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Honorable Palo Alto City Council:
(see also: http://www.chesavage.com/middlefield)

I live at 3833 Middlefield Road, just a half block south of the new Mitchell Park Library under construction. I was astonished, as were my neighbors, to discover a week ago that the street had been restriped for a turning lane into the library, and the inclusion of the new fifth lane into an existing 4 lane road has reduced the shared bicycle/parking lane from 13 feet to 4 feet, the entire 500 foot length of which is now re-striped as a no-parking zone. We discovered this surprise re-striping or about March 23rd. The resultant narrowing of the bike lane consumed by the new turning lane has created a 500' long "no parking" zone along Middlefield at Mayview, reduced the bicycle path to slightly wider than the gutter, adds a double-double yellow island which fully prohibits left turn (southbound) access to several homes in this 500' long stretch, resulting in residents backing out of their driveways directly into the traffic lane.

My primary objection is that a decision was quietly made within Public Works Department that the turning lane would improve safety at this intersection, however, the unintended consequence of this turning lane is the creation of a large variety of new hazards for motorists, bicyclists, pedestrians, and residents which did not previously exist with the wide bike lane.

My secondary objection is that the city commissioned two traffic studies on whether a turning lane would be required at this very intersection - one in 2002 and another in 2008, both of which were included in public documents circulated to the community as part of the library project outreach. Both of these studies indicated no need for the turning lane. This finding was disregarded without notification - we were notified a turning lane was going in by observing it the first day it was painted with the extensive red curb spanning both sides of Middlefield at Mayview.

The affected Middlefield residents are unanimous in their support for the return of the two-lane each direction, no turning lane, as existed previously, and as exists currently at Cubberley/Montrose and Middlefield two blocks south. We are requesting that the lane striping be returned to the original combination left/straight lane (and no dedicated turning lanes), and that this change be made permanent.

Presumably, the motivation of the turning lane is to prevent accidents at this intersection related to library users turning into the new library. The original intersection configuration before the library remodel was clearly confusing to motorists - there were basically two back-to-back traffic signals, one for the old Library/Mitchell Park entrance, and a separate one for Mayview, each separated from the other by approximately 100 feet. **The new configuration of these two**

traffic signals into a single 4-way intersection greatly reduces the hazard caused by the previous two "T" intersection configuration, and residents believe no further action is required beyond a visible traffic signal combined with a combination straight/left-turn lane, as found earlier by the two traffic studies performed for this project.

The residents take note that there are many similarly situated businesses, churches, and community sites which generate greater peak traffic loads, for which the existing two lane each direction (without turning lane pockets) appears to be acceptable:

1) Cubberley Community Center (performance theatre, Foothill College, Daycare, Athletic Fields, temporary library). This configuration is actually identical to that of the new Mitchell Park Library - Cubberley community center (with a single entrance/exit) facing Montrose Ave, and no turning lane.

2) Challenger School - Undoubtedly far greater peak traffic load than the new Mitchell Park Library could generate, motorists simply change lanes at the blockage.

3) Palo Alto Little League entry/exit

4) The many churches along Middlefield Road with fixed service times.

There are many hazards and inconveniences created by the new turning lanes at Mayview, listed below:

A) These are the unintended **safety hazards** for **Bicyclists** created by this new turning lane:

1) The narrow 4.5 foot wide (including the gutter) "Bike lane" which remains is fundamentally unsafe. The introduction of the turning lane actually directs vehicle traffic **into** the bike lane at the pinch point.

2) VTA Busses which travel Middlefield Road routinely veer into the bike lane at the pinch point.

3) Residents have noted that the garbage pickup bins have been left in the narrow Middlefield bike lane after servicing, blocking the bike lane.

4) Bicycle commuters who travel at high speed down Middlefield will naturally opt for the sidewalk, imperiling themselves and pedestrians coming from Mayview towards Middlefield at that intersection.

5) For bicyclists who elect to ride on the sidewalk (and there will be greatly increased numbers of them now that the bike lane is unusable), a motorist entering their driveway previously did so from the bike lane at low speed having the luxury of doing so out of the flow of traffic, providing greater time to survey for these hazards - with the current striping, they will be traveling at the speed of traffic shortly before they enter their driveway, panic stopping in traffic if a bicyclist or pedestrian is unexpectedly encountered. I have experienced this many times at night pulling into my own driveway, stopping in the bike lane to avoid a sidewalk-riding bicyclist without bicycle lighting at night, but thankfully out of the rear-end collision impact zone of traffic. These surprise bicyclists will now cause high speed rear-end collisions, as the resident will be stopped in the traffic lane, or alternatively

colliding with the bicyclist, issues which are newly introduced with the removal of the usable bike lane.

B) These are the unintended **safety hazards** for **Motorists** created by the new turning lane:

1) Northbound Middlefield traffic will be stopping when the traffic light is green and residents are exiting their driveway (in either reverse because there is no longer an opportunity to back into their driveway, or pulling forward blindly when a gap opens in morning commute traffic. With the current configuration, there have already been several near-misses and panic stops where oncoming motorists encounter a resident pulling out of his driveway with a large blind spot to oncoming traffic.

2) Southbound Middlefield traffic will be stopping for residents now stopping further down Middlefield and making U turns, as they are now unable to make left turns into their own driveways, as that access is prohibited by the double-double yellow traffic island associated with the turning lanes.

3) The previous use of the wide bike lane/curb parking had provided a mixed use buffer zone for residents entering and leaving their driveway. Speeding motorists on Middlefield has been a chronic problem, and the removal of these buffer zones for bicyclists and residents creates a hazard for both.

C) These are the **resulting inconveniences** for residents:

1) An astonishing 500 foot long "no parking" zone has now been created from the start of the red-curb at 3825 Middlefield, extending to the opposite side of Mayview to 3751 Middlefield. Employees of Achieve across the street from us, for example, are instructed not to park on-site, as their limited parking is reserved for visiting clients. While parking was previously adequate along Middlefield, it is in very short supply now, and parked cars are routinely (and expectedly) found parked bumper to bumper on either side of the newly-created red curb zones. Day use parking has spilled into Ensign Way.

2) Residents who previously simply made left turns into or out of their driveways (as visitors routinely do into Challenger school, Little League, and the Middlefield Churches) are now unable to do so, because the turning lanes create a double-double yellow barrier island.

D**) The 500 foot red-curb zone has come as a complete surprise to residents, and was done completely outside of any public review process, and stands in direct opposition to the recommendations of the consultant hired to study this very issue at this intersection, which was distributed in 2002 and 2008, presumably to establish public expectations of what would be done at the library project.** Additionally, the decision making process which introduced the turning lane and bike lane narrowing within Public Works/Transportation has been fully opaque to the residