

The analysis provides data only on roadway volumes but for most parts omits information on the distribution of these volumes per direction. Given that regional traffic pattern through the area are highly imbalanced an analysis per direction is necessary to evaluate if the assumed traffic volumes can be realistically handled by the infrastructure. E.g. a PM peak hour volume of 3,390 vehicles on a two-lane roadway (Charcot East of Junction, 2040) seems improbably high given typical max lane capacities as identified by National Association of City Transportation Officials (NACTO)[52].

[51] https://www.pps.org/article/levels-of-service-and-travel-projections-the-wrong-tools-for-planning-our-streets
[52] https://nacto.org/publication/transit-street-design-guide/introduction/why/designing-move-people/

113- Jump in volume within a corridor

The data by direction is also necessary to understand sudden jumps in traffic volumes along corridors as for example

Intersection	First		Zanker		Junction		Paragon		Oakland
Volume between intersections		2,390		1,480		2,050		1,490	
			(-910)		(+570)		(-560)		
	WEST			← CHARCOT →					EAST

#	Roadway	Location	AM	
			Year 2040	Year 2040+ Project
1	Charcot Avenue	East of 1st Street	2,150	2,390
2	Charcot Avenue	East of Zanker Road	920	1,480
3	Charcot Avenue	East of Junction Avenue	1,020	2,050
4	Silkwood Lane	West of Oakland Road	120	1,490

This is also required by the SJ TIA "Uneven lane demand and usage"; (Transportation Analysis Handbook, p. 28)

114- Volume to capacity ratio in east-west corridors

The analysis seems to assume wildly varying volume to capacity ratios for the roadway segments especially on Montague, Brokaw and Charcot under 2040 conditions. This is improbable and requires further explanation (Appendix K, p. 36)

For example, Charcot East of Junction as a 2-lane road will supposedly handle traffic volumes similar to Trimble or Brokaw which are 6-lane roadways.

Segments west of Oakland	Volume PM Peak 2040	# of lanes	Volume / lane
Charcot	1,720	2	860
Brokaw	3,630	6	605
Montague	5,560*	8	695

Segments east of Junction	Volume PM Peak 2040	# of lanes	Volume / lane
Charcot	3,390	2	1,695
Brokaw	3,940	6	657
Trimble	3,990	6	665

115- Comparison to Montague and Brokaw

"The use of the proposed extension is expected to be minimal outside of a two-mile radius since other roadways, including Montague Expressway (8-lane roadway) and Brokaw Road (6-lane roadway) will continue to provide greater capacity and speed limits than the proposed two-lane roadway extension." (p. 44)

This statement confuses theoretical capacity with actual traffic volumes. According to the traffic counts for this project Montague carries less than 700 cars/h on all of its three to four[53] eastbound travel lanes combined. The traffic analysis assumes a much higher vehicle volume for Charcot at the same time. Meaning Charcot will supposedly have a greater capacity than Montague Expressway.

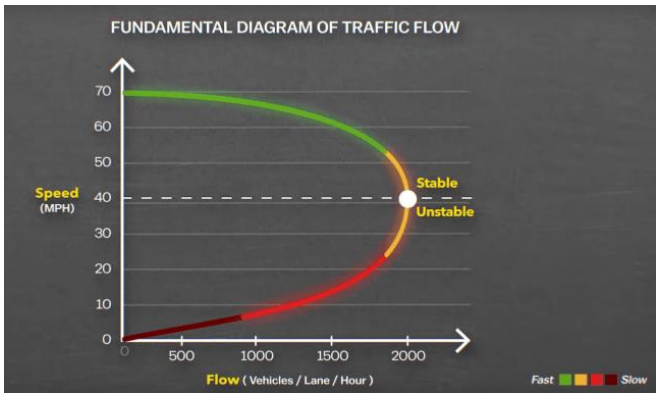
Although Montague may theoretically provide a higher speed and speed limit, the traffic count shows that eastbound traffic on Montague is crawling at less than 5.7 miles per hour during the commute time (5-6PM). Since the DEIR assumes an average travel speed of 25 miles per hour for the Charcot Extension (source: Air Quality Analysis), 1-lane Charcot would supposedly provide not only higher eastbound traffic capacity but also higher speeds than 4-lane Montague.

This seems unrealistic and should be re-evaluated. It is also inconsistent with the statement above.

116- Traffic data for 2040 for Montague Expressway

Travel speed and road way capacity/flow are dependent on each other. Traffic moving at roughly 40 mph provides the greatest capacity for a road/highway. In case of slower moving traffic (congestion) roadway capacity shrinks dramatically (see Graph "Fundamental Diagram of Traffic Flow" below).

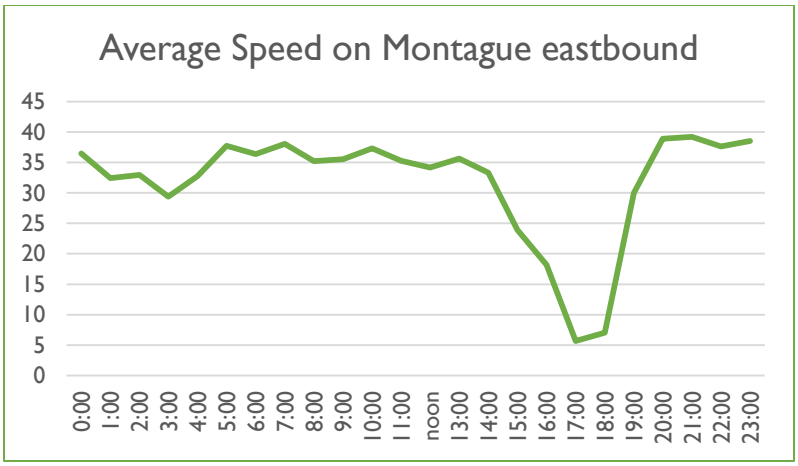
- *"the fundamental defining relationship of our field, the speed-flow curve. This shows that the more traffic uses a road, the slower it goes, the effect becoming more and more severe as the traffic flow approaches the maximum capacity of the network, until finally overload is so extreme that all vehicles are unable to move."*[54]



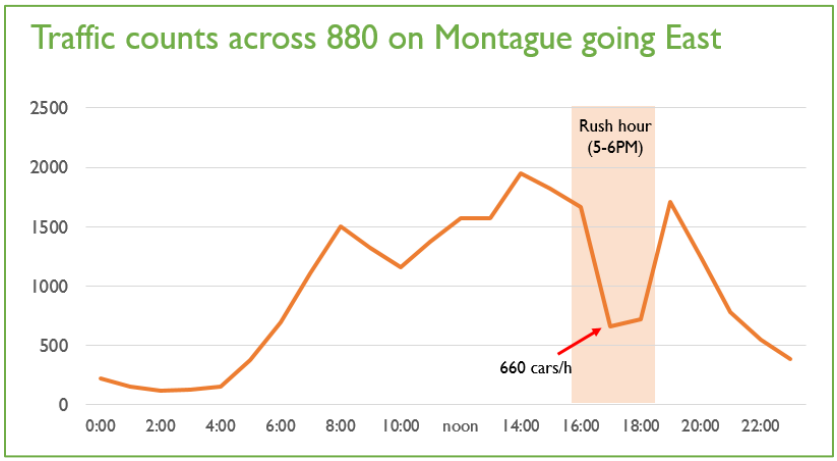
Source: Washington State Department of Transportation[55]

The current traffic counts shows average speeds on Montague are dropping dramatically during peak hours (5-6pm): the road becomes congested.[56]

[53] Depending on Expressway location.
[54] From: P B Goodwin "Inaugural Lecture For The Professorship Of Transport Policy University College London" https://discovery.ucl.ac.uk/id/eprint/1244/1/2004_22.pdf p. 2
[55] Also see: http://cityobservatory.org/backfire_wider_worse_traffic/
[56] The following analysis focuses on eastbound traffic from NSJ towards Milpitas and Berryessa.



Given the relationship between speed and flow discussed above, flow/capacity on Montague drops dramatically as well.



This implies that if the Project is able to improve conditions on Montague (i.e. faster flow), traffic volumes would increase, since flow improves.

Yet, the traffic analysis postulates the opposite. The traffic analysis says with the Project volumes on Montague during peak hour will fall even below current levels.[57]

Also, the analysis projects a doubling of traffic during peak hours on Montague. It is unclear how the Expressway is able to handle volume in 2040, given that it is not able to handle volume now.[58] The same is true Brokaw.

[57] This in turn suggests that traffic would be crawling at an even slower speed.
[58] It seems that the current maximum capacity of Montague Expressway EB seems to be roughly below 2000 cars/hour. Adding vehicle above this numbers lead to breakdown of traffic and a dramatic reduction in speed, flow and capacity.

This questions the validity of the traffic model itself since the model seems to operate with theoretical capacity limits that are significantly above the capacity limits experienced in practice.

- *"The practical experience with widening I-5 shows that eliminating bottlenecks in one place simply leads to the more rapid congestion of the next downstream bottleneck, and ironically, lower throughput on the freeway system. It might seem paradoxical that highway engineers would allow this to happen, but if you're more interested in generating excuses to build things, rather than actually managing traffic flows, it makes some sense. As we've argued before, it seems as if highway engineers treat the sisyphean aspects of perpetually chasing bottlenecks, not as a bug, but as a feature. To them, the fact that widening one stretch of freeway to eliminate one bottleneck simply creates another one is a guarantee of permanent employment, not a fundamental flaw in engineering practice."*[59]

117- Traffic from South Bay Islamic Association (SBIA)

Heavy traffic on Friday afternoons coming from presumably the South Bay Islamic Association (SBIA) at 2345 Harris Way, San Jose, CA 95131 coincidences with school end times. The impact of this potential conflict outside of typical peak hours needs to be assessed.

118- Increase in traffic on Paragon Drive south approach

The intersection analysis projects an increase in traffic at the Paragon Drive south approach. This is a driveway. Please specify why the model would assume an increase at this location since there seems to be no connected development or land-use change projected at this location.

A possible explanation of the change might be different circulation in the business park due to the projects impact. If that is the case, please provide a more detail local circulation analysis.

119- Projected truck traffic

"Truck traffic on the proposed Charcot extension is anticipated to be limited to only those trucks originating from or bound for destinations along Charcot Avenue between Oakland Road and Zanker Road." (p. 44).

Statement omits trucks originating from or bound for destinations along Oakland Road between Montague and Brokaw.

It also requires further explanation why truck drivers would behave differently from other drivers and not try to use the extension if the extension could provide time savings – even if it increases travel distances.

The truck traffic analysis also fails to acknowledge any change in traffic patterns due to the relocation of the Super Micro Loading dock that will be necessary because of the project.

And while the extension might not provide direct access to US 101, I-680 or I-880, it does provide direct access to SR 87.

Instead of using average truck traffic in the area as baseline, it might be more accurate to use the truck traffic percentage of roads connecting to Charcot (such as O'Toole, Paragon) to estimate future truck traffic on the Extension.

[59] http://cityobservatory.org/backfire_wider_worse_traffic/

120- Truck traffic volumes

The report should note that roadways adjacent to the project's western limit (segments 3, 23, 24, 25) have on average a much higher truck traffic volume than other roadways. (p. 142)

121- Projected speeds

*"Therefore, an evaluation of **projected** ADT and **speeds** on roadway segments in the project area also was completed using existing and projected traffic volumes without and with the proposed roadway extension."*

This evaluation of projected speeds on roadway segments is not included in the analysis and needs to be added.

122- Response 24.1 – Beneficial LOS impact

"In general, the proposed project would have beneficial impacts on the level of service for existing roadways in the project area"

This is not an environmental impact under CEQA and should not be considered as part of the DEIR.

123- ADT Conclusion

*"The **evaluation of roadway segment ADTs indicate** that the Charcot extension **will result in additional roadway system capacity** and reduce traffic volumes **and congestion** on parallel roadways."* (DEIR, p. 154)

ADT is neither a measurement of capacity or congestion. Statement is therefore incorrect.

Road design

124- Shoulder/bike lanes

The figures on pages 3 and 4 (Appendix K) don't distinguish between shoulders and bike lanes. Shoulders and in this case protected bike lanes are two distinctly different roadway features that should not be grouped together. They should be more clearly shown in the overcrossing section of the map in Appendix K and on page 7 of the DEIR.

125- Traffic improvements

Please explain why the overpass requires 4 feet shoulders and the remainder of the project doesn't.

Since the overpass includes 4ft wide shoulders, this results in visible space of 16' travel lanes, in turn resulting in likely very high speeds. How will this impact travel speed?

- *Previous research has shown various estimates of relationship between lane width and travel speed. One account estimated that each additional foot of lane width related to a 2.9 mph increase in driver speed*[60]

See also

- *Ingrid Potts, Douglas W. Harwood, and Karen R. Richard, "Relationship of Lane Width to Safety on Urban and Suburban Arterials," (paper presented at the TRB 86th Annual Meeting, Washington, D.C., January 21–25, 2007).*
- *Kay Fitzpatrick, Paul Carlson, Marcus Brewer, and Mark Wooldridge, "Design Factors That Affect Driver Speed on Suburban Arterials": Transportation Research Record 1751 (2000):18–25.*
- *Macdonald, Elizabeth, Rebecca Sanders and Paul Supawanich. The Effects of Transportation Corridors' Roadside Design Features on User Behavior and Safety, and Their Contributions to Health, Environmental Quality, and Community Economic Vitality: a Literature Review. UCTC Research Paper No. 878. 2008*

Is this the reason that City staff believes that "*Eastbound traffic on the future four lane arterial will likely be traveling downhill at a high rate of speed approaching the [...] street crossing to the school site." (SJ City Staff memo to Planning Commission, February 19, 2004)?*

126- Impact of shoulders on overpass on safety.

This assumption is further supported by the fact that on many roads in the area (e.g. Trimble) the actually measured speed is much higher than the posted speed limit (table p. 33).

A more detailed assessment of the road design on likely speeds is necessary.

127- Impact of noise walls on speed

Since noise walls will make it difficult for drivers to assess if children are present on school grounds, speeds will likely violate stated limits ("25 mph when children are present").

[60] https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/

Impact school

128- Access to the school

"Therefore, it is not anticipated that the proposed Charcot Avenue extension would have an adverse effect on the school's access." (p. 44)

The analysis assumes a car-centric view of "access". The SJ General Plan requires special consideration of pedestrian access to schools:

- *"Coordinate the planning and implementation of citywide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings and near areas with higher pedestrian concentrations (school, transit, shopping, hospital, and mixed-use areas) (TR-2.1)"*

Also,

- *"Coordinate and collaborate with local School Districts to provide enhanced, safer bicycle and pedestrian connections to school facilities throughout San Jose (TR-2.10)".*

Not providing safe and attractive pedestrian access to schools, generally leads to increased driving and potentially more congestion.

- *"The National Household Travel Survey in 1969 revealed that 41 percent of children ages 5-18 walked or bicycled to school, with 48 percent of younger children (ages 5-14) walking or biking. By the 2000s, estimates of younger children walking or bicycling to school was less than 14 percent. In the same time period, the use of passenger vehicles for the trip to and from school has increased from 12 percent in 1969 to 50 percent in the 2000s."*[61]

- *"According to independent research using the NHTS data series, distance is one of the major factors in the shift in mode to private vehicle by schoolchildren. This research also found that safety and security concerns are significant factors in parents' decision to let their children walk to school, especially girls."*[62]

129- Existing use of Silk Wood Lane

The report fails to mention that Silk Wood Lane and the access gate on Silk Wood Lane are also used heavily by students walking to school from the residences along Silk Wood Lane as well as the mobile home park Casa del Lago north of Rock Ave. (see page 147)

This omission underlines that pedestrian activity in the area has not yet been properly analyzed.

130- Revised drop-off plans

"It is recommended that Orchard School consider a review of the school drop-off/pick-up plan and procedures and implement measures to reduce adverse effects on surrounding businesses and residential areas during the school drop-off/pick-up periods." (p. 166)

A review of drop-off/pick-up plans for the school should focus primarily on the safety of students not ease of vehicle traffic.

[61] https://lbpost.com/news/education/walking-to-school-why-most-kids-arent-doing-it-these-days
[62] https://nhts.ornl.gov/briefs/Travel%20To%20School.pdf

131- Staggered dismissal times at the school

The transportation analysis suggests: "*Staggered arrival and dismissal schedules should be considered given the physical limitations of the use of public streets and school parking lots to accommodate the current demand of the school."* (p.50).

School start times are already staggered. Is the City hereby proposing to cover any costs associated with any further staggering of school operational hours?

Is the city working with businesses in the area to offer staggered working hours to their employees, metering of Montague expressway or congestion pricing in order to reduce peak hour demand considering the physical limitations of the use of public streets?[63]

132- Trip diversion from limiting northbound access to Oakland Road parking lot

The discussion of alternatives in the DEIR (p. 192, DEIR) suggests that some of the proposed alternatives will limit access to the school's Oakland Road parking lot. This in turn suggests that access to business east of Oakland would be similarly impacted.

The traffic analysis needs to include a trip diversion analysis resulting from these potential impacts especially for trucks with wide turn radii.

133- Effect on school drop-off Silk Wood Lane

"With the Charcot Avenue Extension in place, it would no longer be possible for cars to illegally stop/park along the south side of Silk Wood Lane to drop-off, pick-up, or wait for students." (p. 166)

This statement requires further explanation. Why would it "no longer be possible"? It seems that it would continue to be illegal, but that doesn't make it impossible.

134- Silk Wood Lane Traffic Diversion

It is possible that parents will continue to use the residential neighborhood on Silk Wood Lane as drop-off location for students. Since left turns on Charcot are restricted, these parents would make U-turns on Silk Wood Lane to go back to Rock Ave. This impact on the neighborhood needs to be considered.

Traffic analysis tables 8/9/10 do not reflect the use of Silk Wood Lane as a new drop off location.

135- Orchard School parking lots

"Orchard School is currently served by three driveways along Fox Lane that provide access to two onsite parking lots" (p. 146)

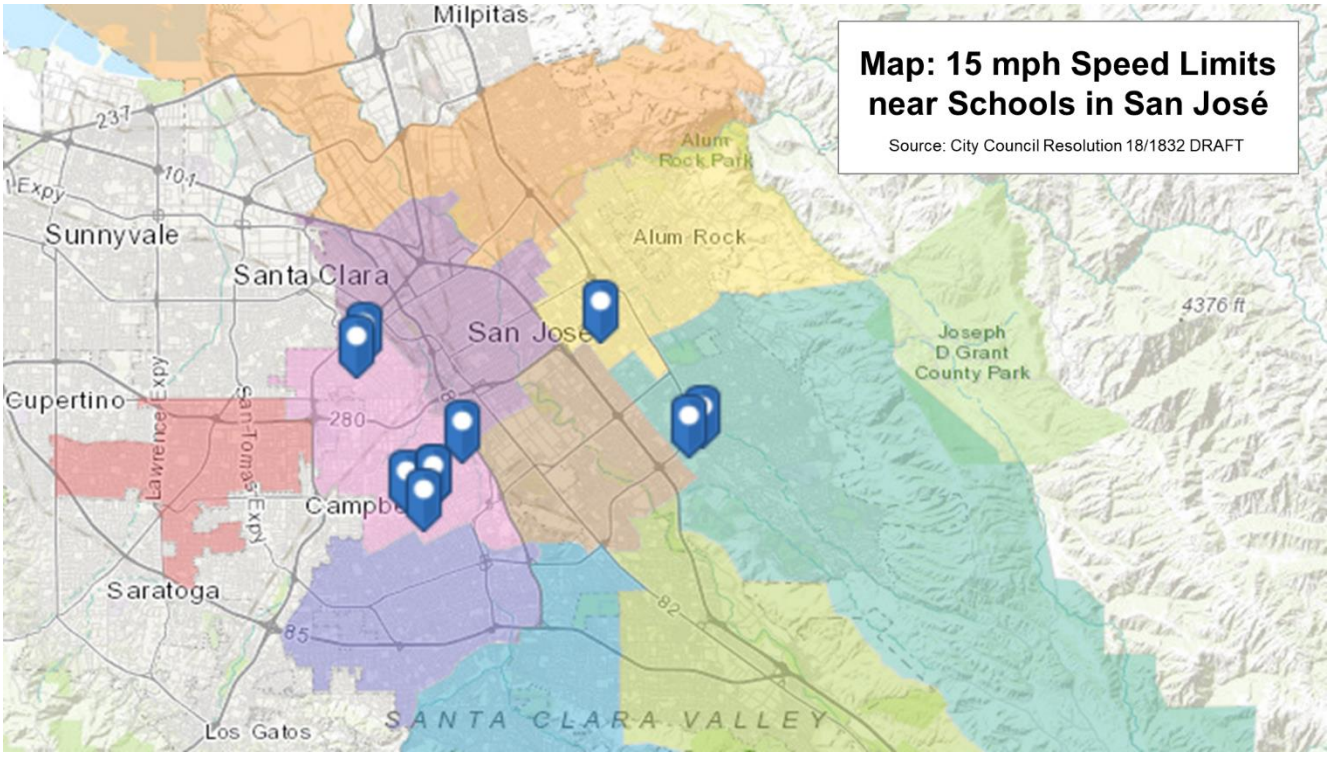
Only two driveways provide access to parking lots. One driveway is an exit-only driveway.

136- 15 mph speed limit near Orchard school.

Similar to other schools in San José (see map) or around the state[64], the City should consider a 15mph speed limit on all roads adjacent to Orchard school.

[63] See e.g. https://www.economist.com/leaders/2018/08/25/the-right-way-to-handle-congestion

[64] https://cal.streetsblog.org/2019/06/05/city-of-sacramento-reduces-speed-limits-near-schools-to-15-mph/



137- Closing the Charcot Overpass for school drop-off and pick-up times

Similar to approaches piloted in European cities[65] the city should consider blocking the Charcot Overpass for through traffic during school drop-off and pick-up times.

[65] https://usa.streetsblog.org/2018/11/27/the-european-answer-to-school-drop-off-chaos/

Intersection analysis

138- Intersection analysis

According to the SJ TIA (p. 39):

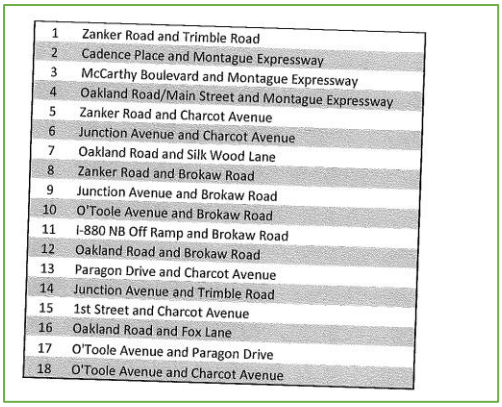
- *"Study Intersections: If a project is expected to add 10 vehicle-trips per hour per lane to a signalized intersection that meets any of the following conditions, the intersection is included in the intersection operations analysis:*
- *Within a ½-mile buffer from the project's property line;*
- *Outside a ½-mile buffer but within a one-mile buffer from the project AND currently operating at D or worse;*
- *Designated Congestion Management Program (CMP) facility outside of the City's Infill Opportunity Zones (defined in Section 4.9);"*

Based on these criteria the analysis should also include at least the following intersections:

- Oakland Road and Rock Ave
- Oakland Road and Fox Lane
- Oakland Road and McKay
- Oakland Road and Brokaw
- Oakland Road and Montague
- McKay and Ringwood
- Brokaw and 880
- Trimble and Montague
- Lundy and Murphy
- Junction and Charcot

Given the significant increase in traffic volume between 2025 and 2040, a queueing and LOS analysis for 2040 conditions is required in addition to the analysis under 2025 conditions. The analysis already seems to indicate that PM peak queueing from Charcot/Paragon would go back in to Charcot/Junction intersection; queueing from Charcot/O'Toole would block access to the overpass; queueing from Charcot/Oakland would reach back through the pedestrian crosswalk.

The 2015 consultant agreement with BKF (right) also includes a number of additional intersection for which data should be provided. This data should be disclosed in the DEIR.



1	Zanker Road and Trimble Road
2	Cadence Place and Montague Expressway
3	McCarthy Boulevard and Montague Expressway
4	Oakland Road/Main Street and Montague Expressway
5	Zanker Road and Charcot Avenue
6	Junction Avenue and Charcot Avenue
7	Oakland Road and Silk Wood Lane
8	Zanker Road and Brokaw Road
9	Junction Avenue and Brokaw Road
10	O'Toole Avenue and Brokaw Road
11	I-880 NB Off Ramp and Brokaw Road
12	Oakland Road and Brokaw Road
13	Paragon Drive and Charcot Avenue
14	Junction Avenue and Trimble Road
15	1st Street and Charcot Avenue
16	Oakland Road and Fox Lane
17	O'Toole Avenue and Paragon Drive
18	O'Toole Avenue and Charcot Avenue

139- Intersection analysis 2025

"An intersection level of service (LOS) analysis was undertaken for the weekday AM and PM peak hours at five study intersections located in the immediate project area. LOS was calculated for both existing and year 2025 conditions with the project in place." (p. 153).

A Queueing and LOS analysis for 2040 conditions is required in addition to the analysis under 2025 conditions, given that:

a) 2025 is likely to be within one or two years of opening of the extension and therefore not a medium-term analysis
b) the data for the 2025 is not generated independently but only a extrapolation of the 2040 model data anyway.

140- Alternative Lane Configurations at Oakland Road

The analysis does not describe Alternative H as a studied alternative lane configuration (p. 29). Alternative H needs to be included.

The intersection analysis should also include data for Alternative E.

141- Description of Oakland/Silk Wood intersection

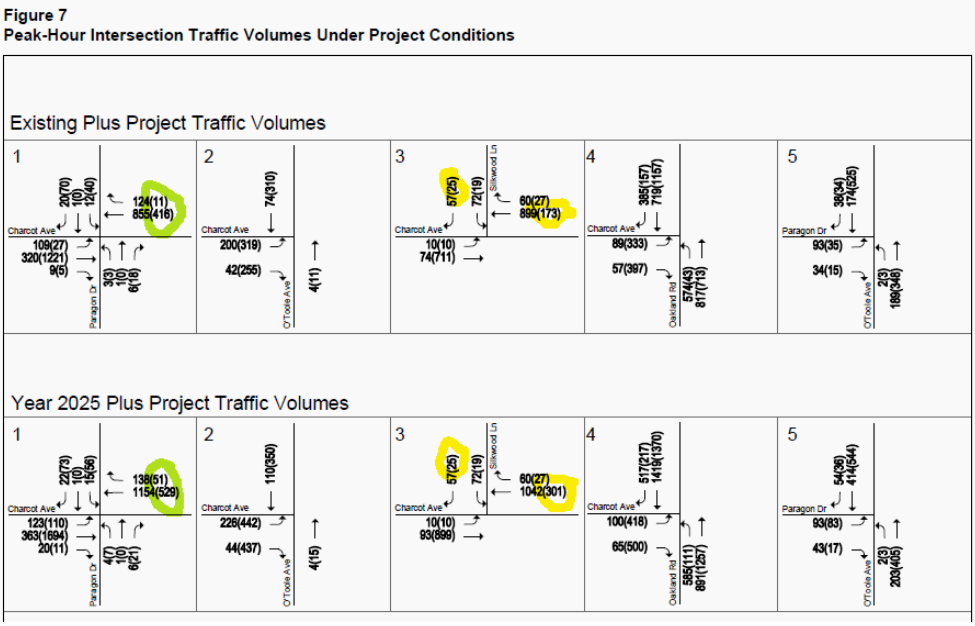
"The existing unsignalized intersection of Silkwood Lane and Oakland Road will be replaced by a new signalized intersection. The proposed lane configurations at the intersection consist of one left-turn and one shared left-right turn lane on Charcot Avenue and two northbound left-turn lanes and six through lanes on Oakland Road" (p. 5)

The description of this intersection omits bike lanes on Charcot and Oakland as well as new crosswalks at the intersection.

142- Figure 7 – Peak-Hour Intersection Traffic Volumes Under Project Conditions

Since there is no driveway or intersection for vehicle traveling west on Charcot between Silk Wood Lane east of I-880 and Paragon Drive west of I-880, the number of vehicles going up the overpass (Intersection 3, marked in yellow in the graphic below) should be identical to the number of vehicles coming down the overpass (Intersection 1, marked in green). Yet this is not the case. Following the flow of traffic along other intersection also produces inconsistent data.

Figure 7
Peak-Hour Intersection Traffic Volumes Under Project Conditions



PM Peak hours existing conditions

Cars going on the overpass (Fig. 3)		Cars coming down the overpass (Fig. 1)	
Going straight on Charcot Ave	*173*	*Going straight on Charcot Ave*	*416*
Turn right from Silk Wood Lane	*25*	*Turn right into Paragon Dr*	*11*
Total	**198**	**Total**	**427**

PM Peak hours 2025 conditions

Cars going on the overpass (Fig. 3)		Cars coming down the overpass (Fig. 1)	
Going straight on Charcot Ave	*301*	*Going straight on Charcot Ave*	*529*
Turn right from Silk Wood Lane	*25*	*Turn right into Paragon Dr*	*51*
Total	**326**	**Total**	**580**

The traffic analysis suggests therefore that the overpass will make cars appear out of nowhere just above 880. Could you please provide more information how this is achieved?

143- Response 48.1 – Oakland vs. Paragon

"The Charcot Avenue extension will be a 2-lane facility except at its intersection with Oakland Road. The four lanes on Charcot Avenue at Oakland Road are needed to accommodate the demand associated with turns at this intersection. Oakland Road receives more cars than smaller streets toward the west end of Charcot simply because Oakland Road is a large 6-lane arterial. By definition, larger streets accommodate more traffic and therefore they "attract" more cars, as compared to smaller streets."

The response seems to argue that the Oakland side of the project will see more traffic than the Paragon side and therefore needs more turn lanes. Generally though, it can be assumed that number of cars on both sides of a bridge is identical at all times. Response seems illogical.

Also, response is inconsistent with the traffic analysis which – similarly illogical – actual shows more vehicles going down towards Paragon Drive than enter on the Oakland side (see comment above).

144- Response 13.1 – Four lanes on Oakland needed

"The four lanes on Charcot Avenue at Oakland Road are needed to accommodate the demand associated with turns at this intersection."

Statement inconsistent with the reports traffic analysis that shows that even with two lanes any vehicle delay would be within acceptable limits.

145- Response 33.4 – Fox vs. Silk Wood

"The Charcot Avenue extension will be a 2-lane facility except at its intersection with Oakland Road. The "extra" lanes on Charcot Avenue at Oakland Road are needed to accommodate the demand associated with turns at this intersection. Note that if Fox Lane were the chosen alignment, the lane requirements at the Fox Lane/Oakland Road intersection would be similar because the traffic demand on Fox Lane would be roughly the same as the traffic demand on Charcot Avenue."

This statement requires further explanation as the current traffic volumes on Fox Lane (ADT: 6,100) and Silk Wood Lane (ADT: 700) are not "roughly the same" but vary greatly. Please quantify "roughly the same".

146- Response 34.6 – Changes Oakland intersection 2025 to 2040

"With the extension in place, the projected number of vehicles that will turn left from Oakland Road to Charcot Avenue in year 2025 will be as follows: 567 vehicles during the AM peak-hour and 260 vehicles in the PM peak-hour. In year 2040, these volumes will be 554 and 568 during the AM and PM peak-hours, respectively."

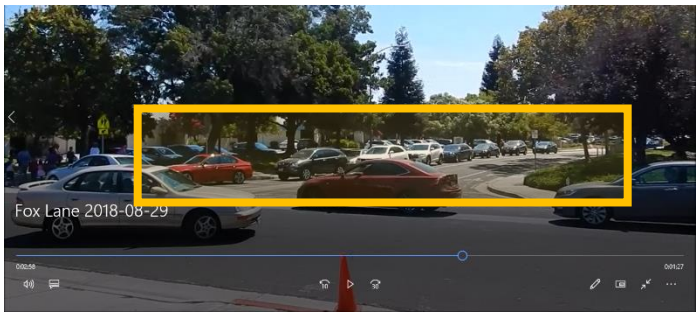
Given that traffic volumes will generally and significantly increase between 2025 and 2040, a reduction in turn movements from 567 to 554 (AM) requires further explanation and seems inconsistent with the data in the traffic analysis.

147- Response 34.20 – gaps in traffic flow on Silkwood

"Such turns [right turns from Silk Wood Lane to westbound Charcot] will be accommodated during gaps in traffic flow. The upstream traffic signal at Oakland Road will create those gaps as it cycles through various phases." (p. 24)

DEIR does not include any analysis that supports this statement. It is just as likely that alternating left- and righ-turns from Oakland into Charcot will be blocking any access from Silk Wood Lane especially considering the additional delay from the HAWK signal.

Traffic gaps on Fox Lane which has a similar configuration are very infrequent at times and can lead to substantial backed up traffic (see picture, delay for right turn shown was 90+ seconds)



Queuing on Ridder Park
at T-intersection with Fox Lane

148- Response 34.11 – access points for industrial businesses on Oakland Road

"The project will not alter or close any access points for industrial businesses on Oakland Road."

Please provide more detailed explanation on how access from southbound Oakland Road to industrial business on the eastern side Oakland will not be altered by the proposed project or any alternatives. This seems inconsistent with the described limited access to the school's Oakland Road parking lot because of the project and/or its alternatives.

149- Signal warrant

Similar to approaches in cities like Seattle[66] that measure warrants after an improvement has been made the project should consider a traffic signal at Silk Wood Lane and future Charcot Avenue despite seemingly not meeting current warrants.

[66] https://usa.streetsblog.org/2019/02/05/seattle-tosses-out-the-rulebook-to-protect-pedestrians/

Other

150- Roadway improvements under 2040 conditions

The analysis needs to include a detailed list of roadway improvements made by 2040 in order for the public to assess the validity of the analysis

For example the map on page 39 *"Year 2040 Conditions"* does not include the planned Zanker/4th street overcrossing over 101.

151- Year 2025 Conditions (p. 6)

Given the rapid planned development in North San José, t is not clear what changes to the existing land use or transportation network have been considered for the 2025.

The analysis needs to clearly state any assumptions made for 2025.

152- Inconsistency with Traffic Analysis for NSJ

The traffic data is also inconsistent with traffic data in the NSJ EIR (e.g. volumes at 880 gateways).

153- Response 34.10 – Schedule for other projects

"There is no schedule or construction staging plans for those projects [Montague-Trimble-Flyover, Montague-McCarthy grade separation, Brokaw widening], so it would be speculative to try to estimate how much traffic – if any – would chose to use Charcot during their construction."

Given the collective professional experience at the City's Department of Transportation and the sophistication of the Traffic Demand Modell used for example for this EIR, it is surprising that no professional estimate ranges can be given.

154- Plan Bay Area 2040, Congestion Management Program Document, Valley Transporation Plan

Inclusion in the Plan Bay Area 2040, Congestion Management Program Document, or Valley Transportation Plan (p. 149) was done without a project-level analysis of project-specific impacts.

There is no documentation that any of these plans would be significantly affected should the project be build or not.

155- Goal of San Jose's transportation system – Bicycle, Transit and Pedestrian Facilities

"San Jose desires to provide a safe, efficient, fiscally, economically, and environmentally-sensitive transportation system". (p. 11)

The sentence should likely read: "San Jose desires to provide a safe, efficient, fiscally-, economically-, and environmentally-sensitive transportation system"

Also, this relates to the overall transportation system not only the section about the pedestrian, bicycle and transit facilities that it is placed in. For example, building the Charcot Extension is not fiscally-sensitive.

156- Response 34.2 – Truck ban

"Truck Ban: The City's ban on select trucks over a certain tonnage is only applicable for residential streets and is not intended for Charcot Avenue."

Statement is inconsistent with San Jose Municipal Code 11.96.010-100[67] which restricts truck traffic on a number of non-residential streets including McKay in close proximity to the project. Also Santa Clara Street next to City Hall seems to be restricted to truck traffic according to the Municipal Code.

General Plan Transportation Diagram

Photo of truck ban sign on McKay Dr

"Charcot will serve as a direct connector to numerous industrial and commercial businesses west of I-880. As such, a sign prohibiting trucks on this roadway would not be effective, as it would not legally ban local trucks from using it to access area businesses."

Statement is untrue as only trucks that deliver directly to business on the Charcot Extension would be allowed to use the Extension. As there are no business along the extension, neither between Oakland Road and 880 nor 880 and Paragon Drive ("Between Paragon Drive and O'Toole Avenue, access to adjacent commercial properties from Charcot Avenue would not be provided. Access would be via other existing streets."), truck traffic could be legally banned next to the school with the few exceptions enumerated in the Municipal Code.

"There are no plans to ban trucks on Charcot Avenue as existing businesses along the Charcot corridor require trucks to support their daily operations."

Business along Charcot Avenue successfully operate under current condition without the overpass. Banning truck traffic on the overpass would therefore not be an impediment to their operations either.

Banning trucks on Charcot Avenue would be important not only from a safety perspective but also from an air pollution perspective:

- *"Heavy-duty diesels spew out nearly 60 percent of smog-forming oxides of nitrogen (NOx) emissions and more than 80 percent of fine diesel particulate matter (PM 2.5) emitted in California from all on-road sources. Diesel exhaust contains more than 40 known cancer-causing organic substances and gaseous pollutants, including volatile organic compounds and NOx, a key ingredient in ground-level ozone, otherwise known as smog."*[68]

157- Response 34.24 – Construction Plan

"A Construction Management Plan will be developed and implemented to ensure the safety of all persons that will be affected by construction."

[67] https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId=TIT11VETR_CH11.96LAVERO
[68] https://www.mercurynews.com/2019/06/25/opinion-california-needs-smog-checks-for-diesel-big-rig-trucks/

Construction activity on Charcot will likely block a major pedestrian access route, yet the impact is not properly assessed.

158- Traffic signals

Figure 14 fails to include the planned traffic light at Paragon Dr/Charcot.

159- Residential cut-through traffic

The DEIR fails to assess if the expected residential cut-through traffic generated by the project should be considered significant under applicable City policies.

- *"Neighborhood Streets General Plan policies discourage inter-neighborhood movement of people and goods on neighborhood streets. Streets are to be designed for vehicular, bicycle and pedestrian safety. Neighborhood streets should discourage both through vehicular traffic and unsafe speeds.*
- *Unacceptable Impacts of Mitigation: For purposes of this Council Policy, an LOS Traffic Improvement has an unacceptable impact if the TIA demonstrates that the improvement would result in a physical reduction in the capacity and/or a substantial deterioration in the quality (aesthetic or otherwise) of any other planned or existing transportation facilities (such as pedestrian, bicycle and transit systems and facilities). The following are examples of the kinds of impacts that would be considered unacceptable:*
- *[…] encouraging substantial neighborhood cut-through traffic […]" (San Jose Transportation Impact Policy)*[69]

160- VTA Congestion Management Program Analysis

Does the project warrant a Congestion Management Program Analysis of the VTA since it generates more than 100 net new peak hour trips?

161- Cumulative Impact

As the DEIR mentions multiple times, the Extension is one of several roadway improvements in the North San José Area and in the general plan. Since plan level analysis for both the general plan as well as NSJ project a significant increase in VMT, the project's impact take together with the other developments and roadway project should be considered significant.

162- Conclusion

Based on comments provided above the conclusion of the traffic analysis needs to be updated to incorporate the necessary changes.

[69] http://www.sanjoseca.gov/DocumentCenter/View/3870

Hazards and Hazardous Materials

163- Transport of Hazardous Materials

Although all public roadways might be constructed in adherence to design standards and regulation, the City of San José nevertheless reserves the right to restrict commercial traffic which might or might not carry hazardous materials on many of its roadways (Municipal Code 11.96.010-100) for various reasons.

The California Department of Education states that *"experience and practice indicate that distances of at least 2,500 feet [to schools] are advisable when explosives are carried and at least 1,500 feet when gasoline, diesel, propane, chlorine, oxygen, pesticides, and other combustible or poisonous gases are transported."*[70]

Given the nature of the businesses west of 880 (e.g. KinderMorgan Oil Terminal, Univar) it is very likely that trucks accessing the area will carry hazardous materials close to classrooms, playgrounds and residential buildings.

The City also needs to adhere to California Public Resources Code 21151.4.

TOP: Sources of potentially significant truck traffic

RIGHT: Hazmat crews cleaning up a spill from a leaking Univar truck on a 880 on-ramp near Hayward (August 2018). Both north- and southbound lanes on 880 needed to be closed because of the spill. A shelter-in-place order was issued for an ~137 acre area next to the incident site. Trucks would be travelling about 50ft away from classrooms.

https://sanfrancisco.cbslocal.com/2018/08/24/leaking-tank-acid-shuts-down-southbound-880-hayward-traffic/

164- MM HAZ-2.1: Site Management and Removal Plan

Given the proximity of the site to sensitive receptors at school and residential area, it is unclear if a adequate mitigation such as a Site Management Plan or Removal Action Plan can be developed.

It is currently not evaluated if mitigation is possible, this is therefore a significant, unavoidable impact

165- Emissions of Hazardous Materials Within One-Quarter Mile of School.

As described in chapter 3.9.2.2 of the DEIR, construction work might release hazardous materials other than air pollutant emissions. The impact of this on the school has not been evaluated and poses significant, unavoidable impact.

[70] School Site Selection and Approval Guide Prepared by School Facilities Planning Division California Department of Education

166- Interference with Emergency Plans

The DEIR fails to analyze the impact of the project on emergency plans at the school including for example the capacity of the proposed gate to function as an emergency exit and if there is sufficient assembly room outside of the school.

167- Increase in hazards due to design features or incompatible uses

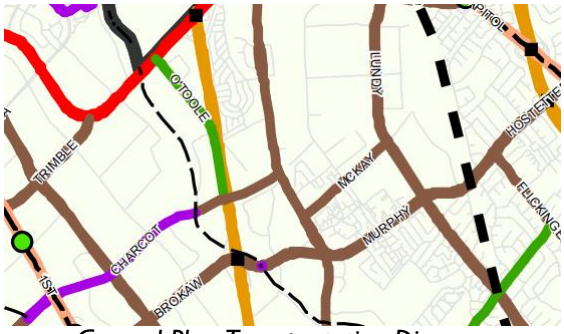
"The proposed Charcot Avenue Extension has been designed to comply with current highway design standards" (p. 152)

The Project needs to comply with the City's street design guidelines. It's compliance with these guidelines needs to be analyzed and presented.

168- Response 34.2 – Truck ban

"Truck Ban: The City's ban on select trucks over a certain tonnage is only applicable for residential streets and is not intended for Charcot Avenue."

Statement is inconsistent with San Jose Municipal Code 11.96.010-100[71] which restricts truck traffic on a number of non-residential streets including McKay in close proximity to the project. Also Santa Clara Street next to City Hall seems to be restricted to truck traffic according to the Municipal Code.



General Plan Transportation Diagram

Photo of truck ban sign on McKay Dr

"Charcot will serve as a direct connector to numerous industrial and commercial businesses west of I-880. As such, a sign prohibiting trucks on this roadway would not be effective, as it would not legally ban local trucks from using it to access area businesses."

Statement is untrue as only trucks that deliver directly to business on the Charcot Extension would be allowed to use the Extension. As there are no business along the extension, neither between Oakland Road and 880 nor 880 and Paragon Drive ("Between Paragon Drive and O'Toole Avenue, access to adjacent commercial properties from Charcot Avenue would not be provided. Access would be via other existing streets."), truck traffic would be legally banned next to the school with the few exceptions enumerated in the Municipal Code.

"There are no plans to ban trucks on Charcot Avenue as existing businesses along the Charcot corridor require trucks to support their daily operations."

[71] https://library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId=TIT11VETR_CH11.96LAVERO

Business along Charcot Avenue successfully operate under current condition without the overpass. Banning truck traffic on the overpass would therefore not be an impediment to their operations either.

Banning trucks on Charcot Avenue would be important not only from a safety perspective but also from an air pollution perspective:

- *"Heavy-duty diesels spew out nearly 60 percent of smog-forming oxides of nitrogen (NOx) emissions and more than 80 percent of fine diesel particulate matter (PM 2.5) emitted in California from all on-road sources. Diesel exhaust contains more than 40 known cancer-causing organic substances and gaseous pollutants, including volatile organic compounds and NOx, a key ingredient in ground-level ozone, otherwise known as smog."*[72]

[72] https://www.mercurynews.com/2019/06/25/opinion-california-needs-smog-checks-for-diesel-big-rig-trucks/

"On that Monday afternoon, Abigail Blumenstein and her mother, the actress Ruthie Ann Miles, had been crossing 9th Street with two friends, Lauren Lew and her 1-year-old son, Joshua. They had a WALK signal. A woman named Dorothy Bruns was waiting in her car across Fifth Avenue, and for whatever reason — the Daily News reported that she said she'd had a seizure — she drove through the red light. She hit the two mothers, the two kids, and another man. In the worst nightmare imaginable, the car continued on for about 350 feet, dragging the stroller, eventually crossing the median lines and crunching into a parked car. The two children died at the scene."

("What New York Should Learn
From the Park Slope Crash That Killed Two Children",
New York Magazine, March 30, 2018)

Visual Impact

General comments

169- Draft

The analysis is marked "Draft" throughout the document. Visualizations used in the analysis differ significantly from the ones used in the presentation at the community meeting[73]. The report misses key elements in the visualization (e.g. HAWK signal – see below).

It seems that similar to the appendices for air quality and noise that the City published an outdated version of the appendix. Therefore, the DEIR needs to be recirculated.

Top: Visualization in the DEIR; Bottom: Visualization used at community meeting

[73] https://mailchi.mp/bkf.com/past_meetings

170- Methodology used for visual assessment

The *"Visual Impact Assessment for **Highway Projects published** by the Federal Highway Administration (FHWA) **in March 1981**"* method (p. 1) is not an appropriate method to determine visual impacts of a City multi-modal street project or to assess the aesthetics of a school playground or the impact of 6+ feet high sound walls on a first grader. The guidelines are also 38 years old.

The use of other guidelines should be considered and explained why the guidelines chosen are the most appropriate.

171- Key Viewpoints

The EIR also needs to consider the following Key Viewpoints (in reference to map on p. 6).

- People (drivers, bicyclists, pedestrians) entering the Charcot Extension from Oakland Road
- Students on the school's playfield (at children's eyelevel)
- Residents/pedestrians on the remaining part (north-south direction) of Silk Wood Lane

172- Super Micro Segment

"No motorists and few or no sensitive viewer groups are present to be affected" (p. 10)

Can you please explain how no motorists can be present in this roadway segment? Are there few or no viewer groups present? Are there no bicyclists or pedestrians that would be considered sensitive viewer groups?

173- Mitigation Measures

The full analysis recommends a number of mitigation measures in addition to MM AES-3.1 and MM AES 3.2. The report needs to discuss why those have not been incorporated.

174- Sun glare

Will the rising sun impact visibility of the crosswalk for drivers going eastbound in the morning?

175- Visual impact of construction

In addition to the impact of the built project, the aesthetic impact of the construction of the project needs to be considered.

Impact on Motorists

176- Charcot Avenue

"In the westernmost Charcot Avenue segment, motorist viewer numbers are low." (p. 10)

Statement seems inconsistent with data from traffic analysis which expects a high number of motorists in this segment.

"Exposure to this very short length of the project (less than one block) is brief and fleeting" (p. 10)

Statement potentially incorrect. Given potentially congestion on this roadway exposure might be less than brief and fleeting.

177- Super Micro Motorists

Super Micro Right-of-Way – looking northeast.

Appendix D, p. 8

"In the Super Micro segment, there are no current motorists and thus no affected baseline viewers." (Appendix D, p. 11)

As described earlier in the analysis *"Super Micro Campus. In the segment immediately east of the freeway, the proposed right-of-way occupies an approximately 100-foot-wide corridor between office park buildings (Super Micro Inc.), including a 360-foot-long paved truck loading area." (Appendix D, p. 5)*

Parking and a truck loading dock indicate that motorists are present in this area. Also the pictures on page 8 show a road on the Super Micro Campus with a stop sign. Another indication for the presence of motorists in the area.

178- Visual impact I-880 Segment

"The principal affected viewers of this portion of the project would be freeway motorists on I-880." (p. 18)

It is much more likely that the principal affected viewers of this portion would be people travelling on the Extension (motorist, bicyclists, pedestrian).

179- Visual impact O'Toole Avenue

"Effects on motorists on O'Toole Avenue would be essentially similar to those of freeway motorists."

Statement not adequately supported by analysis as motorists on slower moving O'Toole Avenue (85th percentile speed: 24mph for section south of Charcot, Appendix K, p. 33) have not been considered in the prior segments of the analysis.

180- Silk Wood Lane Motorist

"In the Silk Wood Lane segment, motorists are currently few, limited mainly to residents on this portion of Silk Wood Lane." (p.11).

Statement is inaccurate. A high portion of motorists on Silk Wood Lane are parents at Orchard School their level of concern with the visual quality of the school is very high.

The description also neglects that with the project the number of motorists would be high.

"Overall, viewer response of motorists on Silk Wood Lane is thus considered to be moderate." Based on explanations above, this assessment is not supported by facts.

Impact on other viewers

181- Impact on office workers

"Three adjoining service buildings of Orchard School are completely screened by existing dense tree planting and have no views facing the right-of-way. Overall viewer response in this segment is thus low". (Appendix D, p. 11)

Statement not true. Buildings (shown in the picture above) are not utility buildings but classrooms. Tree planting is not dense. Right of way visible from inside the class room buildings. Students in these buildings are not office workers as indicated by the heading of this paragraph.

182- Impact on bicyclists and pedestrians

The visual impact of the project on bicyclists or pedestrians on Charcot is not adequately assessed.

183- Impact on playground users

The analysis fails to adequately incorporate its own finding of *"Young children and accompanying adults using the play structures would thus have high exposure and high overall viewer response to the project" (p. 11-12)*

Impact on Silk Wood Lane

184- Impact of glare and light from new traffic signals

The impact of the HAWK signal shining into a residential bedroom on Silk Wood Lane is not identified or assessed. .

The impact to residents by the new traffic light on Charcot and Oakland is also not assessed.

185- Vividness of Silk Wood Lane

The analysis describes that "*the trees provide a vivid element*". The analysis neglects to analyze if the school playground and students or afternoon school activities on the school site that are visible from the road also contribute to the vividness of the road.

186- Degradation of Existing Visual Character of Silk Wood Lane

There is no evidence to support the statement that the construction of noise barriers will lead to a Less Than Significant Impact. Quite to the contrary the installation of noise barriers is in itself a significant, unavoidable impact.

- *"Because of their size and conspicuousness, noise barriers and noise embankments often set their mark on the environment in which they are placed."*[74]
- *"If these barriers are not designed for each individual location, they are likely to remain dull, contrived visual elements and diminish landscape character and landscape quality."*[75]

The noise barriers will also impact passing motorist on Oakland Rd and especially motorist turning into Charcot Avenue from Oakland. The impact has not been evaluated.

187- Soundwall

The project plans to introduce 6+-foot-tall sound walls. Given that the road and the school's playfield are not at grade, is the height of the sound walls measured from road level or school level? If from road level, does the additional increase in height alter the visual impact especially on small children?

What is the basis for the statement *"With these proposed walls, the impacts to residents and school viewers would be moderate, and the potentially substantial visual impact to the tot lot would be reduced to a moderate or moderately low level."* Please provide studies that show that sound walls improve the aesthetics of a residential neighborhood and playground and recreational area.

The San José General Plan seems to disagree with this statement as it prefers setbacks and natural boundaries to sound walls.

Also see:

[74] UC Davis: "Noise Barrier Design: Danish and Some European Examples", Hans Bendtsen, 2009. Also see: Knauer, H. S., Pedersen, S., Lee, C. S. Y. and Fleming, G. G., FHWA Highway Noise Barrier Design Handbook (Report No. FHWA-EP-00-005), US Department of Transportation, Federal Highway Administration, Washington, DC, February 2000.,

[75] Technical Report 2017-02 State of the art in managing road traffic noise: noise barriers", CERD, 2016

- *"A major consideration in the design of a noise barrier is its visual impact on the surrounding area. A tall barrier near a one-story, single family, detached residential area can have a negative visual effect."*[76]
- *"Very few of these walls can be considered a visually successful complement to the community. Most of the noise barriers along highways are an intrusion into the environment, blending neither with the highway nor with the surrounding neighborhood for which they were built. […]When placed in the landscape and viewed as part of the total environment, a barrier such as this seems out of place, visually oppressive, and overly dominant."*[77]

Visualizations

The visualizations in the analysis differ from the ones used during the community meeting (see above). Comments below can refer to either of them. The visualization do not accurately depict the visual impact of the project. (see below)

188- Missing traffic lights

The visualizations miss pedestrian signals on Silk Wood Lane as well as the full traffic signal on Paragon Drive.

189- Trees

The visualizations show trees on the school side of the noise walls. Since the project will require cutting down the existing trees, is this intended to show trees planted as mitigation measures?

The visualization from the community meeting also shows trees as part of the sidewalk. How would they impact the usable width of the sidewalk for all users (e.g. in wheelchairs, large strollers)?

On the Western side the visualizations shows three large trees in the background (marked with yellow arrows below). Are these existing trees or replacement trees? It seems unlikely that they would be visible from this viewpoint.

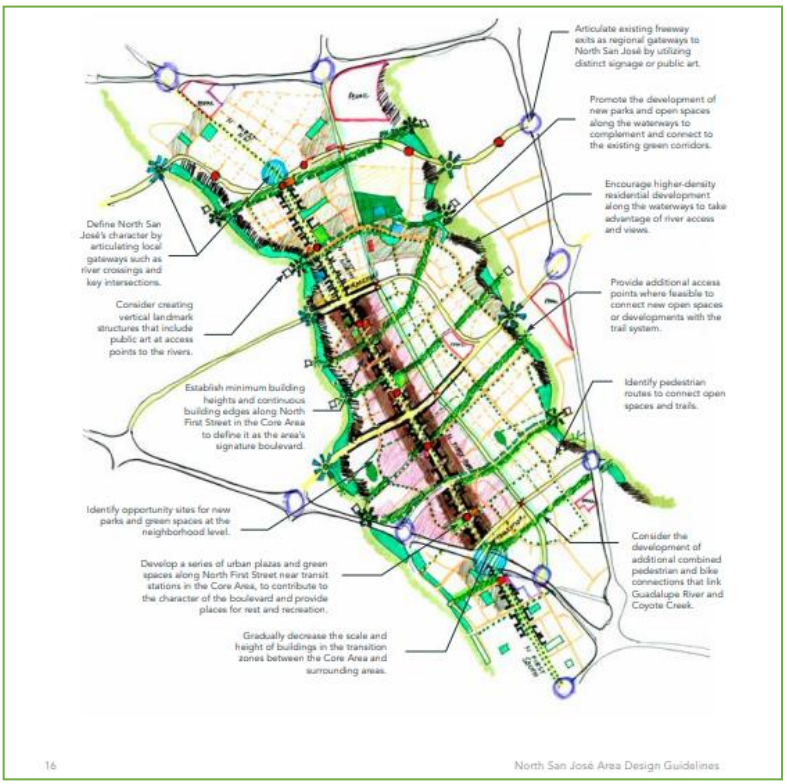
[76] https://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/keepdown.pdf
[77] https://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/visql/visql02.cfm

Cumulative Impacts

As mentioned in the report *"The existing and new bicycle facilities associated with this Project would also provide a connection opportunity to the planned pedestrian/bicycle trail along Coyote Creek, which crosses under Charcot Avenue just west of Paragon Drive."* (p. 10).

The cumulative impact of the Charcot Extension Project and the planned trail access to Coyote Creek needs to be considered.

The report also *mentions "Charcot Avenue is identified as a Parkway between U.S. 101 and Coyote Creek immediately west of the project corridor in the NSJDG."* (Appendix D, p. 13). The implementation of this designation will also lead to aesthetic changes that need to be considered as cumulative impact.



"Every day I have a layer of pollutants on my car that we have to dust off. This [project] was set up in 1994. This is a blatant disrespect for human life.

I have to deal with this every day. I have to keep my windows closed, […] to think to add more pollution […] it's terrible.

We have a lot of old people in our park. there are a lot of respiratory problems."

(Resident of Casa del Lago mobile home park,
Charcot Community meeting, September 26, 2019)

Air Quality

Existing conditions

190- Existing conditions

All air quality assessments used in the DEIR are based on theoretical models, not actual measurements on site. Sporadic actual measurement on site (see Attachment E – "Air Quality Measurements taken at school site") have shown higher exposure rates than what the theoretical models seem to show especially for PM2.5. It raises the question, whether cumulative effects of the existing environment and project conditions still meet legal limits.

Similar to the traffic and noise analysis it is necessary to scientifically establish current conditions on site. The DEIR fails to discuss why the methodology used was chosen and its justification.

Recent studies have underlined the need for a more granular approach to measuring and evaluating air pollution:

- *"EDF's advanced air-pollution sensors found that NO2 levels within neighborhoods varied by more than 8 times from block to block. Some of the areas with elevated levels were truck routes or abutted businesses that attracted trucks."*[78]

Also see:

- *"Indoor and outdoor air quality at Harriet Tubman Middle School and the design of mitigation measures: Phase I report", Portland State University*[79]
- *South Coast Air Quality Management District (SCAQMD) "Air Quality Issues in School Site Selection Guidance Document"*[80]

191- Sensitive receptors

"Some groups of people are more affected by air pollution than others. The State has identified the following people who are most likely to be affected by air pollution: children under 16, […] These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools." (DEIR, p. 36)

Air pollution near schools has for example been linked to a significant increase in paediatric asthma as well as psychological issues:

- *"For example, the insights EDF gathered from hyperlocal monitoring proved critical to understanding pollution in West Oakland, CA. Sandwiched between two highways and a major container port, this*

[78] "Traffic pollution causes 1 in 5 new cases of kids' asthma in major cities: How data can help" http://blogs.edf.org/health/2019/04/29/traffic-pollution-causes-1-in-5-new-cases-of-kids-asthma-in-major-cities-how-data-can-help/

[79] https://s3.amazonaws.com/arc-wordpress-client-uploads/wweek/wp-content/uploads/2018/07/05143206/Tubman-PSU_HTMSReport_Phase1-Outdoor-Monitoring_Final.pdf

[80] http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/school_guidance.pdf

neighborhood's rate of emergency room visits due to asthma is more than double the state average. Almost 25 percent of the student body in the West Oakland Middle School has asthma or other breathing problems."[81]

- *"A major new study has linked air pollution to increased mental illness in children, even at low levels of pollution. The new research found that relatively small increases in air pollution were associated with a significant increase in treated psychiatric problems. It is the first study to establish the link but is consistent with a growing body of evidence that air pollution can affect mental and cognitive health and that children are particularly vulnerable to poor air quality."*[82]

Also see:

- *"Global, national, and urban burdens of paediatric asthma incidence attributable to ambient NO2 pollution: estimates from global datasets", Pattanun Achakulwisut, PhD, Prof Michael Brauer, ScD, Perry Hystad, PhD, Susan C Anenberg, PhD, April 2019*[83]
- *Kim, J. et al. (2004) "Traffic-related air pollution near busy roads: the East Bay Children's Respiratory Health Study." American Journal of Respiratory and Critical Care Medicine. 170: 520-526*
- *Gauderman, J.W., et al (2004) "The Effect of Air Pollution on Lung Development from 10 to 18 Years of Age." The New England Journal of Medicine. 351, pg. 1057-1067*
- *Wilhelm, Michelle, et al. (2008) "Environmental Public Health Tracking of Childhood Asthma Using California Health Interview Survey, Traffic, and Outdoor Air Pollution Data". Environmental Health Perspectives. 116. 9. 125-1260*
- *Heinzerling A et al. (2016) "Respiratory Health Effects of Ultrafine Particles in Children: A Literature Review" Water, Air, and Soil Pollution.*

The EIR should discuss whether the studies cited raise the question of impacts from pollution at lower levels than the current regulatory framework.

- *"A group of scientist advisers dismissed by the Trump administration has concluded that national limits on fine particles of air pollution aren't strong enough to protect people. […]"Based on full consideration of the overall body of scientific evidence, we unequivocally find that the current standards for fine particulate matter do not protect public health and must be revised," said Chris Frey, a scientist from North Carolina State University who chaired the group. "There is no way for EPA to spin this otherwise." ("Scientists fired by Trump warn particle pollution standards don't protect people", Guardian, October 22, 2019)*[84]

192- Residential receptor at 1942/1954 Oakland Rd

The analysis fails to discuss impact on residential receptors at 1942/1954 Oakland Rd.

193- BAAQMD CARE community

The analysis fails to acknowledge that the project area is identified as a CARE community by BAAQMD.

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[81] http://blogs.edf.org/health/2019/04/29/traffic-pollution-causes-1-in-5-new-cases-of-kids-asthma-in-major-cities-how-data-can-help/

[82] http://bmjopen.bmj.com/content/6/6/e010004.full see also: https://www.theguardian.com/environment/2016/jun/13/air-pollution-linked-to-increased-mental-illness-in-children

[83] https://www.thelancet.com/journals/lanpla/article/PIIS2542-5196(19)30046-4/fulltext

[84] https://www.theguardian.com/us-news/2019/oct/22/scientists-warn-fine-particle-pollution-standards-dont-protect-people

- *"In many cases, air quality conditions in impacted communities result in part from land use and transportation decisions made over many years. BAAQMD believes comprehensive, communitywide strategies will achieve the greatest reductions in emissions of and exposure to TAC and PM2.5. BAAQMD strongly recommends that within these impacted areas local jurisdictions develop and adopt Community Risk Reduction Plans, described in Section 5.4. The goal of the Community Risk Reduction Plan is to encourage local jurisdictions to take a proactive approach to reduce the overall exposure to TAC and PM2.5 emissions and concentrations from new and existing sources. Local plans may also be developed in other areas to address air quality impacts related to land use decisions and ensure sufficient health protection in the community."* [85]

And that the BAAQMD recommends to:

- ***"Consider alternatives such as increasing public transit or improving bicycle or pedestrian travel routes before funding transportation improvements that increase VMT."***[86]

194- Bay Area 2005 Ozone Strategy

The report fails to acknowledge that the Bay Area Air Quality Management District (BAAQMD) adopted the Bay Area 2005 Ozone Strategy on January 4, 2006. The Bay Area 2005 Ozone Strategy updates vehicle miles traveled (VMT) and other assumptions in the 2000 Clean Air Plan (CAP) related to the reduction of ozone in the atmosphere and serves as the current CAP for the Bay Area. This is a significant change to the ambient and regulatory requirements regarding air quality that happened since the approval of the 2005 NSJ FPEIR.

195- General conditions in Bay Area

The EIR fails to acknowledge and include relevant background information for the Bay Area.

- *"The San Francisco Bay Area still exceeds federal standards for ozone and fine particulate matter, which are responsible for approximately 2,500 premature deaths each year" (Mayor Sam Liccardo, 29 October 2019)*[87]

- *"Santa Clara County experiences many exceedances of the PM2.5 standard each winter. This is due to the high population density, wood smoke, industrial and freeway traffic, and poor wintertime air circulation caused by extensive hills to the east and west that block wind flow into the region."*[88]

San José specifically seems to have made little progress in reducing O3 pollution between 2010 and now.[89]

[85] http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en
[86] http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en
[87] https://oversight.house.gov/sites/democrats.oversight.house.gov/files/Liccardo%20-%20Testimony.pdf
[88] http://www.baaqmd.gov/in-your-community/santa-clara-county
[89] https://www.thoracic.org/about/newsroom/press-releases/conference/2019/health-of-the-air2.pdf, p. 76

196- California

The EIR fails to acknowledge and include relevant background information for California. [90]

- *"California has the worst air quality in the nation. That's bad news for everyone – but especially bad for hundreds of thousands of Bay Area residents the American Lung Association says are particularly vulnerable to the pollutants we're spewing into our air. They are our patients, kids and neighbors living with heart or lung disease or asthma. They are those living in impoverished neighborhoods crisscrossed by freeways, or near ports, warehouses and freight hubs where diesel big rigs are commonplace. And when it comes to air pollutants from mobile sources, heavy-duty diesel trucks are a primary culprit."[91]*

Increasing frequency and severity of wildfires in California are likely to worsen background conditions further.[92] Their impact has not been evaluated in the DEIR.[93]

Progress in battling air pollution especially in California has stalled in recent years[94] and air quality especially fine particle matter is expected to get worse.

- *"More than 90 percent of Californians live in areas impacted by unhealthy air and the transportation sector is by far the leading source. So it should come as no surprise that 32 of California's 58 counties received an F grade in American Lung Association 2019 State of the Air report for ozone pollution while another 28 counties received an F for particle pollution. Unfortunately, Alameda, Contra Costa and Santa Clara counties earned Fs for both categories of unhealthy air days."[95]*

- *"Particulate matter concentrations are expected to significantly increase in California due to climate change. According to Cooley et al., vulnerable communities in areas exceeding state standards for PM2.5 levels in 2050 are expected to be concentrated in Southern California (i.e., Los Angeles, Orange, and Imperial counties) and along the San Francisco Bay (i.e., Santa Clara, San Francisco, and Alameda counties)." (Mapping Resilience, p. 30)[96]*

[90] For more background on the strategy for achieving California's 2030 greenhouse gas target see ARB "California's 2017 Climate Change Scoping Plan"

[91] https://www.mercurynews.com/2019/06/25/opinion-california-needs-smog-checks-for-diesel-big-rig-trucks

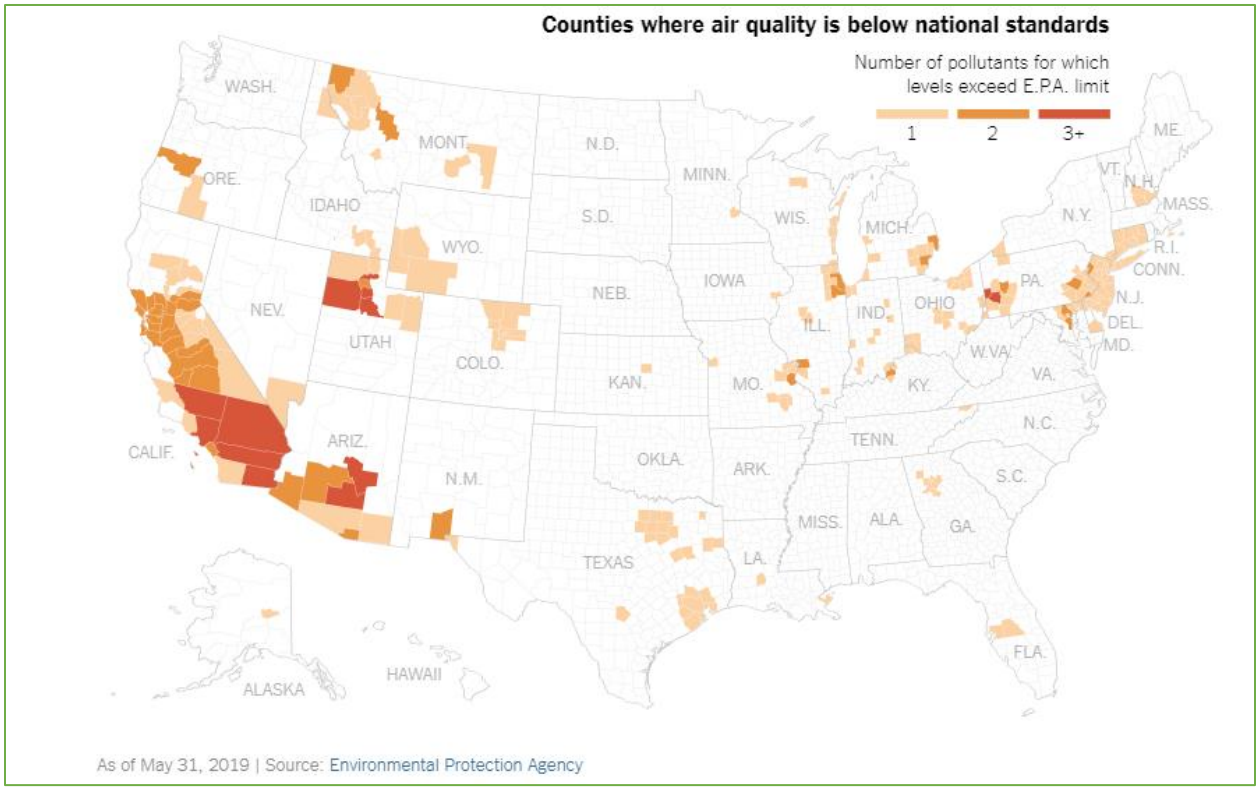
[92] https://www.sfchronicle.com/bayarea/article/Wildfires-warmer-weather-leave-Bay-Area-air-13790007.php

[93] Also see: https://medicalxpress.com/news/2019-05-reductions-pm-decade-health-ozone.html

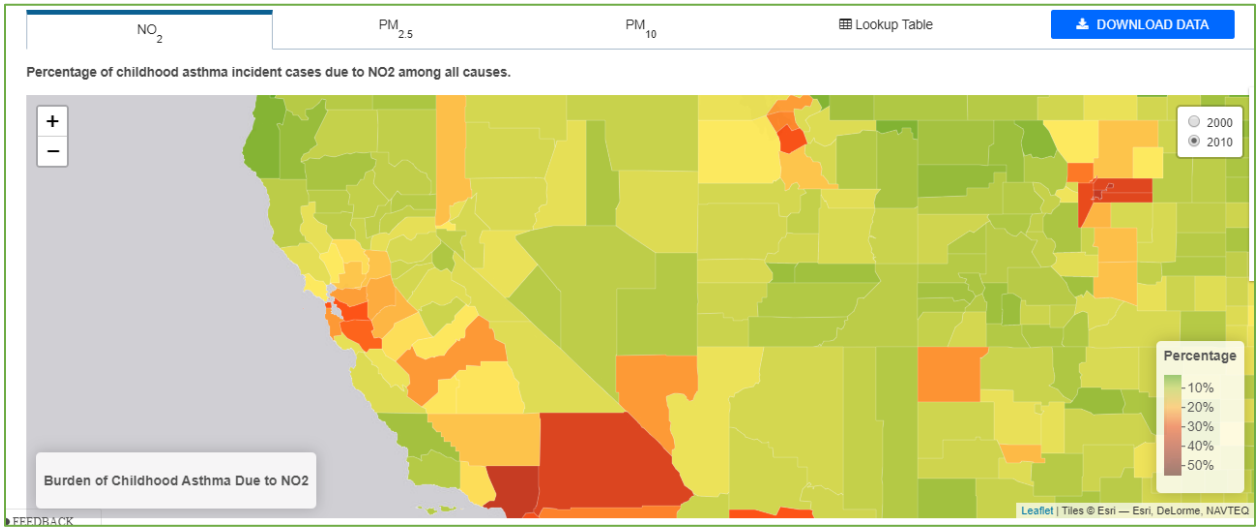
[94] Trends in Excess Morbidity and Mortality Associated with Air Pollution above American Thoracic Society–Recommended Standards, 2008–2017, https://healthoftheair.org/uploads/324/27b2db2b11644bfda45fd50f9e7dfc3c.pdf . See also: https://www.latimes.com/local/lanow/la-me-smog-southern-california-20190701-story.html

[95] https://www.mercurynews.com/2019/06/25/opinion-california-needs-smog-checks-for-diesel-big-rig-trucks/ also see: https://www.lung.org/our-initiatives/healthy-air/sota/

[96] https://apen4ej.org/wp-content/uploads/2019/07/APEN-Mapping_Resilience-Report.pdf and Cooley, H., E. Moore, M. Heberger, and L. Allen (Pacific Institute). 2012. Social Vulnerability to Climate Change in California. CEC-500-2012-013. Sacramento, CA: California Energy Commission



[97] https://www.nytimes.com/interactive/2019/06/19/climate/us-air-pollution-trump.html



- *Source: Traffic Related Air Pollution and the Burden of Childhood Asthma in the Contiguous United States in 2000 and 2010, Raed Alotaibi , Mathew Bechle , Julian Marshall , Tara Ramani , Joe Zietsman , Mark Nieuwenhuijsen , Haneen Khreis*[98]

97

[98] https://carteehdata.org/library/webapp/trap-asthma-usa

197- Air quality has worsened from 2016 to 2018

Study: US air pollution deaths increased by 9,700 a year from 2016 to 2018[99]

- *"New data reveals that damaging air pollution has increased nationally since 2016, reversing a decades-long trend toward cleaner air. An analysis of Environmental Protection Agency data published this week by researchers at Carnegie Mellon University found that fine particulate pollution increased 5.5 percent on average across the country between 2016 and 2018, after decreasing nearly 25 percent over the previous seven years.*
  "After a decade or so of reductions," said Nick Muller, a professor of economics, engineering and public policy at Carnegie Mellon, and one of the study's co-authors, "this increase is a real about-face."
  The research identified recent increases in driving and the burning of natural gas as likely contributors to the uptick in unhealthy air, even as coal use and related pollution have declined. In the West, wildfires contributed to the rise in particulate matter."[100]

The reversal in air quality needs to be considered as a cumulative impact.

Additionally, the DEIR fails to discuss the impact of sources outside of California on existing and cumulative impacts.[101]

198- Spare the air days

The report needs to note and discuss the increasing number of "Spare the Air" alerts[102] (e.g. because of increased pollution from wildfires) and how this relates to the cumulative impact.

Assumptions made for the analysis

199- Input traffic data

Traffic data for the analysis was based on a memorandum provided by Hexagon Transportation Consultants on November 12, 2018. The traffic analysis was not finalized till April 2019 (title page of Appendix K). The analysis should use the finalized traffic data and not preliminary numbers.

For example the value of ADT for Oakland Road used in the Air Quality analysis (41,450 ADT, p. 28) does not match the ADT for the road provided in the Traffic Analysis (p. 36)

Also the percentage of truck traffic needs to be adjusted to be consistent with the traffic analysis.

200- Traffic data

The traffic data for the air quality analysis is in many instances inconsistent with the data from the traffic analysis.

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[99] https://www.vox.com/future-perfect/2019/10/24/20927103/air-pollution-study-deaths-elderly-obama-trump?fbclid=IwAR3_LfD3NITV51IktRJBLg2BXPyiYuUmN3XOfhYGLVTJcodEl0lNlfVruvk

[100] https://www.nytimes.com/interactive/2019/10/24/climate/air-pollution-increase.html

[101] See: https://www.npr.org/sections/thetwo-way/2017/03/03/518323094/rise-in-smog-in-western-u-s-is-blamed-on-asias-air-pollution

[102] http://www.sparetheair.org also see https://www.mercurynews.com/2019/10/30/latest-spare-the-air-ties-the-bay-area-record

Data in air quality analysis inconsistent with data in transportation analysis

No Project	VMT 2025	VHT 2025	Speed 2025	VMT 2040	VHT 2040	Speed 2040
Transportation Analysis	1,821,479	104,144	25.22	2,659,078	185,249	14.35
Air Quality Analysis	4,789,277	209,093	22.90	6,080,580	340,160	17.88

Project	VMT 2025	VHT 2025	Speed 2025	VMT 2040	VHT 2040	Speed 2040
Transportation Analysis	1,823,272	103,460	25.28	2,661,463	183,620	14.49
Air Quality Analysis	4,787,047	205,279	23.32	6,092,019	336,012	18.13

Cars/h	Peak AM 2025	Peak PM 2025	Peak AM 2040	Peak PM 2040	Average speed
Transportation Analysis	1240	1250	1490	1720	TBD*
Air Quality Analysis	776	818	1026	1082	25 mph

201- Traffic data peak hour traffic

The analysis (e.g. p. 113) assumes not only different peak hour traffic volumes than the traffic analysis, the air quality analysis also assumes traffic volumes are identical in both directions at all times, which is likely to be incorrect given regional travel patterns.

202- Assumed speed on Charcot

Speed on Charcot is assumed to be 25 mph. Given the volumes expected on the road and average speeds in the area that are much lower than during peak hours, this value is not properly justified and requires further analysis. The impact of a HAWK signal at the Silk Wood Lane intersection and the merging necessary in case of the 4-lane alternative are not adequately considered.[103]

The analysis assumes identical speeds for both 2- and 4-lane alternative. It seems improbable that the same traffic volume will travel at the same speed regardless of the number of lanes and this requires further explanation. (p. 134)

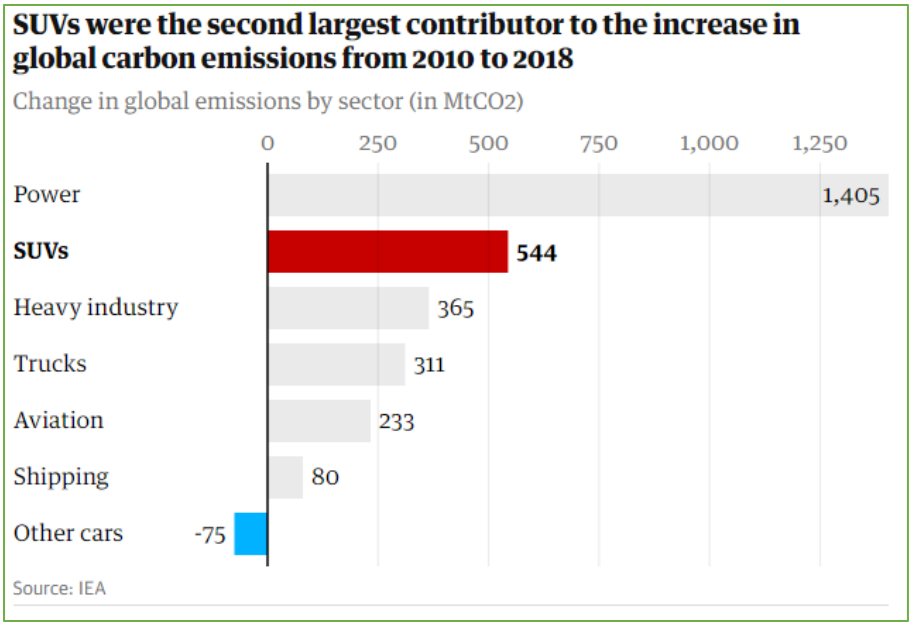
203- SUVs

The air quality fails to incorporate the rising number of SUVs on our streets which have a significantly different air pollution profile than smaller cars.

- *"Growing demand for SUVs was the second largest contributor to the increase in global CO2 emissions from 2010 to 2018, an analysis has found. In that period, SUVs doubled their global market share from 17% to 39% and their annual emissions rose to more than 700 megatonnes of CO2, more than the yearly total emissions of the UK and the Netherlands combined."*[104]

[103] "A recent study found that the concentration of airborne nanoparticles at red traffic lights are as much as 29 times higher than concentrations seen while the car is cruising. One study found that pollution levels inside cars due to congested traffic around intersections are up to 40 percent higher than when traffic is moving." https://blog.aclima.io/how-traffic-affects-your-short-term-pollution-exposure-a3b6bae8b71b

[104] https://www.theguardian.com/environment/ng-interactive/2019/oct/25/suvs-second-biggest-cause-of-emissions-rise-figures-reveal



204- Street orientation

The analysis describes traffic being north- or southbound on Charcot (p. 23) and Charcot as having a northwest/southeast orientation (e.g. p. 113). Yet especially near Oakland Rd the orientation of the road is east-west. This could significantly impact exposure levels on and needs to be analyzed more specifically using the correct road orientation or worst-case scenario. [105]

It is also plainly inconsistent to speak of north/southbound traffic on an east/west connection.

205- "Area-Wide Daily Emission"

The report needs to specify what is meant with *"area wide"* and why that radius was chosen. (Appendix E, p. 18)

206- Impact of I-880

The analysis fails to consider increasing traffic volumes that are expected for I-880 by 2040. Especially since Caltrans has indicated that I-880 might be widened (Appendix C, p. 96 and Appendix B p. 4). The analysis needs to take this into account.

207- Sources of pollution

The DEIR limits itself to modeling permitted sources in the area. It fails to identify other and/or especially non-permitted sources of pollution in the area (e.g. Union Pacific Railroad, industrial use and truck traffic/idling east of Oakland Rd, loading docks). This needs to be corrected and/or supplemented with air quality measurements of current conditions.

Fox Lane will have an ADT of 7,800 in 2040 and should be included in the analysis as well.

[105] See for discussion of particle counts in relation to wind direction: Rundell, K. W., Caviston, R., Hollenbach, A. M., & Murphy, K. (2006). Vehicular air pollution, playgrounds, and youth athletic fields. Inhalation toxicology, 18(8), 541-547.

208- Cumulative Impact / 10 hours

The analysis assumes that children spend up to 10 hours at the school and are therefore exposed to the air pollution only for this timeframe.

The report neglects that the living situation for many of the students at Orchard (the remaining 14 hours a day) also include significant exposure to air pollution (e.g. students living at Casa del Lago next to 880 or mobile home parks on Oakland near 101/880 interchange).

The analysis needs to incorporate air pollution exposure for 24 hours not just 10.

209- Impact of construction and operation

The report fails to adequately present the impact of construction and operation on employees working at the offices of Super Micro and the business along Charcot Avenue west of I-880.

210- CO emissions

"CO impacts, which are expressed in parts-per-million, are described subsequently in this report." (Table 3.3-4, p. 40)

CO impacts are not adequately discussed. As the report states:

"Congested intersections with large traffic volumes have the greatest potential to ***cause high localized concentrations*** *of CO." (p. 40)*

As concentrations of CO are highly localized, an area wide assessment as in the DEIR provided is inadequate. Localized analysis similar to e.g. PM2.5 is necessary.

The analysis states that the legal threshold for operational CO emissions is 9.00 ppm (8-hour average) or 20.0 ppm (1-hour average).[106] Yet, the analysis does not show if the project will meet these thresholds.

This is also required as part of the Consultant Agreement with BKF:

- CO Hot Spot Analysis. Conduct a qualitative Hot Spot CO analysis based on the screening guidance provided by BAAQMD that is based on traffic volume.

211- Attachment 2: Operational Emissions Analysis – CT-Emfac2014 (p. 86)

Length for "Build 2025 – second row" (21400) described as 0.12, which is inconsistent with the length for the other scenarios (0.18).

212- Project length

Worksheet in Attachment 1 (Road Construction Emissions Model) uses a project length of 0.09 miles. Further explanation needs to be provided.

213- Release height

The analysis does not seem to factor in that the project starts to be elevated resulting in a higher release heights west of Silk Wood Lane.

[106] Also see BAAQMD "CEQA Air Quality Guidelines"

214- Questions marks in table

The report needs to explain the question marks in the first table of attachment 1 in the row "Concrete Mixer Trucks".

215- Roll-back of Federal Air Quality Standards

The DEIR fails to adequately consider the impact of the announced roll-back of federal air quality standards. [107]

- *"The proposed roll back of several Clean Air Act regulations and the proposed roll back of the greenhouse gas standard for automobiles will make it hard for communities to maintain their air quality, and even harder for cities with poor air quality to clean up"*[108]

216- Construction emissions calculations

Table 3. Construction Period Emissions PM10: ***0.18t*** (Appendix E, p. 16)	"*The Roadway Construction Emissions Model provided total annual PM10 exhaust emissions (assumed to be DPM) from the off-road construction equipment and worker, vendor and hauling trucks used for the proposed road construction (both the bridge and roadwork)* ***of 0.1286 tons*** *(257 pounds) over the construction period.*" (Appendix E, p. 19/20)
Table 3. Construction Period Emissions PM2.5: ***0.14t*** (Appendix E, p. 16)	"*Fugitive dust PM2.5 emissions were also computed and included in this analysis.* ***The model predicts emissions of 0.4464 tons (893 pounds) of fugitive PM2.5*** *over the construction period..*" (Appendix E, p. 20)

Please explain the discrepancies.

[107] https://cal.streetsblog.org/2019/06/06/federal-unsafe-rollbacks-would-have-dire-consequences-for-california-air-quality/

[108] https://medicalxpress.com/news/2019-05-reductions-pm-decade-health-ozone.html

Other

217- Air Quality Management District recommends larger bugger zone

- *"A general buffer zone of no less than 500 feet (150 m), and possibly as much as 1,000 feet (300 m), between major roadways and school sites should be considered to protect the health of students and school employees and meet state guidelines on location of mobile source emissions."*[109]

The DEIR should include and discuss this recommendation.

218- Supplemental Analysis: Alternative Designs

Data in Table 10 is partially inconsistent with data in Table 7. This needs to be corrected.

219- Ozone

The analysis should disclose the increase of ozone in the area because of the project and compare it to federal and state standards.

- *"Ozone, which is formed when sunlight reacts with chemicals emitted from cars, is getting worse as we drive more and it gets hotter. […] If you live in a city with high ozone levels for a decade, the results are similar to smoking a pack of cigarettes daily for three decades."*[110]

Also see

- Association Between Long-term Exposure to Ambient Air Pollution and Change in Quantitatively Assessed Emphysema and Lung Function, Meng Wang, PhD; Carrie Pistenmaa Aaron; Jaime Madrigano, ScD (https://jamanetwork.com/journals/jama/fullarticle/2747669?guestAccessKey=cfba7399-ed6b-4ff3-abcd-260039916cd9)

220- Impact to Montague and I-880

In a January 2019 meeting it was indicated that the project would reduce air pollution in the I-880/Montague interchange area (northwest corner of Casa del Lago). Does DEIR support this statement?

221- Cumulative impact

As discussed above because of the inconsistency of the General Plan and the NSJADP with the City's GHG reduction goals the cumulative impact of the project together with the build out of the General Plan and the NSJADP is therefore significant.

[109] http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/school_guidance.pdf, p. 8
[110] https://www.fastcompany.com/90388917/breathing-dirty-city-air-is-as-bad-for-your-lungs-as-smoking

"the General Plan alone is not enough
to meet the State's [or City's] carbon commitments,
let alone align with the decarbonization rates
implied by the Paris Agreement"

("Climate Smart San José")

Greenhouse Gas Emissions

222- Climate Smart San José

Climate Smart San José (p. 77) also includes detailed goals for mode share. The impact of the project on these goals is not discussed and needs to be added.

223- Construction GHG emissions

The construction GHG emissions modelled seem to include only direct GHG emissions at the site, but not for example for the production of materials (e.g. concrete) or relative lifecycle emissions from construction equipment. This needs to be added.

224- Operational GHG emissions

The data used to calculate operation GHG seems inconsistent with data from traffic analysis. This is not acceptable and needs to be corrected.

225- Cumulative impact

As discussed above because of the inconsistency of the General Plan and the NSJADP with the City's GHG reduction goals the cumulative impact of the project together with the build out of the General Plan and the NSJADP is therefore significant and irreparable.

Construction GHG emissions

226- Direct and indirect GHG emissions

The construction GHG emissions modelled seem to include only direct GHG emissions at the site, but not for example for the production of materials (e.g. concrete) or relative lifecycle emissions from construction equipment. This needs to be added.

- *"The U.S. added an average of 31,000 highway lane miles per year over the last decade, Shill reports adding about 109 million metric tons of carbon dioxide to the air annually just from the construction. The social cost of that, using standard formulas, is about $4 billion, he says."*[111]

Operational Greenhouse Gas Emissions

Analysis fails to acknowledge the effect of induced demand as described in the San José TIA:

- *"Shortly after the project becomes operational, induced VMT may occur where road users respond to an initial appreciable reduction in travel time. With lower travel times, the modified facility becomes more attractive to travelers, resulting in four short-run trip-making changes: (1) longer trips; (2) changes in route choice; (3) changes in mode choice; and (4) newly generated trips. Longer trips may occur because the ability to travel a long distance in a shorter time increases the attractiveness of destinations that are further away, increasing trip length and VMT. Changes in route choice may occur immediately when faster travel times on a path attract more drivers to that path from other paths, which can increase or decrease VMT depending on whether it shortens or lengths trips. Changes in mode choice may also occur in the near-term when travelers respond to a reduction of personal motorized vehicle travel time by*

[111] https://usa.streetsblog.org/2019/03/06/heres-how-driving-is-encouraged-and-subsidized-by-law/

shifting toward personal motorized vehicle use from other modes. Newly generated trips may occur when an individual who previously did not have a travel need might have one because of increased speed and decreased travel time. The short-run effect of a project on induced VMT, measured in percent change in total VMT, is evaluated for a project." (TIA, p. 49)

227- Operational Greenhouse Gas Emissions – increased speeds

The analysis fails to adequately consider that impacts on GHG due to increases in speed vary vastly between for example speed improvements at low speeds and improvements at higher speeds. An analysis based solely on average speeds does not adequately capture these effects, making a more detailed analysis necessary.[112]

228- Reduction of congestion

"Decrease [in GHG] is the result of the reductions in congestion" (p. 79)

No data in the DEIR allows for the conclusion that the project would lead to a reduction in congestion. Statement needs to be substantiated. It also inconsistent with research.[113]

- *"Capacity, demand, and vehicle based emissions reduction strategies are compared for several pollutants employing aggregate US congestion and vehicle fleet condition data. We find that congestion mitigation does not inevitably lead to reduced emissions; the net effect of mitigation depends on the balance of induced travel demand and increased vehicle efficiency that in turn depend on the pollutant, congestion level, and fleet composition. In the long run, capacity-based congestion improvements within certain speed intervals can reasonably be expected to increase emissions of CO2e, CO, and NOx through increased vehicle travel volume." (Transportation Research Part D: Transport and Environment, Volume 17, Issue 7, October 2012, Pages 538-547, Transportation Research Part D: Transport and Environment, Congestion and emissions mitigation: A comparison of capacity, demand, and vehicle based strategies, Alexander Y.Bigazzi, Miguel A.Figliozzi)[114]*
- *"[Batterman's] 2011 study, evaluated how much carbon was released by cars under different conditions: rush hour congestion, work zones, and free flow conditions. The "emissions density" is worse in congested rush hour conditions, because a lot of cars are sitting around idling, which is not surprising. But that finding does not support the popular conclusion that widening highways would reduce emissions, Batterman says in his letter. That's because highway widening tends to lead to more driving — a phenomenon known as induced demand. He wrote: For example, an expansion adding four lanes to the existing eight lanes that soon reach capacity would represent a 50-percent increase in volume or [vehicle miles traveled], all things being equal. The change in the VMT would likely to be larger than the changes in the emission factors, and thus would offset any benefits of free flow conditions."[115]*

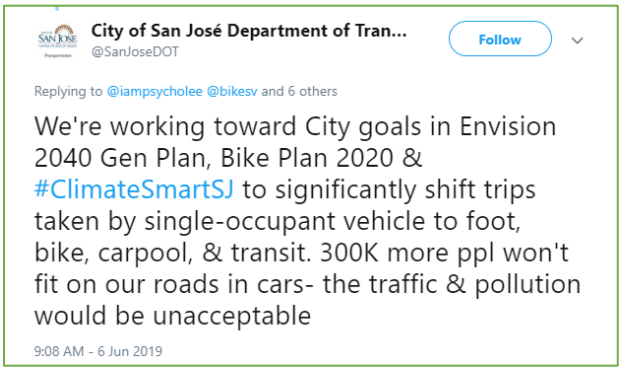
[112] "Vehicle emissions in congestion: Comparison of work zone, rush hour and free-flow conditions" (https://sph.uth.edu/kaizhang/files/2014/02/Zhang-2011-AE.pdf)
[113] http://cityobservatory.org/urban-myth-busting_idling_carbon/
[114] https://www.sciencedirect.com/science/article/pii/S1361920912000727
[115] https://usa.streetsblog.org/2019/06/06/what-happened-when-larry-hogan-tried-to-claim-wider-highways-would-help-the-climate/

229- *Mode share*

"The Extension includes bicycle and pedestrian improvements, including a new bike/ped connection over I-880, which will facilitate those modes of travel. Trips made by non-motorized modes instead of by motor vehicle have a direct benefit in terms of fewer GHG emissions." (p. 79/80)

The impact of the project on mode share has not been analyzed. Statement needs to be substantiated.

- *"What if we rethought the purpose of our streets. Are they really just meant for cars to get from A to B? Or can we see them as a place to walk and cycle, where children play and neighbours meet? By removing cars from cities, you are not just reducing emissions – there are countless other benefits"*[116]



[116] https://europeansting.com/2018/08/11/what-would-happen-if-we-removed-cars-from-cities/

Noise

230- Vibration Source Levels for Construction Equipment

Since construction occurs as close as 30 feet away from sensitive structures, Table 3.13-7 (p. 118) should be updated to portray data at 30 feet instead of 50 feet.

"A review of the anticipated construction equipment and vibration level data provided in Table 3.13-7 by the acoustical engineers who prepared the project's noise and vibration analysis concluded that vibration levels generated by the proposed activities and equipment would be below the 0.2 in/sec PPV criteria when construction occurs at distances of 30 feet or greater from sensitive structures." (p. 119)

Calculations or supporting evidence for this statement and especially for cumulative impact of simultaneous use of various equipment needs to be provided.

231- California Department of Transportation threshold

The California Department of Transportation considers sound at 50 decibels in the vicinity of schools to be the point at which it will take corrective action for noise generated by freeways. (See Streets and Highway Code sections 216 and 216.1.) This should be noted in the DEIR.

232- Vibration during construction

"Construction will occur only during the daytime hours, reducing the potential for annoyance to residences during evening and night hours of rest and sleep." (p. 119)

The report fails to acknowledge that most construction would occur during school operating hours and business hours of nearby offices. The impact of vibration on these receptors will therefore be significant.

233- Vibration during operation

The DEIR fails to discuss the potential impact of vibrations during operation (heavy trucks passing close to classrooms) as discussed for example in "Mitigation of Highway Traffic-Induced Vibration".[117]

234- Cumulative Increases in Traffic-Related Noise

The table 3.13-8 (p. 121) and subsequently the report fails to acknowledge and further analyzes significant impacts to receivers S2, S3 and S4 as all these receivers will see an increase of 5 dBA DNL or more where the project will contribute 1dBA DNL or more.

235- Interior noise levels

The City's standard for interior noise levels should be applied to this project, specifically at the school.

236- Appendix – Calculations

The calculation input documents provided to the public are - according to a phone conversation with John Hesler, Principal Project Manager for David J. Powers & Associates, Inc. -illegible and he was not sure how useful they are.

Meaningful, transparent records for all calculations need to be provided, especially given the many typos and inconsistencies in other work sheets.

[117] http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.509.3322&rep=rep1&type=pdf

237- Traffic data

Based on the information provided, it seems as if the noise study was completed only for existing traffic conditions but not 2040 conditions. An analysis for 2040 conditions needs to be done as well.

238- Accuracy of noise levels

"Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA." (p. 2).

The margin of error should be included in the presentation of all results affected, especially since a number of results are close to or at "Normally Acceptable Levels" (see e.g. Table 7, S1, S5, ST-3, R2, R4) or other applicable thresholds.

Inaccuracy likely also affects the calculation of existing noise levels. This potential error is not identified in the EIR.

- *"it is important to recognize the correlation between the precision of measurements and the confidence in the impact assessment. Especially in a Detailed Noise Analysis, avoid using less precise methods of measuring existing noise just for the sake of convenience or expediency. The use of less precise methods must be clearly justified."*[118]

239- Regulatory Background - California Collaborative for High Performance School (CHPS)

The report should include information on the California Collaborative for High Performance School (CHPS).[119] The Acronym CHPS (p. 22) should be explained at first use

240- Difference in calculated DNL for ST-3 and S2

Table 5 shows a difference of 10dB under existing conditions between ST-3 and S2 which are in close proximity to each other. This requires further explanation and the calculated value for S1-S5 should be compared to measurements on site.

241- Difference in calculated DNL for S2 and S5

Table 5 shows a difference of 8dB between S2 and S5 which are in close proximity to each other. This requires further explanation and the calculated value for S1-S5 should be compared to measurements on site.

242- Super Micro

The report fails to evaluate the noise impact to the employees at Super Micro.

243- Traffic distribution across lanes

"Traffic was evenly distributed across EB/WB and NB/SB lanes on each side of intersections since turning lane volumes at intersections were not available."

Given the regional commute patterns, an evenly distribution of traffic seems unrealistic. The report needs to be re-evaluated and its analysis based on updated more detailed traffic data.

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[118] "Transit Noise and Vibration Impact Assessment Manual", FTA, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf, p. 92

[119] See e.g. http://www.sanjoseca.gov/DocumentCenter/View/86115 "Harker School Project Environmental Noise And Vibration Assessment"

244- 130 days of construction

A construction period of 130 days (p. 28) seems widely unrealistic given that similar projects that were recently build have either taken much longer than this or are anticipated to take much longer. It is also inconsistent with data provided in other parts of the DEIR.

245- Gap in noise barrier

"To be effective, barriers must be constructed with a solid material and without any gaps in the face of the wall or at its base. Openings or gaps between noise barrier materials or the ground substantially decrease the acoustical effectiveness of the barrier."

The report should evaluate how this statement relates to the gap in the barrier created by the access gate to the school site.

246- Noise barrier west of classrooms

It is not clear how or if noise barriers will continue west of the school buildings. Please provide a correct and more detailed map.

R LOCATIONS

247- Impact of construction noise and vibration

The report fails to adequately present the impact of construction noise and vibration on the offices of Supermicro and the business along Charcot Avenue west of I-880.

248- Union Pacific Railroad

The analysis fails to identify the UPPR as a significant source of noise.

249- Residential receptor at 1942/1954 Oakland Rd

The analysis fails to include a residential receptor at 1942/1954 Oakland Rd.

Public Services

250- Increase in public services

The DEIR states that the project will have no impact on public services. It fails to consider that any increase in VMT is correlated with an increase in crashes which will require public services (police, fire, health).

The project will also require general funding for maintenance, potentially impacting other public services by reducing the funding available for them.

251- Crime near noise barriers

*"The City is **not aware of any study that establishes a correlation between roadway construction and crime rates**. In any event, this is a social impact that is not covered under CEQA."*

(Appendix B, Response 3.2)

- *"Another consideration related to the design of barrier overlap sections [similar to the gate to the school site] is the potential for increased crime in the immediate areas surrounding the overlapping sections, particularly where a pedestrian overpass is also located nearby. To address this concern, safety measures, including additional lighting or a modified overlap design to provide more open visibility, may need to be implemented."*

(FHWA Highway Noise Barrier Design Handbook) [120]

The increased need for public services (i.e. police) is an impact that needs to be evaluated under CEQA.

- *"Collective Point 6 is a cooperative of feminist architects, sociologists and urban planners who have been trying to build equality into Barcelona's streets for a decade. Visibility is key, says member Sara Ortiz, but there's more to it than lighting. "In well-lit places where there is no activity, no eyes on the street, people are not going to feel safe anyway," she says. "Eyes on the street" means both activity on the streets in terms of footfall and what's going on in the buildings that line them. "Whether it's commercial [properties] or not," Ortiz says, "there should be transparency." **From inside you can see outside, and vice versa. After all, violence against women often happens behind closed doors. Affluent neighbourhoods can be the worst offenders in this respect, with high walls shielding homes so that the streets feel like a tunnel**." ("What would a city that is safe for women look like?" The Guardian, 13 December 2018)*[121]

The impact of noise walls on safety and walkability in the area needs to be discussed in the DEIR.

252- No road closures

"During the construction phase of the project, no full roadway closures/detours would be needed." (p.128)

[120] https://www.fhwa.dot.gov/ENVIRonment/noise/noise_barriers/design_construction/design/design09.cfm
[121] https://www.theguardian.com/cities/2018/dec/13/what-would-a-city-that-is-safe-for-women-look-like

Can you please expand how the Charcot Extension will be built without a roadway closure of Silk Wood Lane between Oakland Road and the future intersection at Charcot and Silk Wood Lane on the eastern end or of the existing Charcot Ave at the western end?

The statement is also inconsistent with response 20.6 which states that detours might be needed.

Consultant Agreement with BKF also states that consultants are required to:

- *"Lane Closure Report: Consultant will obtain 7 day 24 hour traffic counts from Caltrans. If the counts are not available, perform 7 day 24 hour traffic counts at mainline and for all ramps where closures are required, including local streets."*

This has not been discussed.

253- Impact of noise walls on emergency access

The report needs to evaluate how the noise walls will impact emergency access to both the school and residences on Silk Wood Lane.

254- Cumulative impact

The EIR argues that the Extension is an important part of development in North San Jose which will *"provide for the development of 26,700,000 square feet of industrial uses, 300,000 square feet of commercial uses, and 32,000 residential dwelling units in North San José. […] the Charcot Avenue Extension is identified as one of the infrastructure projects in the NSJADP, its construction will facilitate the planned growth in North San José that is identified above."* (p. 179).

If this development will only happen with the Extension project then this cumulative impact would mean a significant increase in the need of all public services.

This is a significant, unavoidable impact.

255- Impact on school scores

"Based on the analyses contained in this EIR, there is no reason to conclude that the construction of the project would result in a demonstrable degradation of the school's programs and their competitiveness." (Response 20.7)

It needs to be specified which part of the analyses contained in the EIR the statement is based on.

Research has shown that increased air pollution can significantly impact student learning:

- *Victor Lacy, Avraham Ebenstein, and Sefi Roth study the impact of short-term ambient air pollution on Israeli students' test scores and find "a robust negative relationship with test scores" which "suggest[s] that the gain from improving air quality may be underestimated by a narrow focus on health impacts."*[122]

- *Wes Austin, Garth Heutel, and Daniel Kreisman look at the rollout of school buses in Georgia that have had their engines retrofitted to be cleaner and "find that retrofitting districts see significant test score gains in English and smaller gains in math."*[123]

[122] https://www.nber.org/papers/w20648
[123] https://www.nber.org/papers/w25641

Also see

- "Something in the air? Air quality and children's educational outcomes", Economics of Education Review, Volume 56, February 2017, Pages 141-151 https://www.sciencedirect.com/science/article/abs/pii/S0272775716303703
- "Air pollution: A systematic review of its psychological, economic, and social effects", Current Opinion in Psychology, Volume 32, April 2020, Pages 52-65, https://www.sciencedirect.com/science/article/pii/S2352250X19300673
- "Indoor air quality and academic performance", Journal of Environmental Economics and Management, Volume 70, March 2015, Pages 34-50,
- https://www.sciencedirect.com/science/article/abs/pii/S0095069614001016
- Brockmeyer, S., & D'Angiulli, A. (2016). How air pollution alters brain development: the role of neuroinflammation. Translational neuroscience, 7(1), 24-30.
- "Does Pollution Drive Achievement? The Effect of Traffic Pollution on Academic Performance", Jennifer Heissel, Claudia Persico, David Simon, NBER Working Paper No. 25489, Issued in January 2019, https://www.nber.org/papers/w25489
- Air Pollution Exposure Harms Cognitive Performance, Study Finds, https://www.npr.org/2018/08/27/642321572/scientists-link-air-pollution-exposure-to-cognitive-decline
- Air pollution and detrimental effects on children's brain. The need for a multidisciplinary approach to the issue complexity and challenges; Lilian Calderón-Garcidueñas, Ricardo Torres-Jardón, Randy J. Kulesza, Su-Bin Park and Amedeo D'Angiulli, https://www.frontiersin.org/articles/10.3389/fnhum.2014.00613/full
- The role of neuroinflammation in developmental neurotoxicity, tackling complexity in children's exposures and outcomes, Advances in Neurotoxicology, Volume 3, 2019, Pages 223-257 https://www.sciencedirect.com/science/article/pii/S2468748018300274?via%3Dihub
- Prenatal and Childhood Traffic-Related Pollution Exposure and Childhood Cognition in the Project Viva Cohort (Massachusetts, USA), Environ Health Perspect. 2015 Oct; 123(10): 1072–1078, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4590752/
- The impact of exposure to air pollution on cognitive performance, Xin Zhang, Xi Chen, and Xiaobo Zhang, https://www.pnas.org/content/115/37/9193
- Sunyer, J. et al. (2015) "Association between Traffic-Related Air Pollution in Schools and Cognitive Development in Primary School Children: A Prospective Cohort Study."
- Pastor et al. (2004) Reading, writing and toxics: children's health, academic performance, and environmental justice in Los Angeles
- Byoung-Suk Kweon, Paul Mohai, Sangyun Lee, and Amy M Sametshaw. 2016. "Proximity of public schools to major highways and industrial facilities, and students' school performance and health hazards. "Environment and Planning B: Urban Analytics and City Science Vol 45, Issue 2, pp. 312 – 329
- "Air Pollution Around Schools Is Linked To Poorer Student Health And Academic Performance", Paul Mohai, Byoung-Suk Kweon, Sangyun Lee, and Kerry Ard https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2011.0077
- Air pollution rots our brains. Is that why we don't do anything about it?, James Bridle, https://www.theguardian.com/commentisfree/2018/sep/24/air-pollution-cognitive-improvement-environment

Recreation

256- Regulatory framework

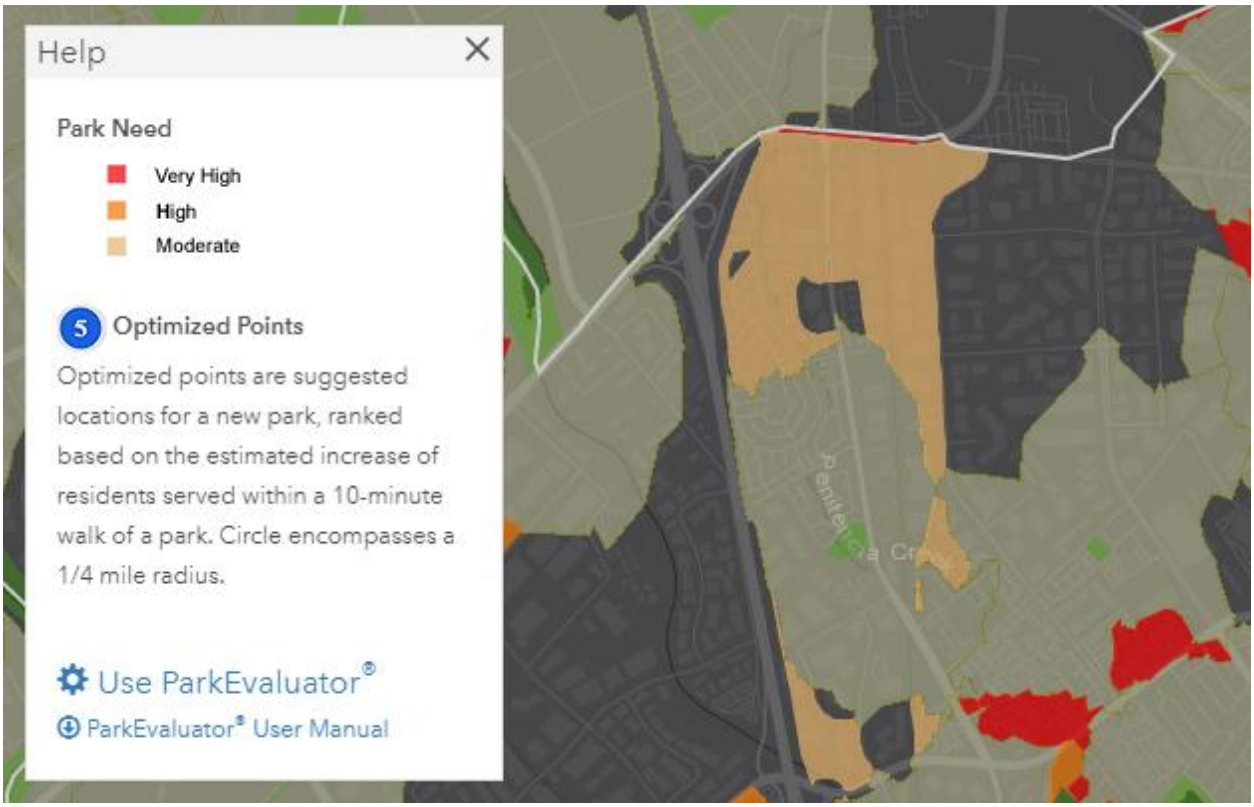
Staff has indicated that the project will apply for federal funding. (VTA Board of Directors Meeting April 4th, 2019). If so compliance with NEPA and especially section 4(f) will be necessary. This needs to be considered and acknowledged in the EIR.

257- Impact of Construction

The DEIR fails to describe the impact on the recreational areas at Orchard School during construction both because of easements needed for construction as well as limitations in use due to construction activities.

258- Existing condition

The DEIR should discuss existing conditions in neighborhood in terms of access to parks relative to needs.



Source: ParkServe ParkEvaluator[124]

259- Cumulative Impact

Cut-through traffic from and to the Extension along McKay might lead to increased traffic volumes next Gran Paradiso Park which in turn could limit activities at this park. This impact needs to be analyzed.

[124] See e.g. https://parkserve.tpl.org/mapping/index.html?CityID=0668000

Cultural Resources

260- Sensitivity of the location

"The entire project alignment has a high to highest potential for buried prehistoric archaeological deposits, with the highest being at the eastern and western ends of the project alignment." (p. 58)

*"An Extended Phase 1 included excavation of eight exploratory trenches and six exploratory cores at 14 different locations within the project alignment. The subsurface investigation identified a cultural feature at a depth of approximately 10-12 feet below ground surface in one of the trenches. The age, nature, and depth of materials found in this feature s**uggests that a potentially important prehistoric archaeological site is buried in the general vicinity of the trenching location** where this feature was identified."(DEIR, p. 58)*

Given the stated highest potential for an important prehistoric site, further studies should be undertaken to fully assess the potential impact.

Further discussion is needed to evaluate the impact of construction on the important prehistoric site, the value of further examining the site before construction, the impact of vibrations from construction and operation of the roadway.

Hydrology and Water Quality

261- Bioretention area

"These bioretention areas would be located throughout the project as landscape strips along the back of curb, which collect surface runoff directly from sidewalk and roadway"(DEIR, p. 94)

Please explain how bioretention area located next to the sidewalk along the back of the curb can collect surface runoff from the roadway. Given the raised profile of these areas, it requires further explanation how water can flow up the curb to the bioretention area.

262- Groundwater

There is insufficient discussion of how the groundwater level at 5 feet impacts the project.

Utilities and Service Systems

263- Construction impact/Solid waste

The report fails to adequately describe the expected amount of waste resulting from construction activities.

V. Inconsistency with City plans

The project is inconsistent with a number of General Plan policies and other City policies.

Fiscally strong City

- *"MAJOR STRATEGY #8: FISCALLY STRONG CITY*
  The General Plan establishes a land use planning framework that promotes fiscal balance of revenue and costs to allow the City to deliver high-quality municipal services. The Fiscally Strong City Major Strategy was created in part to counteract the negative fiscal consequences of past land use patterns.

- *Land Use and Fiscal Health*

- *Past land use patterns have resulted in a predominance of low-density, single-family residential uses (43 percent of the City's land area) compared to only approximately 15 percent of job-generating employment land. The remaining land is higher density residential, public, or other uses. Low-density sprawl results in a disproportionate cost to the City due to high capital investments and ongoing operations and maintenance for infrastructure, serving less people and businesses than the City otherwise could in a higher-density built environment."*

- *"The Circulation Element of the Envision San José 2040 General Plan includes a set of balanced, long-range, multi-modal transportation goals and policies that provide for a transportation network that is safe, efficient and sustainable (minimizes environmental, **financial**, and neighborhood impacts)."*

The EIR does not assess the financial impact of the project or its alternatives. This omission needs to be corrected.

- *"New roads encourage environmentally destructive transportation and land use; they're also a bad deal that has led the country into a road maintenance crisis. Existing road miles outnumber new ones 99 to 1, but states spend more money making those incremental additions than taking care of the rest."*[125]

264- Maintenance Costs

According to the most recently adopted City budget San José does not have sufficient funds to bring its street pavement into overall "Good" condition (PCI 70). [126]

Adding an additional road and bridge structure to the system will only increase maintenance costs, potentially impact the General Fund and make delivery of other public services more difficult.[127] This impact needs to be discussed and disclosed.

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[125] https://slate.com/business/2019/02/portland-oregon-is-expanding-a-highway-says-it-will-be-good-for-the-environment.html

[126] "San José's street system consists of 2,434 miles of pavement and is rated overall in "Fair" condition with a Pavement Condition Index (PCI) rating of 66 on a scale of 0-100, with 100 being a new street. The City would need to invest $102 million annually for 10 years to improve the City's streets into overall "Good" condition (PCI 70) and significantly reduce the $539.1 million backlog of deferred pavement maintenance. With average ten-year funding levels estimated at approximately $87.2 million per year, the City falls short of the total amount of needed funding by $14.8 million annually." http://www.sanjoseca.gov/DocumentCenter/View/86326, V-776

[127] http://lgc.org/wordpress/docs/events/first_thursday_dinners/ftd_2013_Protecting_Transportation-june.pdf

San José Climate Smart

265- Consistency of General Plan and NSJADP with San José Climate Smart

"Further, the proposed roadway extension is included in the adopted Envision San José 2040 General Plan roadway network and the planned roadway network for the North San José Area Development Policy, both of which are consistent with the City's GHG Reduction Strategy." (p. 80)

Statement is inconsistent with staff memo for City of San José Transportation and Environment Committee October 7, 2019:

- *"the climate implications of building out the General Plan and finds that the General Plan alone is not enough to meet the [City's or] State's carbon commitments, let alone align with the decarbonization rates implied by the Paris Agreement"*[128]

And with staff memo:

- *"Mobility accounts for 54% of GHG emissions in San Jose today. The City supports the Paris Agreement and is developing an Environmental Sustainability Plan that establishes a technically robust "pathway to Paris" that aligns with the Agreement's 2 degrees Celsius goal. Implementing the General Plan is a necessary but insufficient part of that pathway. To realize our GHG-reduction goals, the City must use a metric like VMT that supports smart land use and transportation choices and reduce the need to travel by car."*[129]

California in general is not on track to meet its climate goals:

- *"While positive gains have been made to improve the alignment of transportation, land use, and housing policies with state goals, the data suggest that more and accelerated action is critical for public health, equity, economic, and climate success. […] California will not achieve the necessary greenhouse gas emissions reductions to meet mandates for 2030 and beyond without significant changes to how communities and transportation systems are planned, funded, and built." (California Air Resources Board, California's Sustainable Communities and Climate Protection Act, Progress Report November 2018)*[130]

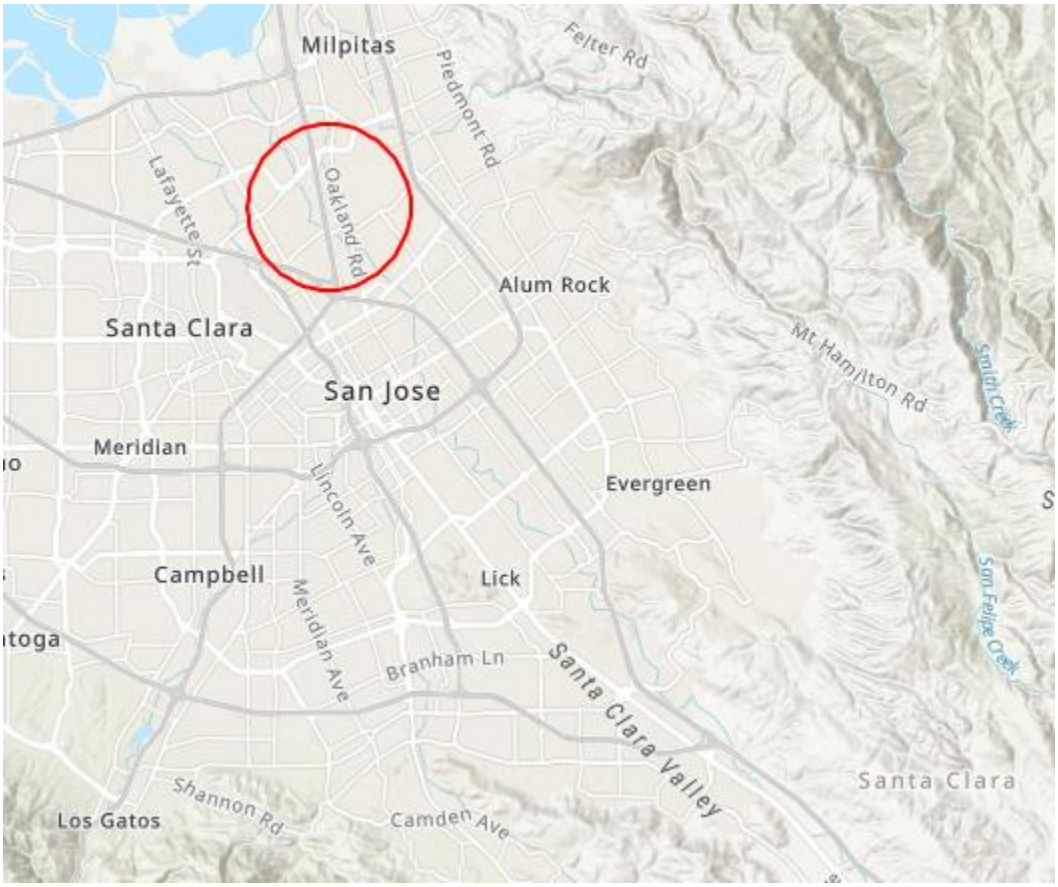
266- Traffic analysis data suggests significant increase in VMT

DEIR seems to indicate that VMT in San José will actually increase significantly by 2040 as the project area alone will see an increase of 1.4 million VMT per day.

	2015	2025	2040
Daily VMT in study area[131]	1,263,080	1,821,479	2,659,078
Increase vs. 2015		+44%	+111%

[128] https://sanjose.legistar.com/View.ashx?M=F&ID=7740265&GUID=BDA753CC-B484-4112-BA30-0F346E4D1F96
[129] http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=2795&meta_id=667835
[130] https://ww2.arb.ca.gov/resources/documents/tracking-progress also see https://cal.streetsblog.org/2018/11/26/report-california-efforts-to-reduce-transportation-emissions-are-not-working/
[131] Appendix K – Transportation Analysis, p16

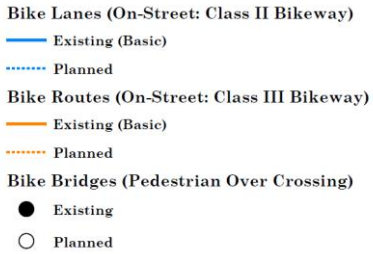
Given an increase of this magnitude – roughly 11% of total City VMT[132] – in this relative small area of San José (see map) raises questions how a reduction of 43% by 2040 for the City as whole can be achieved.



[132] City wide VMT is estimated to be 12.5 million per day (Source: SJ DOT, October 2019)

San José Bike Plan 2020

The DEIR should note that the Bike Plan 2020 designates the Charcot/880 overcrossing as a Bike-/Pedestrian Only-Overcrossing and that the proposed project is therefore inconsistent with the Bike Plan 2020, and a significant impact.



Complete Streets Design Guidelines

The DEIR fails to acknowledge the City's Complete Streets Design Guidelines and the compliance or non-compliance of the project with this plan.

Vision Zero

The DEIR fails to acknowledge the City's Vision Zero plan and the compliance or non-compliance of the project and alternatives with this plan.

- *"Vision Zero Principle 2: Human life and safety takes priority over mobility"*[133]

[133] Vision Zero San Jose http://www.sanjoseca.gov/DocumentCenter/View/74828

San José Transportation Analysis Policy 5-1

The DEIR (p. 149) does not accurately interpret San José Transportation Analysis policy 5-1, the transportation analysis does not meet the standards of policy 5-1 and the construction of the project is therefore not consistent with this policy.

The analysis determines:

"Per San Jose Transportation Analysis Policy 5-1, the project is presumed to have less-than-significant transportation impact and is screened from a detailed CEQA transportation analysis."

This determination is omitting key parts of the policy and misreading the parts it applies.

The policy exception seemingly applied by the analysis is the following:

- *"Through Lanes: Addition of roadway capacity on local or collector streets provided the project substantially improves conditions for pedestrians, cyclists, and/or transit" (p. 7).*

Yet, the policy speaks of roadway capacity ON [meaning existing] streets. As the analysis itself state, the project will provide a new connection, not add on to an existing (also see discussion of Alternative B – widening of Montague or Brokaw). Considering the building of a new connection as adding capacity on a local or collector street is false interpretation of the policy.

Further the City policy itself states:

- *"However, most other roadway projects, including building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future, may or may not induce additional vehicle travel. For example, adding an extra lane to an especially critical and congested link may leverage VMT growth far beyond that link, increasing VMT to a greater degree. […]Therefore, projects that will likely lead to additional vehicle travel should not be presumed to have less-than-significant impacts." (Transportation Impact Analysis Handbook).*

In conclusion, the project needs to include a complete VMT analysis under CEQA based on City guidelines and should not be screened from a detailed CEQA transportation analysis.

Public Outreach Policy For Pending Land Use And Development Proposal

267- Notice of Preparation and Scoping

The Project seems to be in violation of the City's "Public Outreach Policy For Pending Land Use And Development Proposals"[134]

- This is a project of significant community interest and yet
  - Notification radius inadequate
  - No On-site notice

The notification radius for example was smaller than the notification radius for when the adjacent residential development was approved (Permit GP03-04-01) providing further evidence that the notification radius was too limited. Please provide a list of owners notified to verify.

268- Community meeting:

"An important aspect of staff's role at community meetings is to understand and record public comment so that staff can transmit community input to the decision-makers" (p. 3).

Staff did not record public comment at the community meetings in 2018 and indicated that they won't record verbal public comments at the September 2019 meeting either.

In contrast, comments at the community meeting organized by Orchard PTA on September 26, 2019 were summarized live by Orchard PTA and a full record of comments is available as the community meeting was recorded on tape. Record of the meeting has been submitted to the City as part of the commenting process to the DEIR. A summary of comments made can be found in Attachment D – "Notes from September 26, 2019 community meeting at Orchard School".

269- Location of the Community meeting

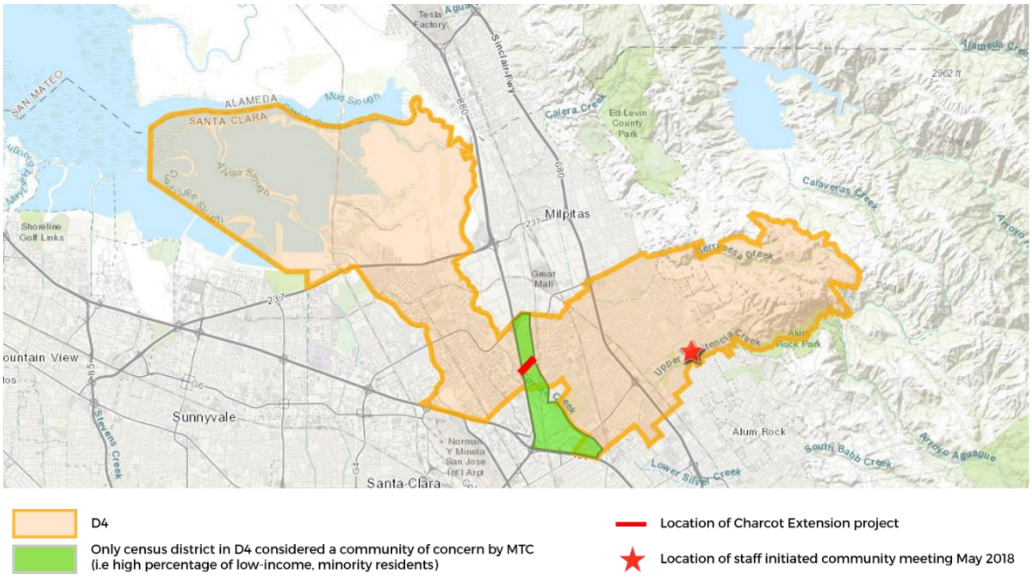
The EIR should also note that the City held a community meeting on the project in May 2017. While Orchard school was deemed an appropriate meeting place for the May 2017 meeting, staff initiated public meetings in 2018 and 2019 were at the Berryessa Library Branch – 25 minute away.

According to the EIR, *"The nearest branch library is the Joyce Ellington Library at 491 East Empire Street, which is located approximately one mile south of the project alignment."*

The EIR has been made available at the Educational Park Branch Library location which is also closer to the project site than the Noble Branch library where the community was held. This indicates that the location chosen for the community meeting was inadequate.

The location of the community meeting at the Noble Branch library is not a location that allowed the majority of the directly impacted community to adequately be informed about the project.

[134] https://www.sanjoseca.gov/DocumentCenter/View/3892



270- Inadequate responses to community concerns in Appendix B

Many community members expressed concerns about the project in written comments. The responses to these comments are often inadequate (see Attachment C – "Inadequate responses to NOP/scoping comments"). Responses often stated that comments are just noted for the record since they don't raise any environmental issues. Closer evaluation of the original comments shows that the comments did raise environmental issues, although not in "official EIR/planning" terminology. The City should respond to all comments equally, regardless of vocabulary used.

271- Sensitivity of reports

Why is the information contained in the following reports considered sensitive and what qualifications are necessary to view the report?

- Cultural Resources Report
- Tribal Cultural Resource Report
- Paleontological Report

272- Decision for EIR

Please describe when and by whom the determination to work on an EIR was made. Numerous statements indicate that substantial efforts for the EIR seem to have been made before a Notice of Preparation was issued. For example, a number of sources were last accessed before the NOP notice was circulated. One source was last accessed in July 2016. Two years before the NOP for the EIR was published.

273- Subcontractor used

The noise analysis was prepared by Illingworth & Rodkin, Inc. The subcontractor is not identified in the BKF consultant agreement (see below). Please provide documentation including the written approval by the Director on when the subcontractor was added to the agreement.

SECTION 7. USE OF SUBCONSULTANTS

7.1 **Authority to Use:** Whichever of the following is marked applies to this Agreement:

☐ The Consultant can *not* use any subconsultants without the Director's prior written approval.

☒ The Consultant will use the following subconsultants for the specified areas of work. The Consultant can not remove, replace or add to any of the subconsultants identified in this provision without the Director's prior written approval.

	Subconsultant's Name	Area of Work
1.	David J. Powers & Associates, Inc.	Environmental Engineering
2.	Hexagon Transportation Consultants	Traffic Engineering
3.	Apex Strategies	Community Outreach
4.	Biggs Cardosa Associates, Inc.	Structural Engineering
5.	Parikh Consultants, Inc.	Geotechnical Engineering
6.	Alliance Engineering Consultants, Inc.	Electrical Engineering
7.	Gates + Associates	Landscape Architecture

Other approved EIRs

"Since being added to the General Plan in 1994, all traffic analyses for projects in the greater North San Jose area and environs have included the Charcot Avenue Extension as part of the planned roadway network. Examples include the 2004 EIR for the condos located on the northside of Silk Wood Lane, the 2015 EIR for the Super Micro Project, the 2007 EIR for the San Jose Flea Market Project, the 2018 EIR for the BART Project, and various revisions to the North San Jose Development Area." (Appendix B, Response 34.55)

Some of the EIRs mentioned do not identify Charcot as a transportation improvement included in their EIR. The statement therefore seems untrue. Furthermore, data from the EIRs were Charcot was included is inconsistent with data in this DEIR especially in regards to traffic data and projections.

The City has failed to adequately incorporate the Charcot Extension in its long-term traffic planning.

274- Milpitas Transit Area Specific Plan

The 2007 DEIR for the Milpitas Transit Area Specific Plan[135] had to undertake a detailed traffic study of the area between 237 and Brokaw Road. The DEIR failed to include the Charcot Extension as a future roadway in the analysis.

Since the Charcot Avenue Extension is an "important and established part" of the NSJADP, the San José General Plan, the NSJ Deficiency Plan, it is surprising that the City of San José in its comment to the DEIR[136] did not mention this oversight. Could you please elaborate, why the City of San José did not feel it to be necessary for the Project to be included in the Milpitas Transit Area Specific Plan EIR and why the City did not mention it in the official comment to Milpitas? Are there other EIRs were the City failed to adequately notify applicants of this future roadway?

275- Orchard School EIR

"Prior to that decision, the City advised the Board against building the school at this location due to its proximity to existing and planned roadways (Oakland Road and Charcot Avenue) and industrial businesses."

Email Meenaxi Ravel: *"The statement in Appendix B of the EIR is based on conversations with former staff members of the City's Planning Department and City Attorney's Office.* ***The staff expressed to the District staff in phone calls concern with constructing an elementary school in an industrial area and adjacent to major planned roadways (Oakland Road and Charcot Avenue)****, and that the District was subject to the City's General Plan land use designation and zoning designation, pursuant to state law, and the District Board needed to go through an override process to locate the school, despite the City's land use controls applicable to the site. […]."*

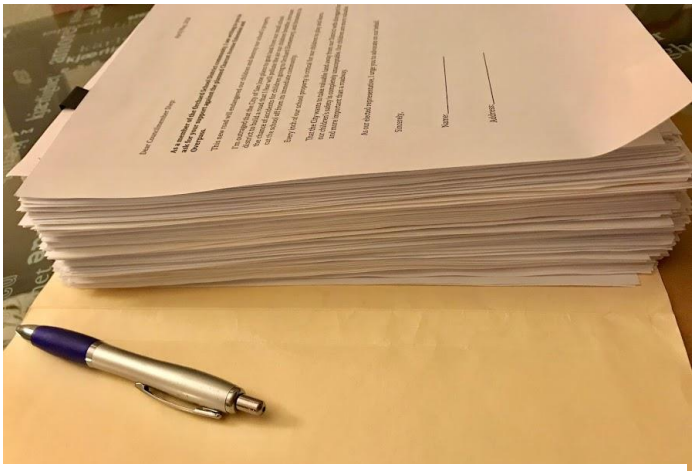
Regardless of staff expressing certain opinions to unidentified school staff, there is **no indication** that the SJ Planning Commission - who under Public Resource Code Section 21151.2 seems to be the appropriate decision making body for such concerns - indicated those concerns to the school district or **disapproved of the school site selection during the environmental review for the school site**.

[135] http://www.ci.milpitas.ca.gov/_pdfs/plan_eir_tasp_draft.pdf
[136] http://www.ci.milpitas.ca.gov/_pdfs/plan_eir_tasp_final.pdf

General planning process

"The City of San José updates its general plan on a regular basis, including comprehensive updates as needed to ensure that the plan reflects the latest vision of the community as well as economic and demographic trends." (DEIR, p. 3)

Given that the City is currently in the process of its regular general plan update, given the overwhelming opposition in the community that shows that this project does not reflect the latest vision of the community, and the general generational change under way,[137] the project should not move forward till at least after the general plan update. [138]



Picture of the over 600 letters collected in 14 days against the project (first page blank to protect privacy)

It should also be noted that there is now a statewide majority to update outdated plans:

- *"A strong majority of Californians (74%, 68% likely voters) also express support for encouraging local governments to change land use and transportation planning so that people can drive less."*[139]

276- Original planning for the Charcot Avenue Extension

"The City has planned the Charcot Avenue Extension for over 25 years."(p. vi)

"The Extension was first identified as an infrastructure improvement project needed to serve the planned growth in the North San José area in the San José Focus on the Future 2020 General Plan, which was approved in 1994." (p.3)[140]

Other infrastructure improvements identified at that time[141] have either never been finished (expanding Tasman Drive to 6 lanes across Coyote Creek) or are currently re-evaluated (Tasman Complete Corridor Study).

Additionally, other infrastructure improvements planned to accommodate growth and planned even before 1994 have since been deemed not feasible anymore.

- *"These included pre-1975 General Plan facilities such as State Route 87 extended north to State Route 237, the Commercial Street/Sierra Road Connection over Coyote Creek, etc. These improvements are no longer feasible due to developed land uses along the routes and will cause significant environmental impact. Based on this review, City staff concluded that no other viable, alternatives are available without significantly impacting land-use in the current General Plan designation." (1994 NSJ deficiency plan)*

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[137] https://usa.streetsblog.org/2018/11/13/millennials-unhappily-stuck-in-their-parents-transportation-system/
[138] For a discussion of a similar problematic also see: "The Inertia of Lines on Paper" https://www.strongtowns.org/journal/2018/10/8/the-inertia-of-lines-on-paper
[139] https://www.ppic.org/blog/californians-favor-stronger-efforts-to-reduce-greenhouse-gas-emissions/
[140] As a point of reference: The median price for a single family home in Santa Clara County was $257,520 at that time (September 1994).
[141] See https://gallery.mailchimp.com/3c2e887be4432eb0e94db571d/files/0136cf2d-6e3e-43d3-8e2a-b2b00635b9d4/20170322_PublicMeetingPresentation.pdf, p. 3)

It should also be noted that between 1994 and today, plans for Charcot itself have changed (e.g. reduction from four lanes to two lanes, Complete Streets Design).[142]

277- Orchard School opposition to General Plan 2020

The Charcot Avenue Extension was first identified as an infrastructure improvement project needed to serve the planned growth in the North San José area in the San José "Focus on the Future" 2020 General Plan, which was approved in 1994.

Further it should be noted that Orchard School District in a consortium with other schools urged and appealed to the City to not approve the General Plan 2020 and the EIR for it without further analysis of its impact schools such as Orchard (see Attachment I – "School opposition San José General Plan 2020"). The City declined the appeal and moved forward with the General Plan against the recommendation from the schools.

[142] See for example Response 34.56, Appendix B

"Classmates and teachers of Angel Garcia, the 6-year-old kindergartner who was struck by a car and killed along with his mother, marched about a mile from their school to the crash site Thursday to mourn them[…].

The children sang, "We love you, Angel, I'm going to let it shine," to the tune of "This Little Light of Mine" and placed candles at 26th Avenue and Foothill Boulevard, while about 200 neighbors, teachers and parents watched, many with tears in their eyes.

Garcia, his mother Alma Vasquez, 30, and Garcia's 20-year-old uncle were crossing the street at 26th Avenue and Foothill Boulevard a little before sunset on Saturday when they were struck in a hit-and-run."

("Classmates of boy killed in hit-and-run call on Oakland for safer street", East Bay Times, April 18, 2019)

General Plan Policies CD-1.24, CD-2.1, CD-4/11, CD-5.1, CD-5.3, CD-10.2, EC-1.1, EC-1.2, EC-6.5, EC-6.7, ES-3.9, MS-21.4, MS-21.5, TR-1.1, TR,-1.2, TR-1.3, TR-1.5, TR-1.9, TR-2.1, TR-2.3, TR-2.6, TR-2.10, TR-2.22

278- General Plan Policy CD-1.24

- *"Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Avoid any adverse effect on the health and longevity of such trees through design measures, construction, and best maintenance practices. When tree preservation is not feasible, include replacements or alternative mitigation measures in the project to maintain and enhance our Community Forest."*

The compliance of the project with this policy needs to be discussed in more detail.

279- General Plan Policy CD-2.1

- *"Create a comfortable and safe pedestrian environment by implementing wider sidewalks, shade structures, attractive street furniture, street trees, reduced traffic speeds, pedestrian-oriented lighting, mid-block pedestrian crossings, pedestrian-activated crossing lights, bulb-outs and curb extensions at intersections, and on-street parking that buffers pedestrians from vehicles."*

The project does not implement wider sidewalks (10 feet is minimum according to SJ Complete Street Design Guidelines), shade structures, attractive street furniture, reduced traffic speeds, pedestrian-oriented lighting, mid-block pedestrian crossings, bulb-outs and curb extensions at intersections, and on-street parking that buffers pedestrians from vehicles.

280- General Plan Policy CD-4.11

- *"Accomplish sound attenuation for development along City streets through the use of setbacks and building design rather than sound attenuation walls. When sound attenuation walls are located adjacent to expressways or freeways, or railroad lines, landscaping, public art, and/or an aesthetically pleasing and visually interesting design should be used to minimize visual impacts."*

Noise walls along City streets are to be avoided according to General Plan policy. They should therefore be considered a significant impact.

281- General Plan policy CD-5.1

- *"Design areas to promote pedestrian and bicycle movements, to facilitate interaction between community members, and to strengthen the sense of community."*

The impact of the project on this policy and especially of the noise walls is not adequately discussed.

282- General Plan Policy CD-5.3

- *"Promote crime prevention through site and building designs that facilitate surveillance of communities by putting "eyes on the street." Design sites and buildings to promote visual and physical access to parks and open space areas."*

The impact of the proposed sound walls has not been evaluated under this General Plan Policy. They represent a significant, unavoidable impact.

283- General Plan Policy CD-10.2

- *"Require that new public and private development adjacent to Gateways, freeways […] and Grand Boulevards consists of high-quality architecture, use high-quality materials, and contribute to a positive image of San José."*

Impact of noise walls needs to be considered under this policy. Given that sound walls have not been designed, impact cannot be accurately assessed. Also the architectural quality of the overpass in general should be evaluated as well.

284- General Plan Policy EC-1.1

- *"Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review"*

In accordance to San Jose General Plan policy EC-1.1, The report needs to acknowledge and incorporate California Streets and Highway Code sections 216 and 216.1. as relevant regulatory background.

California Streets and Highway Code sections 216 and 216.1. states that sound at 50 decibels in the vicinity of schools to be the point at which corrective action needs to be taken.

285- General Plan Policy EC-1.2

- *"The City considers significant noise impacts to occur if a project would: Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable."*

Table 3.13-6 shows increases of 11 and 6 dBA for receivers S2 and S3. The report subsequently fails to identify and discuss these significant impacts.

"While noise levels outside the Orchard School primary classrooms (S2 and S3) would be exposed to increases in traffic noise levels that are greater than five dBA DNL, the classrooms have been constructed with double-paned windows, insulation, and forced-air mechanical ventilation, therefore interior noise levels would still be maintained at 45 dBA DNL and the impact at this location would be less than significant. (Less Than Significant Impact)" (p. 116)

As stated in General Plan policy EC-1.2, an increase by five dBA DNL needs to be considered significant even when noise levels remain "Normally Acceptable".

The report further fails to analyze of mitigation measures for these noise receptors.

286- General Plan Policy EC-6.5

- *"The City shall designate transportation routes to and from hazardous waste facilities as part of the permitting process in order to minimize adverse impacts on surrounding land uses and to minimize travel distances along residential and other non-industrial frontages."*

The transportation of hazardous materials next to Orchard school and the residential area along Silk Wood Lane also conflicts with the City's General Plan:

287- General Plan Policy EC-6.7

- *"Do not approve land uses and development that use hazardous materials that could impact existing residences, schools, day care facilities, community or recreation centers, senior residences, or other sensitive receptors if accidentally released without the incorporation of adequate mitigation or separation buffers between uses."*

Since the project is likely to increase the number of trucks passing the school while also bringing them into closer proximity to the school, the impact should be considered significant.

288- General Plan Policy ES-3.9

- *"Implement urban design techniques that promote public and property safety in new development through safe, durable construction and* ***publicly visible and accessible spaces****."*

The impact of the proposed soundwalls has not been evaluated under this General Plan Policy. They represent a Significant, Unavoidable Impact.

289- General Plan Policy MS-21.4

- *"Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it."*

The reports need to disclose how all feasible alternatives would conform to this policy and what reasonable measures haven been evaluated to preserve mature trees.

290- General Plan Policy MS-21.5

- *"As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effect on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy."*

The reports need to disclose how all feasible alternatives would conform to this policy.

291- General Plan Policy MS-21.5

- *"As a condition of new development, require the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies or guidelines."*

The reports need to disclose how all feasible alternatives would conform to this policy and where the replacement trees are likely to be planted.

292- General Plan Policy TR-1.1

- *"Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT)."*

The report should not that the project is in violation of this goals as it increases VMT (Appendix K, p. 16).

293- General Plan Policy TR-1.2

- *"Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects"*

Or, as stated in the DEIR:

- *"Policy 1.2 of The Envision San Jose 2040 General Plan states that impacts on overall mobility and all travel modes should be considered when evaluating transportation impacts of new developments or infrastructure projects to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT." (p. 5)*

The DEIR fails to analyze overall mobility and mode share use. This omission needs to be corrected.

294- General Plan Policy TR-1.3

- *"Increase substantially the proportion of commute travel using modes other than the single-occupant vehicle."*

The EIR fails to disclose the impact of the project or its alternatives on mode share.

295- General Plan Policy TR-1.5

- *"Design, construct, operate, and maintain public streets to enable safe, comfortable, and attractive access and travel for motorists and for pedestrians, bicyclists, and transit users of all ages, abilities, and preferences"*

The EIR fails to disclose the impact of the project and especially the proposed sound walls on attractive access and travel for pedestrians and bicyclists.

296- General Plan Policy TR-1.9

- *"Give priority to the funding of multimodal projects that provide the most benefit to all users. Evaluate new transportation projects to make the most efficient use of transportation resources and capacity."*

The DEIR fails to provide a cost-benefit analysis for the alternatives.

297- General Plan Policy TR-2.1

- *"Coordinate the planning and implementation of citywide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings and near areas with higher pedestrian concentrations (school, transit, shopping, hospital, and mixed-use areas)"*

The DEIR fails to address how different project alternatives would comply or not comply with this policy.

In violation of this policy the transportation analysis even suggests:

"Therefore, it is recommended that access to the school site be located near Oakland Road to discourage crossing of Charcot Avenue at points other than the Oakland Road intersection." (p. 30).

298- General Plan Policy TR-2.3

- *"Construct crosswalks and sidewalks that are universally accessible and designed for use by people of all abilities."*

The report should note that the project is in violation of this goals as the planned sidewalks do not meet minimum standards of the City's Street Design guidelines. The visualizations provided show trees planted on the sidewalk next to Orchard School. While useful as shade structures, this would limit the sidewalk width to an inadequate narrow path.

299- General Plan Policy TR-2.6

- *"Require that all new traffic signal installations, existing traffic signal modifications, and projects included in San José's Capital Improvement Plan include installation of bicycle detection devices where appropriate and feasible."*

The report should note that the project is in violation of this goals as the installation of bicycle detection devices is not planned.

300- General Plan Policy TR-2.10

- *"Coordinate and collaborate with local School Districts to provide enhanced, safer bicycle and pedestrian connections to school facilities throughout San José."*

While the City's Department of Transportation has collaborated with the Orchard School District to enhance safety for access to the school on Fox Lane, the project team has not collaborated with the Orchard School District to create a safer bicycle and pedestrian connection from Silk Wood Lane to the school.

301- General Plan Policy TR-2.22

- *"Collect and report pedestrian and bicycle counts, as part of routine manual traffic counts, along roadways and at intersections where bicycles or pedestrians are permitted. Quantifying pedestrian and bicycle activities will measure the amount of pedestrian and bicycle activities throughout the City and assist in determining and prioritizing infrastructure improvement projects."*

The location for the pedestrian counts (Oakland Road/Silk Wood Lane) does not match the main areas of pedestrian crossings and activity identified in the traffic study. (p. 49)

The pedestrian and bicyclist count is inadequate.

302- General Plan Policy TR-5.7

- *"Development projects' effects on the transportation network will be evaluated during the entitlement process and will be required to fund or construct improvements in proportion to their impacts on the transportation system. Improvements will prioritize multimodal improvements that reduce VMT over automobile network improvements."*

Similar to private developers the City of San José should prioritize multimodal improvements that reduce VMT over automobile network improvements to mitigate development in North San José.

VI. Comments on overarching issues

Project objectives

For a more detailed discussion of transportation system deficiencies and potential alternatives to the project please see Attachment F – "Discussion of Context and Alternatives to Charcot Extension".

303- Purpose vs. objectives

The DEIR should make a clear distinction between the projects purpose and its objectives. The current descriptions are at least partly redundant.

*"The **purpose** of extending Charcot Avenue across I-880 is to **provide a safe multi-modal facility**, **improve connectivity** for vehicular, bicycle, and pedestrian travel routes, provide the opportunity to utilize alternative travel modes, and reduce travel time for the east-west travelers in the North San José Area."*	*"The **objectives** for the proposed project are as follows:* ► ***Improve connectivity** between the east side of I-880 and the west side of I-880; […]* ► ***Provide a safe bicycle/pedestrian facility** over I-880, in compliance with San José's Complete Streets Policy; […]"*
(DEIR, p. 13)	*(DEIR, p. 13)*

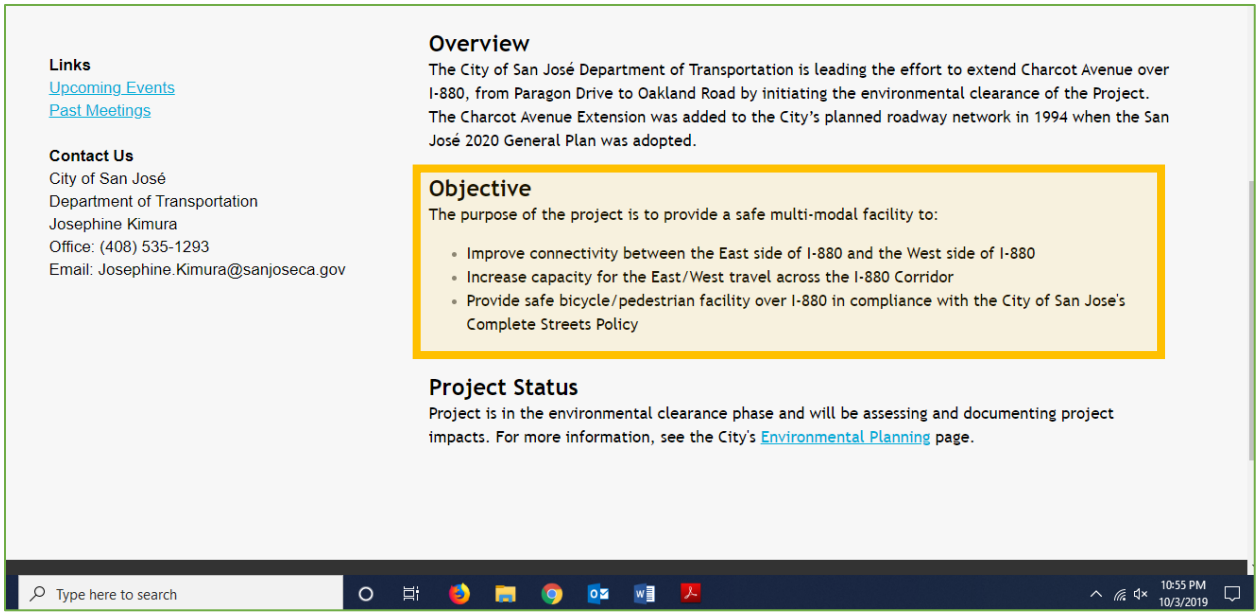
304- Change in project objectives since scoping

The objectives for the proposed project are as follows:

- Improve connectivity between the east side of I-880 and the west side of I-880;
- Increase the capacity for east/west travel across the I-880 corridor;
- Provide a safe bicycle/pedestrian facility over I-880, in compliance with San José's Complete Streets Policy;
- Implement a programmed roadway network improvement project identified in the *Envision San José 2040 General Plan;* and
- Implement a planned major roadway improvement project, as set forth in the *North San José Area Development Policy* and the *North San José Deficiency Plan*.

(DEIR, p. 13)

The project objectives presented in the DEIR are inconsistent with the project objectives presented during the scoping process, the City's project website and the information in the initial site assessment. Please explain why additional objectives (i.e. compliance with City plans) were added, when and by whom.



Links
Upcoming Events
Past Meetings

Contact Us
City of San José
Department of Transportation
Josephine Kimura
Office: (408) 535-1293
Email: Josephine.Kimura@sanjoseca.gov

Overview

The City of San José Department of Transportation is leading the effort to extend Charcot Avenue over I-880, from Paragon Drive to Oakland Road by initiating the environmental clearance of the Project. The Charcot Avenue Extension was added to the City's planned roadway network in 1994 when the San José 2020 General Plan was adopted.

Objective

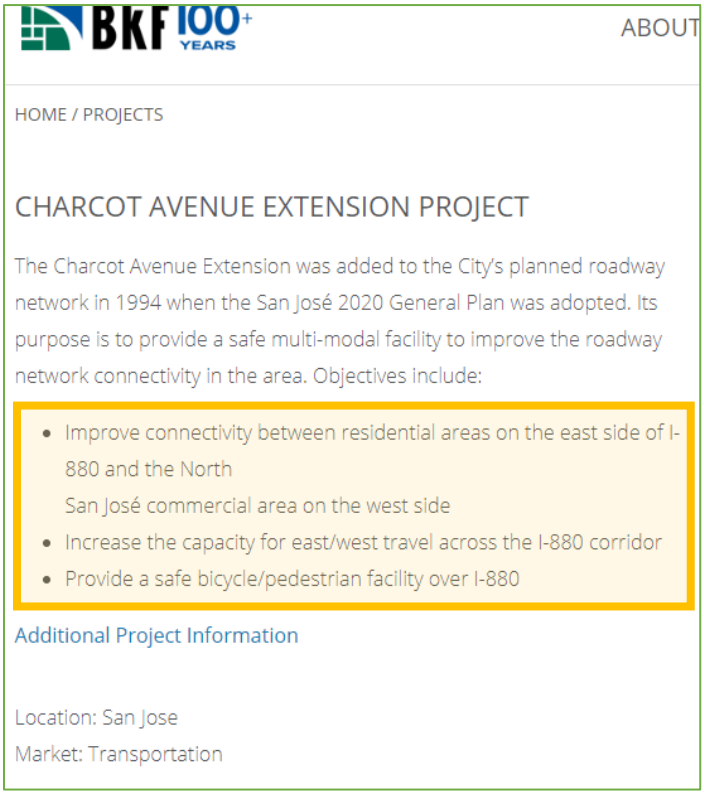
The purpose of the project is to provide a safe multi-modal facility to:

- Improve connectivity between the East side of I-880 and the West side of I-880
- Increase capacity for the East/West travel across the I-880 Corridor
- Provide safe bicycle/pedestrian facility over I-880 in compliance with the City of San Jose's Complete Streets Policy

Project Status

Project is in the environmental clearance phase and will be assessing and documenting project impacts. For more information, see the City's Environmental Planning page.

Project website October 2019



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CHARCOT AVENUE EXTENSION PROJECT

The Charcot Avenue Extension was added to the City's planned roadway network in 1994 when the San José 2020 General Plan was adopted. Its purpose is to provide a safe multi-modal facility to improve the roadway network connectivity in the area. Objectives include:

- Improve connectivity between residential areas on the east side of I-880 and the North
  San José commercial area on the west side
- Increase the capacity for east/west travel across the I-880 corridor
- Provide a safe bicycle/pedestrian facility over I-880

Additional Project Information

Location: San Jose
Market: Transportation

Contractor BKF website, October 2019

Slide from Community Scoping Meeting, May 2018

The EIR also needs to identify the initial transportation deficiency, the system strategies as defined in State, regional, and local plans, goals, and objectives, and the community values the project reflects as described in the 2015 Consultant Agreement with BKF:

- *„The primary purpose and need of the Project needs to be defined in order to initiate the geometric alternative analysis and establish if the traffic operations support the Project goals. The purpose and need will be collaboratively developed by the Consultant, the City, VTA and Caltrans to ensure concurrence.* ***Considerations in establishing the purpose and need include:***
- ***• Identify the Initial Transportation Deficiency; • Meet system strategies as defined in State, regional, and local plans, goals, and; objectives; • Reflect Community Values***
- ***Once the initial purpose and need is established, Consultant shall evaluate alternatives to; avoid or reduce environmental impacts and to select the alternative that causes the least; overall environmental damage and that satisfies the transportation purpose and need.;*** *The purpose and need may be modified by Consultant (with the approval of City) during the; course of the PSR/PDS development as other requirements and benefits arise.“*

305- Connectivity

The original justification for including the project in the general plan has been capacity increase:

“The additional capacity at the eastbound approaches to I-880 […] is expected to attract slightly heavier traffic volumes and improve the screenline level of service from LOS E to LOS D” (GP 2020 EIR Traffic Analysis, p. 219).

Improved connectivity might be a benefit of the project but was not identified as an objective. Please provide any supporting material that shows that connectivity is an intended objective of the project. Also, connectivity in this context should be assumed as connectivity for people.

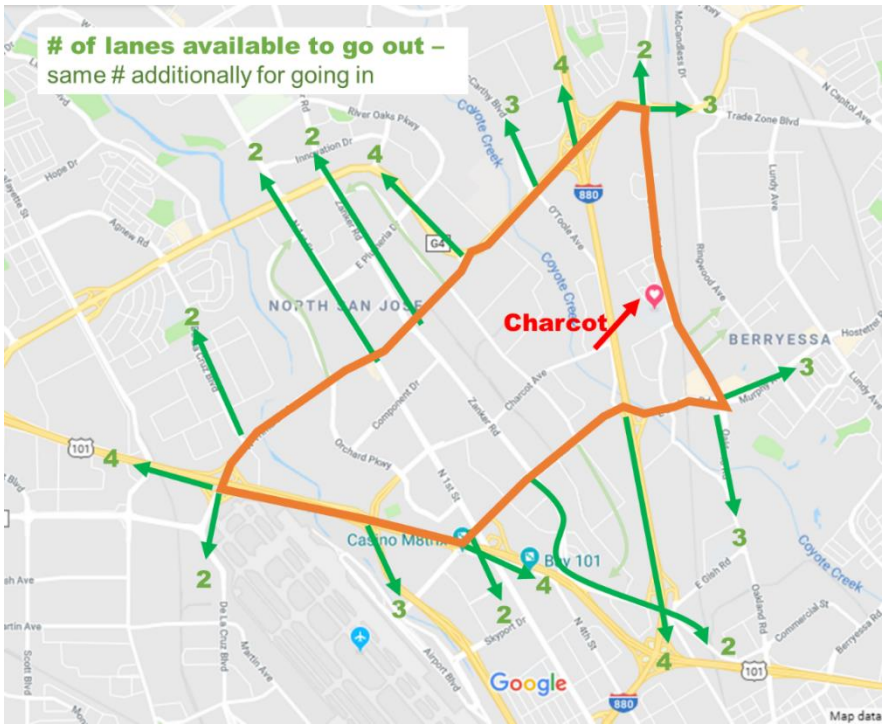
Generally, staff has argued that NSJ has a high degree of accessibility and connectivity.

- *"North San José provides a strategic location for job growth because of its proximity to the San José Norman Y. Mineta International Airport and the Downtown, along with a high degree of accessibility from several major freeways including Highway 101, Interstate 880, State Route 237 and State Route 87. The area is also well served by other transportation facilities including an existing light rail line and the Guadalupe River and Coyote Creek trail systems."* [143]

And although staff has compared the south end of NSJ to a "bathtub"[144], a detailed analysis of this[145] shows NSJ is connected to its surroundings by 49 vehicle lanes per travel direction or 98 lanes for both travel directions). Based on NACTO information[146] this provides access for over 940,000 vehicles per day - one-way.

As shown on the map, it is also unclear how Charcot would actually increase connectivity.

It should further be noted that many of the existing barriers blocking vehicle traffic are **freeways built to increase car mobility**.



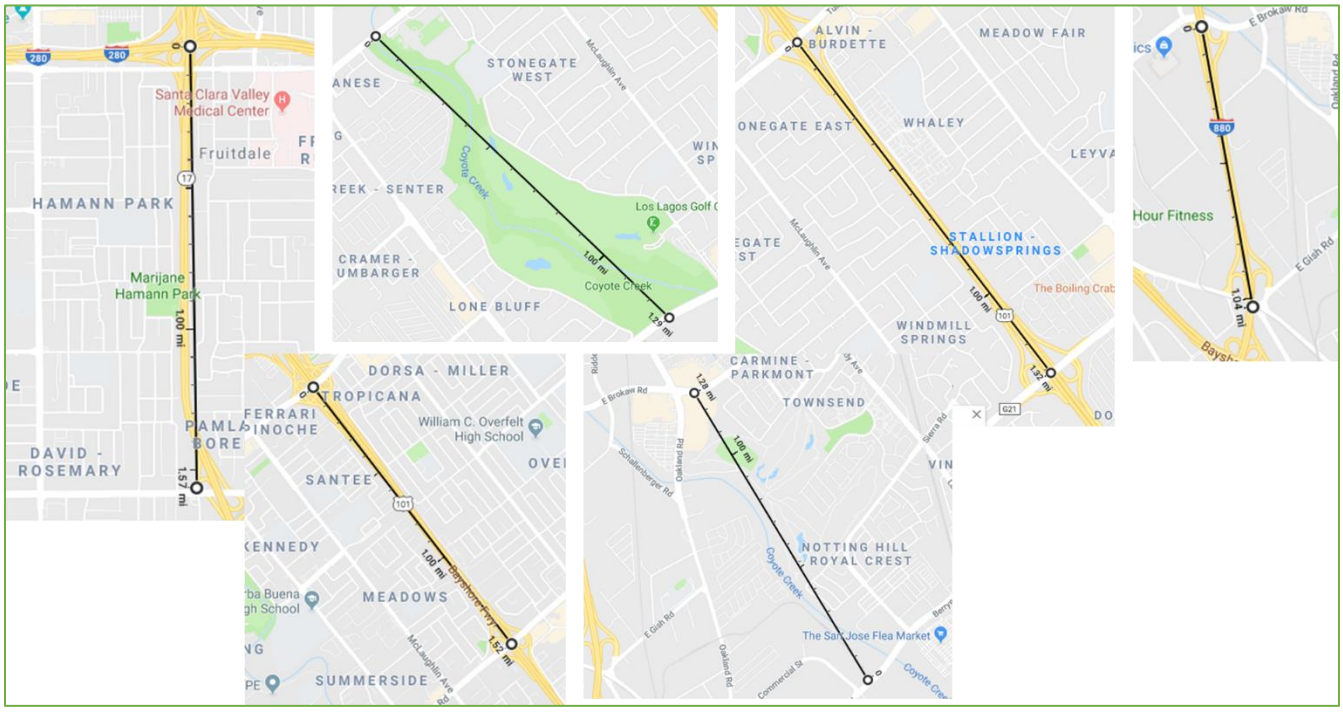
[143] North San José Area Development Policy, p. 7, http://www.sanjoseca.gov/DocumentCenter/View/43619 also: "**One of North San Jose's greatest strengths is its connection to the regional transportation infrastructure.** The area is located adjacent to the Norman Y. Mineta San Jose International Airport and is bounded by multiple major highways that provide direct access to the rest of Silicon Valley, San Francisco, and East Bay communities. Multiple VTA light-rail stations also connect area residents and workers directly to Downtown San Jose. Furthermore, the area has relatively easy access to two existing Caltrain stations and two future BART stations (Berryessa and Alumn Rock), all of which provide even greater regional connectivity." "NSJ Retail Strategy", http://sanjose.granicus.com/MetaViewer.php?meta_id=624592"

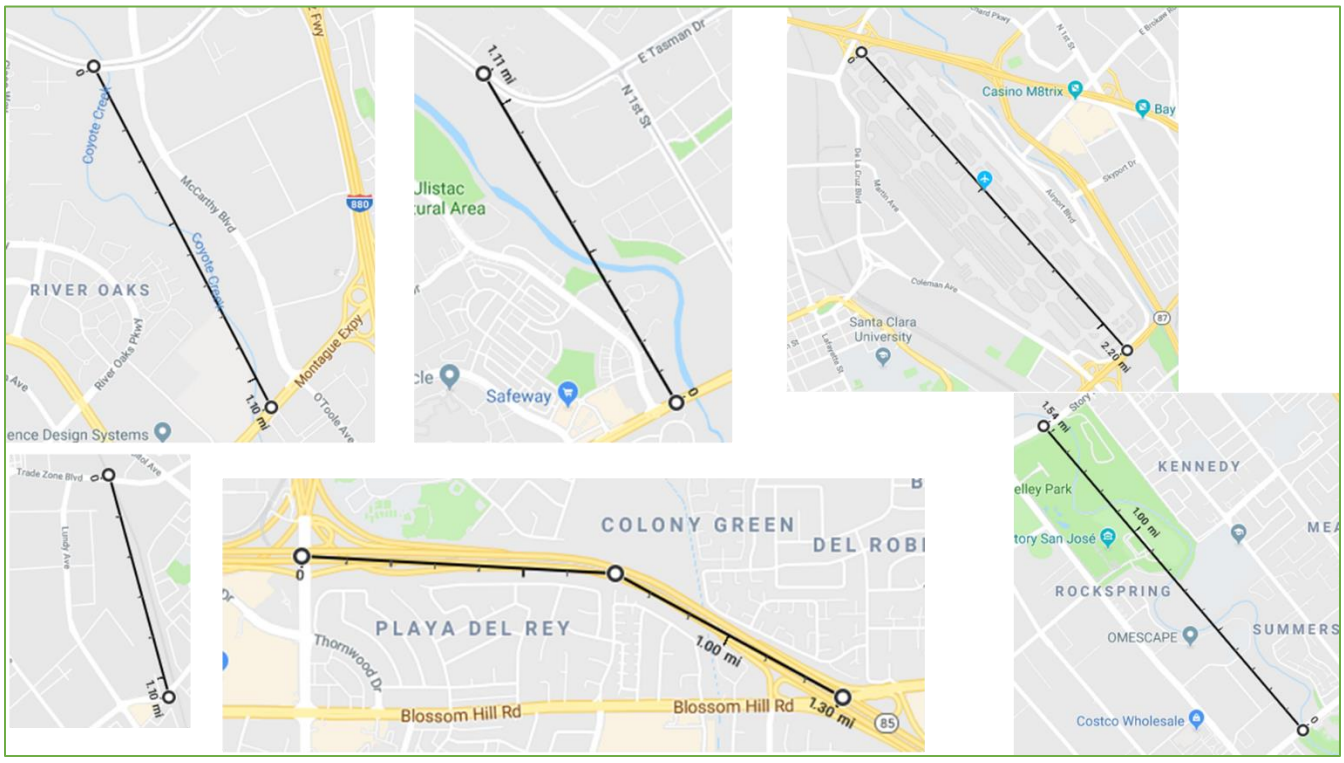
[144] Jim Ortbal, Director of Transportation at San José City Council, Jun 19, 2018, "6.5 18-837 Amendment to the Agreement with BKF Engineers for I-880/Charcot Avenue Extension Project."

[145] Comparable to a screenline analysis

[146] https://nacto.org/publication/transit-street-design-guide/introduction/why/designing-move-people/

It should further be noted that there are a number of similar barriers (longer than 1 mile) throughout San José including some very close to the project area that limited connectivity, yet there seem to be no plans to build any roadways across these barriers.





306- Existing east/west connections

There are also a number of other north-south barriers in the vicinity of the project that are maybe the underlying cause of congestion in the area and that are not addressed by the project (e.g. Coyote Creek, UPPR, Bart tracks). The focus on the I-880 crossing as a potential reason for congestion is arbitrary.

The project also does nothing to address remaining barriers.

Major barriers (i.e. ± 1 mile between crossings) and at-grade rail crossings between Berryessa, North San Jose and employment centers further west after Charcot is extended over 880.

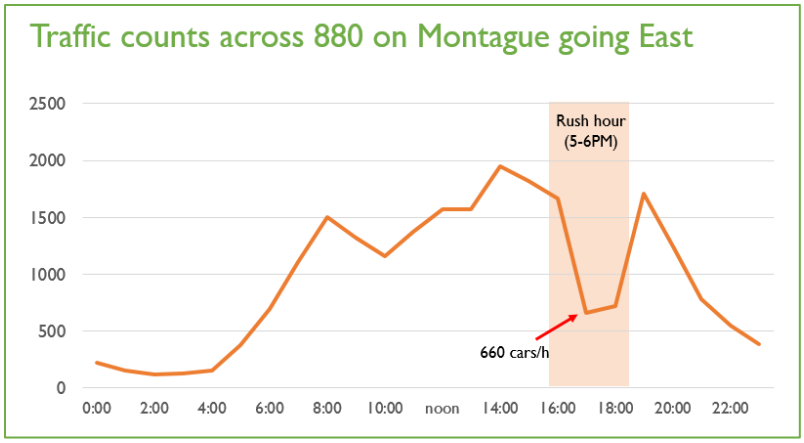
307- Time savings

The purpose of the project is to *"reduce travel time for the east-west travelers in the North San José area"* (p. 13).

Does the project fulfill this purpose? Please provide data to support the assessment. According to the data included in the DEIR any time savings seem to be minimal at best and might not even occur during peak travel hours. An appropriate focus of such an analysis would be a corridor analysis for Montague, Charcot and Brokaw for people travelling between 1st and the BART tracks between the Milpitas and Berryessa stations.

308- Capacity

The purpose of increasing capacity for east/west travel across the I-880 corridor is questionable given that traffic volumes on for example Montague eastbound (peak hour direction) sink dramatically (below 700 cars/hour on 4 lanes) and below levels seen during off-peak hours. This seems to indicate that this is not an issue of roadway capacity, but rather more complex.



309- State strategy

- *"Reducing congestion through strategies designed to encourage people to shift from cars to other modes of transportation. Funding active transportation options that contribute to the overall health of Californians and reduce greenhouse gas emissions, such as walking, transit, biking, and other active modes." (Executive Order Governor Newsom, September 2019)*[147]

The EIR should address how the project and the alternatives meet the cited state strategy.

310- Impact EN-1

"The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation. (Less than Significant Impact)".

Since the City has not established that the project would provide a significant benefit especially compared to the alternative of the overpass for pedestrians and bicyclists only, the consumption of energy necessary for the project construction and operation is wasteful, inefficient and unnecessary and a significant impact.

[147] https://cal.streetsblog.org/wp-content/uploads/sites/13/2019/10/9.20.19-Climate-EO-N-19-19.pdf

"It is imperative that road expansions stop […]

Over the years, many road expansion projects have been created through these deficiency plans, through mitigations for development agreements or through the California Environmental Quality Act (CEQA).

But local, regional and state policy goals have changed since these projects were proposed, and political leaders have come to embrace more compact, transit-oriented growth. VTA should work with its member agencies to update existing transportation mitigation programs and congestion management program deficiency plans to reflect these new policies. […]

This approach could apply […] to projects in the 2006 North San Jose Deficiency Plan"

(SPUR, "Freedom to Move – How the Santa Clara Valley Transportation Authority can create better transportation choices in the South Bay")

North San José planning

For a more detailed discussion of how Charcot relates to the development of North San José, please see Attachment A – "Background memo Charcot and Development in North San José".

311- Direct and indirect Growth

"Further, there are no pending or recently-approved projects whose construction is conditioned upon the implementation of the project."

(DEIR, p. 179)

"Chapter 5 of the NSJADP identifies the infrastructure improvements needed to serve the planned development. The Charcot Avenue Extension is listed as one of nine Major Roadway Projects"

(DEIR, p. 179)

Given the above cited inconsistency, the EIR needs to explain in more detail if development of North San José is conditioned upon the implementation of the project (statement right) or not (statement left).

Depending on the conclusion the DEIR will need to further address if the project will induce growth or not.

312- NSJ Evaluation at program level

"The environmental impacts of the Extension and other planned transportation improvements were evaluated at a program level in the San José Focus on the Future 2020 General Plan EIR (1994)." (p. 3)

"The environmental impacts of the nine Major Roadway Projects were evaluated at a program level in the North San José Development Policies Update EIR (2005)."(p. 8)

Given that evaluation criteria for transportation improvements have significantly shifted (LOS to VMT, SB 743)[148], any previous evaluation of the project is irrelevant or contradictory to today's standards.

The evaluation of the Charcot project on a program level for the North San José Development Policies Update EIR (2005) does not show any benefit of the project.

The NSJ deficiency plan itselfs states:

- *"the degree that individual projects identified in the North San Jose Deficiency Plan have the potential for creating ancillary (i.e. localized) impacts to the environment, such impacts will be evaluated as individual projects come forward for design and construction."*

The criteria used to suggest and develop transportation improvements changed between the 1994 approval of the "General Plan 2020" (criteria: screenline analysis) and the 2005 NSJ Development Policy (LOS intersection analysis). Given this shift in methodology between 1994 and 2005, it has not been evaluated if the 1994 transportation improvements are actually necessary under the 2005 methodology.

[148] As so much has changed since 2005. For example these companies or products didn't even exist in 2005: Uber, Instagram, Bitcoin, iPad, Snapchat, Apple Maps, Angry Birds, Kickstarter, GoFundMe, WhatsApp, Apple Watch, FB Messenger, Candy Crush, Pinterest, Alexa, Venmo, WeWork, WeChat, Tinder, Twitch, Siri, Square, Stripe, Slack

313- NSJADP

"The Charcot Avenue Extension has been included in each version of the NSPADP in 2005."(DEIR, p. 8)

It needs to be noted the inclusion in each version of the NSJADP happened without any evaluation of impact or benefits of the Charcot Extension.

314- North San José Deficiency Plan

"The City adopted the North San José Deficiency Plan in July 2005 to identify and implement a set of measures that will improve transportation conditions and air quality in North San José. Charcot Avenue Extension was identified as one of the projects on the Action List in the North San José Deficiency Plan."(DEIR, p. 8)

The North San José Deficiency Plan is based on LOS. In May 2019, City Council directed staff to:

- *"return to Council in early August with a workload and feasibility assessment of various options that forward the goal of advancing housing with an enhanced amount and incentives for affordable housing, including but not limited to the following options:[…] Commencing a new programmatic environmental impact study on North San Jose, utilizing statewide adoption of VMT to guide creation of a new development policy."*

This indicates that City Council is realizing the flaws of the current North San José Deficiency Plan and would like staff to re-evaluate the improvements in the plan. Staff has so far failed to follow through on council direction.

And although the plan intends to improve air quality there is no proof that infrastructure projects such as the Charcot Extension identified in the plan will improve air quality. Statement is also inconsistent with NSJ EIR that states:

- *"The proposed project will implement mitigation measures identified above to reduce impacts to regional air quality. The project as proposed will, however, result in near-term and long-term impacts to regional air quality. (Significant Unavoidable Impact)"*

315- North San José Deficiency Plan

"Implement a planned major roadway improvement project, as set forth in the North San José Area Development Policy and the North San José Deficiency Plan." (p. 13)

The NSJ Deficiency Plan writes about the purpose of Charcot :

- *"The City of San Jose has identified several physical improvements to non-CMP intersections that will further offset CMP [i.e. LOS] deficiencies. […]: Charcot Avenue Extension" (p. 13-15 NSJ Deficiency Plan)*
- *"It is the objective of the NSJDP to set forth a comprehensive solution to LOS deficiencies at CMP intersections in North San Jose to avoid the need for strict adherence to LOS standards at CMP intersections for which no localized mitigation is feasible."(Hexagon Transportation Consultants)*[149]

It should be noted that the DEIR doesn't show any LOS intersection improvements at CMP intersections or otherwise because of Charcot.

[149] http://www.hextrans.com/featured-work

- *"For decades, most local, regional, and state governments have had a myopic approach to handling the transportation needs related to infill development: they require developers to add more street/road capacity. And this single-minded approach has produced exactly what one might expect: Lots of new, expensive roads that actually increase driving, and with it pollution, emissions, roadway deaths, and impediments for people trying to get around without cars." ("Modernizing Mitigation: A Demand-Centered Approach", State Smart Transportation Initiative (SSTI) and the Mayors Innovation Project (MIP)150)*

316- Timing in NSJADP

"The Area Development Policy establishes a specific procedure for the allocation and timing of development capacity within the policy area." (DEIR, p. 98)

The report fails to acknowledge that the Charcot Extension is a Phase 2 project under the policy. Phase 1 projects have not been completed or in some cases even started.

Statement needs to be amended to incorporate the fact that Charcot is not part of the current Policy phase. Moving it to the current phase is a significant impact demonstrated by the fact of City staff having numerous discussions with a large number of stakeholders including several reports to City Council about this potential change.

Arguing that the order can or should be changed admits that the specific procedure and timing of the policy has shown to be flawed and raises the question of additional flaws in the policy especially given new understanding of transportation impacts and the move from LOS to VMT.

[150] https://smartgrowthamerica.org/app/uploads/2018/10/Modern-Mitigation-A-demand-centered-approach-compressed.pdf

317- In-fill and compact development

"However, to the extent that the Extension supports in-fill and compact development within the TPA and PDA, it is consistent with the Plan." (p. 97).

There is no evidence that the Extension supports in-fill and compact development. Quite contrary road expansion projects have generally lead to more suburban development and sprawl.[151] [152] [153] [154] [155] For a detailed discussion also see: "Driving and the Built Environment The Effects of Compact Development on Motorized Travel, Energy Use, and CO2 Emissions" (Transportation Research Board)[156]

- *"We should not expect that adding capacity to the road network will provide more than short-run relief from traffic congestion. […]we should expect that transportation infrastructure leads to cities that are less dense, even if metropolitan area population increases" (Local Transportation Policy and Economic Opportunity Matthew A. Turner Brown University, January 2019)[157]*

The stated purpose of the project according to the 2020 general plan is to allow more access to North San José from suburban areas outside the area.

- *"The flight to the suburbs and the decentralization of American cities, the report says, was fueled not only by the commuting benefits that highways provided but by the desire of more affluent urbanites to escape the negative effects of increased noise and air pollution that these roads inflicted." [158]*

- *"Our congested commutes are the result of decisions that stretch back decades, to when Americans began to build their communities around cars. Today, the ways in which we plan and invest in transportation continue to contribute to problems like congestion, lack of accessible and affordable transportation options, and a sprawling, unsafe, and ecologically destructive built environment." ("Stop trying to solve traffic and start building great places")[159]*

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[151] "Maybe you are saying, "But at least in this way you can escape the hell of the city once the workday is over." There we are, now we know: "the city," the great city which for generations was considered a marvel, the only place worth living, is now considered to be a "hell." Everyone wants to escape from it, to live in the country. Why this reversal? For only one reason. The car has made the big city uninhabitable. It has made it stinking, noisy, suffocating, dusty, so congested that nobody wants to go out in the evening anymore. Thus, since cars have killed the city, we need faster cars to escape on superhighways to suburbs that are even farther away. What an impeccable circular argument: give us more cars so that we can escape the destruction caused by cars." http://unevenearth.org/2018/08/the-social-ideology-of-the-motorcar

[152] https://sanjosespotlight.com/fearer-the-elephant-in-the-room-is-san-joses-sprawl/

[153] "Equating mobility with building more roads nurtured a tendency towards increased motorisation, reinforcing an ever-increasing inclination to expand the road network. The result was a range of unintended adverse environmental, social and economic consequences. Most of these are rooted in the high priority given to private vehicles." https://theconversation.com/four-ways-our-cities-can-cut-transport-emissions-in-a-hurry-avoid-shift-share-and-improve-106076

[154] "The Commuting Principle That Shaped Urban History", https://www.citylab.com/transportation/2019/08/commute-time-city-size-transportation-urban-planning-history/597055/

[155] https://www.theatlantic.com/ideas/archive/2019/07/car-crashes-arent-always-unavoidable/592447/ also see: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3345366

[156] http://onlinepubs.trb.org/onlinepubs/sr/sr298.pdf

[157] https://www.brookings.edu/wp-content/uploads/2019/01/Turner_PP_web_20190128.pdf

[158] https://www.citylab.com/transportation/2019/07/freeway-revolts-interstate-highway-system-data-urban-history/594082/

[159] https://www.brookings.edu/blog/the-avenue/2019/03/20/stop-trying-to-solve-traffic-and-start-building-great-places/

In contrast, limiting car access to an area is much more likely to densify an area and result in compact, high-density, mixed-use neighborhoods.[160] [161]

- *"People who live in more compact and mixed used developments in cities tend to own fewer cars and take fewer trips compared to their suburban counterparts. These results show that traditional transport planning models are overestimating the traffic impacts and parking needs of new 'smart growth' schemes which may in turn be discouraging the spread of such developments. […]Guidelines for trip and parking generation in the United States come mainly from the Institute of Transportation Engineers (ITE). The ITE Trip Generation Manual and Parking Generation manuals are considered "bibles" in transportation planning. However, these manuals focus on suburban locations with limited transit and pedestrian access. As a result, they overestimate vehicle trips and parking demands generated at urban sites" [such as future NSJ].*[162]

- *"more cars make the city a less congenial place for strollers, bicyclists and people who take public transit to their destinations. The cars push out frolicking kids, quiet afternoons reading on a bench and sidewalk cafes. So we give up our public space, our neighbor-to-neighbor conversations and ultimately our personal mobility for the next car, and the next one."*[163]

Even adding thousands of residents to an area does not necessarily lead to an increase vehicle traffic:

- *"Seattle, almost alone among American cities, has managed to grow without putting more cars on its roadways. Average daily traffic has stayed flat, and even declined a little, as its hot economy added 116,000 new residents."*[164]

318- Financial impact of the project on development in NSJ

There is no evidence that the Extension supports any development of any kind.

The EIR itself states: *"the proposed roadway extension would not result in a population and housing impact."* (p.125)

To the contrary, the high and significant Traffic Impact Fees collected for this and other major transportation projects are a major obstacle to development in North San José. Reducing the costs of this and other projects might allow the City to reduce Traffic Impact Fees and with that spur development in San Jose.

Statement is therefore not supported by evidence and should be removed.

[160] https://sf.curbed.com/2019/10/15/20916092/market-street-sf-ban-cars-vehicles-san-francisco-vote
[161] https://www.strongtowns.org/journal/2018/10/30/a-literal-bridge-from-the-past-to-the-future
[162] https://blogs.lse.ac.uk/usappblog/2018/12/14/transport-planning-bibles-overestimate-car-and-parking-needs-and-this-may-be-hurting-smart-growth-development/
[163] https://www.nytimes.com/2018/04/25/opinion/cars-ruining-cities.html
[164] https://www.politico.com/interactives/2019/what-works-next-2019-seattle-carless-city/

Equity

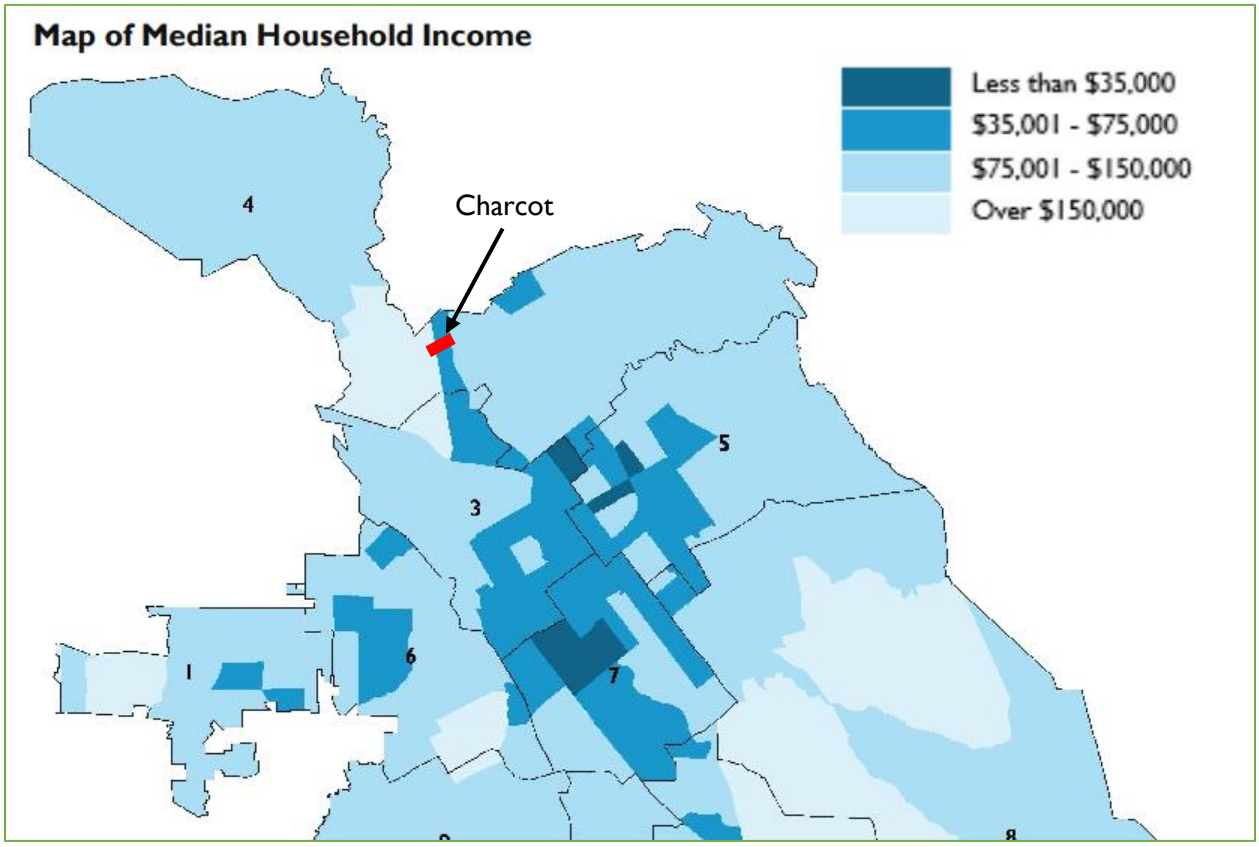
> *"We know it's a problem when we see much higher rates of asthma in low-income communities in the eastern part of my city where we know there are neighborhoods built closer to freeways. We know it's directly resulting from transportation, particularly automobiles. We know we have much farther to go. […]"As I experience children who simply cannot engage in daily activities because of asthma, as I see premature deaths, particularly in low income communities, caused by this kind of air, it makes me furious." (Mayor Sam Liccardo, 29 October 2019)*[165]

The EIR fails to consider equity as a City goal in its discussion of the project and the alternatives. Of particular concern are disparities in income and on different gender.

- *"If we truly want to tackle the issue of equity in our City, then everything we do should be done through an equity lens. We will not achieve systemic change without first truly understanding how inequity inherently makes its way into the systems, processes, and mechanisms that govern San Jose." (Memorandum from Peralez, Jimenez, Carrasco, Esparza, Arenas, June 7, 2019)*[166]

319- Low income neighborhood

The project will cut through a low-income neighborhood in order to connect richer suburbs with job rich areas west of it.



[165] https://sanjosespotlight.com/on-capitol-hill-san-jose-mayor-sam-liccardo-talks-pge-outages-clean-air/#.Xbi23xJ3hXw.twitter

[166] https://sanjose.legistar.com/View.ashx?M=F&ID=7297950&GUID=619210E1-FF17-41BC-A317-088B2BE38566

Map of Median Household Income San Jose - Auditors Report 2018, Charcot project in red

- *"Finally, children living in census block groups with a lower median household income had slightly higher percentage of attributable incident cases [of asthma] than children living in areas with a higher median income. Our results are in line with previously published data showing that, on average, households with lower income were more likely to live near high density traffic"*[167]

- *"There are powerful equity reasons to invest in walkability." That's because car-centered cities only cater to the two-thirds of Americans who can drive—excluding the elderly, the vision-impaired, and people who can't afford to have a vehicle in the first place. Cities with more transit choices demonstrate less income inequality and less overspending on rent, he writes, while better sidewalks make life easier for wheelchair users and seniors alike" (Jeff Speck*[168]*)*

- *"Researchers also have honed in on the pollution dangers children - particularly lower-income children - face when at school. A study assessing inner-city schoolchildren via personal exposure monitoring of schoolchildren with asthma showed that exposures to fine particulate matter increased same-day wheezing, shortness of breath and total symptoms. A national study found that approximately one in three U.S. public schools are located in "air pollution danger zones" within a quarter-mile or less of highways. A similar study of California schools found that 9.5 percent of schools were located within 450 feet of roads carrying at least 25,000 vehicles per day. The same California study also found that schools with higher levels of exposure to traffic were schools that disproportionately served economically disadvantaged and non-white students. Similar findings were reported in a study of Wayne County, Detroit, Michigan. The results showed 7.2 percent of schools were located in high-traffic areas and that more traffic exposure correlated with lower-income and minority populations. Looking abroad, studies in Canada and in Europe have also found that lower-income individuals live in and attend schools in neighborhoods that are located closer to busy roadways. (Safe Routes to School and Traffic Pollution)* [169]

- *"Study Finds Racial Gap Between Who Causes Air Pollution And Who Breathes It"*[170]

Also see:

- *Spira-Cohen, A, LC Chen, M Kendall, R Lall and GD Thurston. "Personal Exposures to Traffic-Related Air Pollution and Acute Respiratory Health among Bronx Schoolchildren with Asthma." Environmental Health Perspectives 119,4 (2011): 559–565*

- *Appatova, A S, P Ryan, G LeMasters and S Grinshpun. "Proximal exposure of public schools and students to major roadways: a nationwide US survey," Journal of Environmental Planning and Management 51,5 (2008)*

- *Green, Rochelle S, Svetlana Smorodinsky, Janice J Kim, Robert McLaughlin and Bart Ostro. "Proximity of California Public Schools to Busy Roads." Environmental Health Perspectives 112,1 (2004): 61–66*

[167] https://www.sciencedirect.com/science/article/pii/S0160412018325388?via%3Dihub
[168] https://qz.com/1421323/for-the-good-of-all-humankind-make-your-city-more-walkable/
[169] http://saferoutespartnership.org/sites/default/files/pdf/Air_Source_Guide_web.pdf
[170] https://www.npr.org/sections/health-shots/2019/03/11/702348935/study-finds-racial-gap-between-who-causes-air-pollution-and-who-breathes-it

- *Wu Y-C and SA Batterman. "Proximity of schools in Detroit, Michigan to automobile and truck traffic." Journal of Exposure Science and Environmental Epidemiology 16 (2006): 457-470*
- *Amram, Ofer, Rebecca Abernethy, Michael Brauer, Hugh Davies and Ryan W Allen. "Proximity of public elementary schools to major roads in Canadian urban areas." International Journal of Health Geographics 10,68 (2011): 1–11*
- *Deguen, Séverine and Denis Zmirou-Navier. "Social inequalities resulting from health risks related to ambient air quality – A European review." European Journal of Public Health 20,1 (2010): 27–35.*
- *https://mass.streetsblog.org/2019/06/28/study-minorities-suffer-higher-health-risks-from-highway-pollution/*
- *http://cityobservatory.org/why-do-poor-school-kids-have-to-clean-up-rich-commuters-pollution/*

320- *Gender equity*

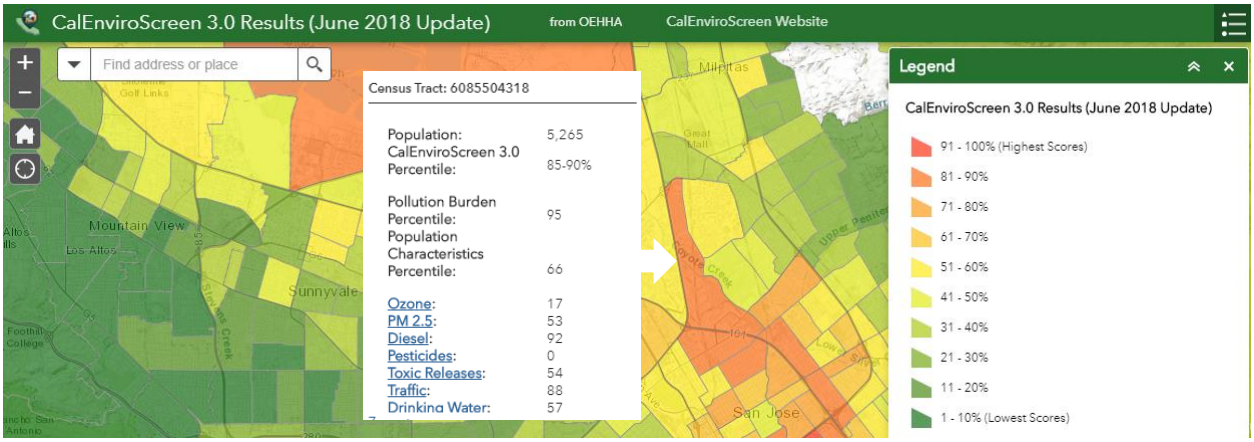
- *"Car-dominated environments particularly dissuade women from cycling, as well as other under-represented groups and people travelling with children."*[171]
- *"Transportation engineers — who by the way are overwhelmingly men — have long held up work commuting as the standard by which to base planning decisions. But women make many more trips than men daily, and they commute shorter distances on average. According to the American Enterprise Institute, they spend 31 percent less time commuting in the U.S. then men. In addition, they are often responsible for more caregiving and retail trips. U.S. transport planning has for ages privileged long trips over short. Big highway expansion projects that serve suburban commuters over more small scale projects that facilitate safer, faster short-distance travel."*[172]

[171] https://irishcycle.com/2019/07/04/reducing-cars-is-like-smoking-ban-people-wont-want-the-traffic-back-cycling-expert-tells-irish-politicians/
[172] https://usa.streetsblog.org/2019/08/29/all-the-ways-u-s-transport-system-is-biased-against-women/

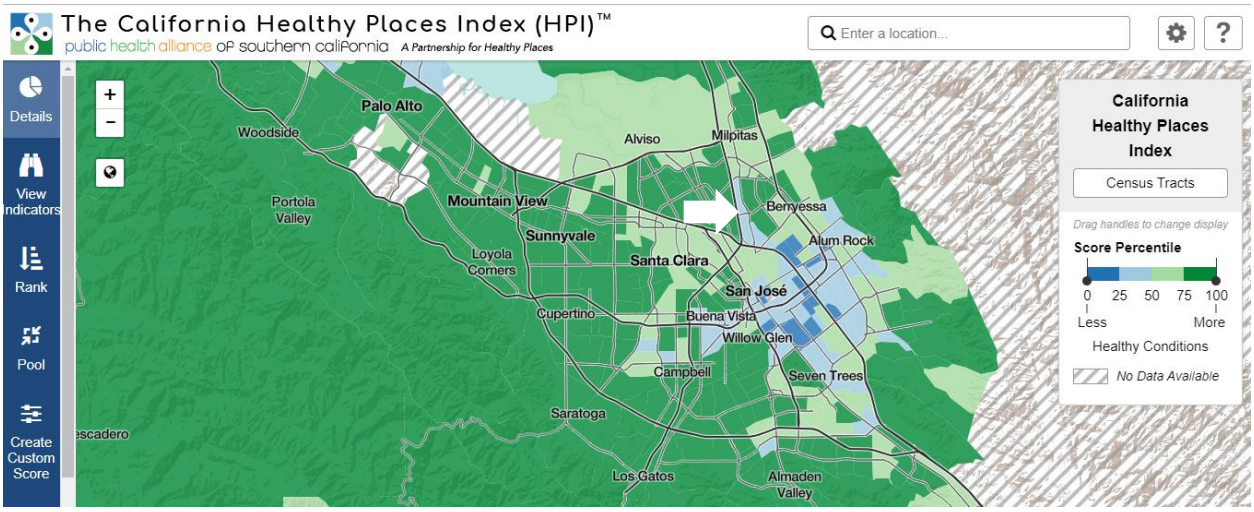
Cumulative Impacts

321- Cumulative impacts with overall existing conditions

The DEIR fails to adequately address and consider overall existing environmental conditions as documented by CalEnviroScreen 3.0



Or the California Healhy Places Index[173]



322- Impact on Charcot between Junction and Paragon Drive

The section of Charcot between Junction and Paragon Drive – which crosses Coyote Creek – will see the most increase in traffic of all roadway segments studied under existing and 2025 conditions. Impacts resulting from this increase have not been evaluated and but need to be assessed especially but not limited to air quality, noise, biological resources and impacts to Coyote Creek.

[173] https://map.healthyplacesindex.org/

323- Cumulative Impacts

"Cumulative air quality, energy, greenhouse gas, and noise and vibration analysis were evaluated in relation to pending and approved projects in the larger project area. These cumulative projects were accounted in the traffic modeling used for this project, which was used to derive traffic volumes in the larger project area."

Please provide a detailed breakdown which pending and approved projects were accounted for.

324- NSJADP to be considered as cumulative impact

Given that the DEIR sees the Extension project as an essential part of the NSJADP and the deficiency plan, any discussion of cumulative impacts in DEIR should consider the cumulative impact of Charcot and the NSJADP and the deficiency plan throughout the report. [174]

[174] Also see: https://records.sanjoseca.gov/Resolutions/RES72768.PDF

VII. Discussion of alternatives

For a more detailed discussion of transportation system deficiencies and potential alternatives to the project please see Attachment F – "Discussion of Context and Alternatives to Charcot Extension".

The discussion in this chapter needs to be revised based on errors and inconsistencies discovered.

Criteria used to evaluate alternatives

325- Alternatives are not infeasible

"The ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, City of San José City Council. (See PRC Section 21081[a] [3].)" (p. 183)

All alternatives discussed should therefore be considered potentially feasible till a decision by the decision-making body.

326- Costs

Considering alternatives infeasible because of costs as for example for Alternatives A, B and C does not comply to CEQA as stated in the EIR itself:

"The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, ***even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly****."* (p. 183).

The EIR should provide a clearer cost-benefit analysis so that the decision-making body has the necessary information to evaluate alternatives. How does the DEIR define "significant" costs? Please provide cost estimates for all alternatives and the project.

327- Benefits

The DEIR should discuss how efficient the feasible and infeasible alternatives would be in terms of reducing congestion and travel times.

Additional alternatives to be considered

328- Evaluate the following additional alternatives

1. **Road diet on Brokaw**
2. **Bus express lanes on Brokaw and Montague**
3. **McCarthy grade separation**
4. **Trimble flyover**
5. **Roundabouts on Montague and Brokaw,** which could increase capacity on these roadways[175]

[175] https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/camutcd2014-part4-rev3-a11y.pdf p 827

It should be noted that studies have shown that smaller, slower street might be better equipped to handle larger traffic volumes.[176] And that

- *"two U.S. cities, Salt Lake City and Portland, Oregon, showed measurable progress in making traffic less frustrating. Both attacked the problem with a similar strategy, investing in sophisticated traffic light optimization, bike infrastructure, light rail, and reducing parking availability. It's a lesson all cities should take to heart. Make life easier for pedestrians, bikers, and mass transit users and encourage more commuters to shift modes and abandon their cars, and roads start to become unclogged."*[177]

329- Response 14.1

"This comment recommends an alternative roadway improvement to alleviate congestion along Brokaw Road. The suggested alternative serves to improve access to I-880 via a new ramp and improvements at Gish Road. However, improved access to I-880 is not the intent of the proposed Charcot Avenue extension. Rather, the extension aims to improve local access, generally the area surrounded by Montague Expressway, Oakland Road, and Brokaw Road, from the east and west sides of I-880. The extension will not provide access to I-880 and will have minimal effect on travel routes to and from I-880 in the area."

The alternatives suggested by the comment are similar in nature to the alternatives of widening Brokaw Road or the alternative of an overpass south of Brokaw. Both these alternatives are considered in the DEIR, therefore the alternatives suggested by the comment should be considered as well.

330- Alternative locations north of Montague or south of Brokaw

"The alternative of locating the crossing north of Montague Expressway or south of Brokaw Road would not meet goals listed in the first and third bullet [reduce traffic volumes along Montague Expressway and Brokaw Road] points listed above, as it would not be effective in alleviating existing and projected roadway congestion, since these two major arterials would continue to provide more direct access with wider lanes and greater speed limits across I-880."

Please provide the TDF data associated with this statement.

Alternative A – "Fox Lane alignment"

331- Alternative A

"From an environmental perspective, there would be substantial impacts to Orchard School's designated student drop-off/pick-up area on Fox Lane." (DEIR, p. 185)

As the EIR considers the impact of this alternative to the student drop-off/pick-up area on Fox Lane significant, a similar impact by the proposed project to the drop-off/pick-up area on Silk Wood Lane should also be considered substantial and significant.

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[176] Billy Riggs, an assistant professor at the University of San Francisco School of Management and a planner who consults on the future of transportation, says autonomous vehicles, and lower speeds, could allow cities to devote less room to cars by redesigning street infrastructure. "It's speed and uncertainty that requires such wide roads for human-operated cars," says Riggs. […]In other words, it's like that old Navy Seal adage: Slow is smooth, smooth is fast. That's also the idea behind "green wave" signal timing, which is now getting a pilot in New York City. Traffic flowing at 15 mph allows for fewer red lights. (https://www.citylab.com/transportation/2019/08/low-speed-limit-vehicle-safety-crash-data-traffic-congestion/588412/)

[177] https://www.curbed.com/2019/6/11/18661586/bike-train-traffic-transportation-congestion

Alternative B – "Widening of Brokaw/Montague"

332- Capacity constraints (ramp meters) at freeway ramps

"Widening of Montague Expressway and Brokaw Road also may not improve the eastwest travel due to capacity constraints at their connections to major regional freeways including their interchanges with I-880. It is likely that the capacity constraints (ramp meters) at freeway ramps and congestion on the freeway mainline could result in blockage of travel lanes on both roadways even with widening. The improvement of access to and from I-880 also would provide minimal benefit to operations along Brokaw Road and Montague Expressway due to congestion on the freeway mainline that restricts flow onto the freeway." (DEIR, p. 187)

There is no evidence provided that free ramp meters are restraining capacity on Brokaw or Montague or are expected to be. Statement therefore not substantiated.

Alternative C – "Overpass south of Brokaw"

333- Access to Lowe's

"It would also sever access to Lowe's"

At least two access points to Lowe's are more 500 feet distance from 880. It is unclear how those would be affected given that the planned overpass has a footprint of less than 500 ft on the western side of Charcot and continues to provide access and through-fare on O'Toole Ave.

Alternatively, as the proposed project severs access to several existing businesses on Charcot, this should then similarly be considered a significant impact.

334- Connection to Zanker

As argument against Alternative C it is mentioned that *"unlike the Charcot Avenue alignment, there would be no direct connection to major North San José roadways such as Zanker Road, North First Street, and SR 87."* (p. 187)

Alternative C could provide a convenient access to the new Zanker Road/4th street overcrossing if Junction Ave were to be extended towards that new 101-overcrossing.

335- Connection to SR 87

As mentioned in the previous comment *"unlike the Charcot Avenue alignment, there would be no direct connection to major North San José roadways such as Zanker Road, North First Street, and SR 87."*

Can you please expand why a connection to SR 87 is relevant in the context of the Charcot Avenue alignment since "The use of the proposed extension is expected to be minimal outside of a two-mile radius." (p. 161) and the Sphere of Influence for the project is defined as 1.5 miles which excludes any part of SR 87?

Alternative D – "No Project"

336- Alternative D

"The No Project Alternative would not, however, meet any of the project objectives. It would also be inconsistent with:

- *Policy TR-5.6 of the Envision San José 2040 General Plan, which states that the City should complete the buildout of the City's street system per its Land Use / Transportation Diagram, on which the Charcot Avenue Extension has been listed since 1994. […]*
- *The North San José Area Development Policy, which identifies the Charcot Avenue Extension as a key roadway improvement project needed to serve the planned development of North San José." (DEIR, p. 188)*

The report states that the no-project alternative would not meet any of the project objectives. And *"also be inconsistent with […] Envision San José 2040 General Plan […] North San José Area Development Policy".* (p. 188).

These statements seem to be left over from before consistency to the General Plan and NSADP were added to the overall project objectives. The statements are repetitive *to "would not meet any of the project objectives"* [as stated now] and superfluous. This also impacts discussions on other alternatives.

Alternative E – "New Overcrossing for Bicycles and Pedestrians Only"

337- Impact of improved bike and pedestrian facilities

"Traffic circulation for the Bicycle/Pedestrian Overcrossing Only would be the same as for the No Project Alternative under existing, year 2025, and year 2040 conditions, as described in Section 3.17." (p. 189)

This statement is inconsistent with statements in the DEIR and City plans that bicyle/pedestrians improvement will reduce traffic.

"Walkable and bikeable streets reduce the need for passenger car journeys and encourages active forms of transport, public transport infrastructure, and personalized mobility solutions. This reduces vehicle miles traveled (VMT), a metric of vehicular use which can be a proxy for traffic collisions, and the emissions associated with car journeys." (Climate Smart San José, p. 89)

"The project would provide a new bicycle and pedestrian crossing of I-880, which would facilitate those forms of non-motorized travel. The proposed project would also shorten pedestrian and bicycle travel routes and provide the opportunity to utilize walking and bicycling as an alternative travel mode, which would lead to a reduction in the number of vehicle trips." (DEIR, p. 66)

"By providing improvements that will facilitate bicycle and pedestrian use, the operational phase would reduce vehicle trips and thereby reduce energy consumption" (DEIR, p. 67)

338- Alternative E – consistency with objectives

The EIR does not state that the project objectives of capacity or connectivity must include capacity and connectivity for SUVs, trucks and other vehicles. As the Bike-/pedestrian overpass would improve connectivity and increase capacity for people to cross 880, it would meet those project objectives.

As stated above consistency General Plan and NSJADP has been added after the NOP, are based on outdated LOS methodology[178] and therefore irrelevant.

As staff writes:

- *"VMT is a significant shift in the way the City thinks about transportation. Instead of continuing to plan for more and more auto traffic, using streets and freeways that are already at or nearing capacity, the City is instead focused on developing safe and inviting pedestrian, bicycle, and transit networks to meet new travel demand."*[179]

Alternatives F, G, H – "Various lane configurations at Charcot/Oakland"

339- Alternative F & H – access to Orchard School Event Center Driveway

The EIR fails to assess the impact of northbound and southbound access to the driveways east of Oakland Road.

340- Alternatives F, G & H – consistency with San Jose Bike Plan 2020

The DEIR omits that the project in its current form as well as alternatives F, G and H are inconsistent with the San José Bike Plan 2020 that designates the crossing of Charcot and 880 as a *"Pedestrian Over Crossing"*.

[178] https://www.strongtowns.org/journal/2018/8/13/a-losing-proposition
[179] http://sjeconomy.com/new-traffic-measuring-method-could-benefit-infill-development-in-san-jose/

VIII. Minor Inaccuracies

Inaccurate references

341- Missing references

The following documents are missing in the list of references

- *„Visual Impact Assessment for Highway Projects published by the Federal Highway Administration (FHWA) in March 1981".*
- *Plan Bay Area 2040*
- *VTA Congestion Management Program Document*
- *Valley Transportation Plan 2040*
- *Thorburn Associates, 1996*

342- Scenic Highways

The link provided in the EIR in footnote 4 is not accessible anymore.

343- Location of trees

"For more detail regarding the size, location, and species of the trees located within the project alignment, refer to Appendix G of this EIR." (p. 50)

Appendix G does not include locations of the trees within the project alignment.

344- Source 52 / References that don't exist

The source *"Orchard School District. Indirect Transfers."* cannot be found and doesn't seem to exist. The link provided leads to a different document. The title of that document is "**Interdistrict** Transfers"

345- Access dates

A number of sources were last accessed before the Notice of Preparation (NOP) for the EIR was even circulated. One source was last accessed in July 2016. Please explain how they can be references for the EIR, if they weren't looked at in the preparation of the EIR (i.e. after the NOP was published).

Typo's

346- Alternative B - east-east capacity

Increasing *"east-east"* capacity (p. 187, second paragraph) seems indeed difficult. This should be corrected to state "east-west" capacity.

347- "Silk Wood" or "Silkwood"

The transportation analysis refers nine times to a road called *"Silk Wood Lane"* and 127 times to *"Silkwood Lane"*. Are these different roads?

The DEIR main document with one exception speaks of "Silk Wood Lane". Other appendixes are also inconsistent in the usage. Please correct all instances to the correct street name(s).

In other documents staff has also referred to a street named "Silkwood Drive" that would be affected by the project.[180]

348- "Old Oakland Road" or "Oakland Road"

*"East of I-880, the proposed extension would [...] connect with a widened Silk Wood Lane, to the intersection with **Old Oakland Road** to the east."*

Use of "Old Oakland Road" inconsistent with DEIR which generally speaks of "Oakland Road", further down in the same paragraph. *"The extension would also construct bicycle/pedestrian facilities on Charcot Avenue, including sidewalks and Class IV bikeways, between Paragon Drive and Oakland Road."*

349- Appendix J

Footnote 1 should read "short-term locations" not *"shot-term"* locations.

350- Transit Facilities Appendix K

The headline of this section should be corrected to "facil**i**ties"

351- NSPADP

"The Charcot Avenue Extension has been included in each version of the NSPADP in 2005." (DEIR, p. 8)

The correct the acronym is NS**J**ADP.

352- Typo

Third paragraph, first sentence: *"CEQA Guideline Section 15065(a)(3). **T**he cumulative impacts discussion for each environmental issue"* (p. 15)

353- 7.1 Introduction

Second paragraph on page 183 ends in quotation marks. It is not clear where the quote begins.

[180] http://sanjose.granicus.com/MetaViewer.php?meta_id=693644 p. 3

354- Word seems to be missing

"GEO-3: Although the project would be located on soil that could become unstable during an earthquake, the implementation of standard conditions and compliance with current seismic safety codes will any significant effects due to this condition."

The sentence seems to be missing a word.

IX. ATTACHMENTS

ATTACHMENT A – Background memo Charcot and Development in North San José

ATTACHMENT B – Pedestrian Count

ATTACHMENT C – Inadequate responses to NOP/scoping comments

ATTACHMENT D – Notes from September 26, 2019 community meeting at Orchard School

ATTACHMENT E – Air Quality Measurements taken at school site

timestamp	date (UTC)	VOC (ppb)	pm 10 (ug/m3)	pm 2.5 (ug/m3)
1568796347	9/18/2019 8:45	168	6.84	3.29
1568796407	9/18/2019 8:46	166	6.76	2.60
1568796467	9/18/2019 8:47	163	5.46	2.42
1568796527	9/18/2019 8:48	166	4.73	2.85
1568796587	9/18/2019 8:49	164	3.85	1.48
1568796647	9/18/2019 8:50	164	5.81	2.59
1568796707	9/18/2019 8:51	166	8.40	1.00
1568796767	9/18/2019 8:52	164	7.41	2.56
1568796827	9/18/2019 8:53	164	5.71	2.69
1568796887	9/18/2019 8:54	162	11.14	3.15
1568796947	9/18/2019 8:55	163	7.21	2.90
1568797007	9/18/2019 8:56	163	6.34	2.17
1568797067	9/18/2019 8:57	160	8.77	3.30
1568797127	9/18/2019 8:58	162	4.30	1.06
1568797187	9/18/2019 8:59	159	6.85	1.28
1568797247	9/18/2019 9:00	160	5.66	2.60
1568797307	9/18/2019 9:01	157	4.28	2.52
1568797367	9/18/2019 9:02	154	3.52	1.00
1568797427	9/18/2019 9:03	153	4.18	1.56
1568797487	9/18/2019 9:04	155	2.56	1.00
1568797547	9/18/2019 9:05	156	7.89	2.95
1568797607	9/18/2019 9:06	156	11.40	3.67
1568797667	9/18/2019 9:07	153	11.49	3.15
1568797727	9/18/2019 9:08	155	9.89	2.62
1568797787	9/18/2019 9:09	155	21.10	3.99
1568797847	9/18/2019 9:10	153	13.76	3.69
1568797907	9/18/2019 9:11	153	9.68	1.68
1568797967	9/18/2019 9:12	154	2.68	1.00
1568798027	9/18/2019 9:13	156	2.70	1.00
1568798087	9/18/2019 9:14	153	2.94	1.60
1568798147	9/18/2019 9:15	153	14.88	4.04
1568798207	9/18/2019 9:16	150	10.08	1.25
1568798267	9/18/2019 9:17	152	2.25	1.50
1568798327	9/18/2019 9:18	150	3.00	1.37
1568798387	9/18/2019 9:19	153	8.85	2.04
1568798447	9/18/2019 9:20	149	4.11	1.65
1568798507	9/18/2019 9:21	153	9.99	2.55

1568798567	9/18/2019 9:22	150	3.55	1.00
1568798627	9/18/2019 9:23	152	2.00	1.00
1568798687	9/18/2019 9:24	153	13.02	3.56
1568798747	9/18/2019 9:25	149	6.25	2.65
1568798807	9/18/2019 9:26	153	6.98	1.74
1568798867	9/18/2019 9:27	151	7.73	2.44
1568798927	9/18/2019 9:28	149	5.99	2.52
1568798987	9/18/2019 9:29	153	8.32	2.35
1568799047	9/18/2019 9:30	150	7.43	2.52
1568799107	9/18/2019 9:31	150	3.52	2.24
1568799167	9/18/2019 9:32	149	4.77	1.31
1568799227	9/18/2019 9:33	150	2.31	1.92
1568799287	9/18/2019 9:34	149	2.92	1.00
1568799347	9/18/2019 9:35	151	10.15	2.78
1568799407	9/18/2019 9:36	149	8.11	2.12
1568799467	9/18/2019 9:37	150	6.39	1.68
1568799527	9/18/2019 9:38	151	5.69	2.27
1568799587	9/18/2019 9:39	151	4.14	1.85
1568799647	9/18/2019 9:40	151	10.85	2.96
1568799707	9/18/2019 9:41	151	3.96	1.11
1568799767	9/18/2019 9:42	149	5.69	1.37
1568799827	9/18/2019 9:43	151	4.87	1.85
1568799887	9/18/2019 9:44	152	2.85	1.59
1568799947	9/18/2019 9:45	153	2.59	1.47
1568800007	9/18/2019 9:46	153	4.99	1.72
1568800067	9/18/2019 9:47	154	5.59	1.92
1568800127	9/18/2019 9:48	152	11.68	3.82
1568800187	9/18/2019 9:49	156	9.81	2.24
1568800247	9/18/2019 9:50	156	7.56	1.50
1568800307	9/18/2019 9:51	158	5.07	1.72
1568800367	9/18/2019 9:52	159	9.04	1.39
1568800427	9/18/2019 9:53	159	5.64	1.99
1568800487	9/18/2019 9:54	156	10.11	1.97
1568800547	9/18/2019 9:55	154	2.97	1.26
1568800607	9/18/2019 9:56	158	5.49	2.00
1568800667	9/18/2019 9:57	156	6.26	1.50
1568800727	9/18/2019 9:58	158	3.21	1.93
1568800787	9/18/2019 9:59	157	7.95	2.92

ATTACHMENT F – Discussion of Context and Alternatives to Charcot Extension

ATTACHMENT G – Preliminary Summary of Charcot Avenue Extension DEIR

ATTACHMENT H – Report Orchard School Community Pedestrian and Bicycle Safety Training

ATTACHMENT I – School opposition San José General Plan 2020

The Charcot Avenue Extension was first identified as an infrastructure improvement project needed to serve the planned growth in the North San José area in the San José "Focus on the Future" 2020 General Plan, which was approved in 1994.

Orchard School District in a consortium with other schools urged and appealed to the City to not approve the General Plan 2020 and the EIR for it without further analysis of its impact schools such as Orchard. The City declined the appeal and moved forward with the General Plan against the recommendation from the schools.

The attachment documents the discussion surrounding the schools and the attempts by the schools to avoid potential future conflicts between the City and the School resulting from the implementation of the plan.

Due to the large extent of discussion and the numerous efforts made by the school, the documentation is quite large in size (500+ pages). The file is therefore provided as digital copy. It is available at: https://app.box.com/s/pt7xcirvybqfz2tahwju260ndk9ckzu9.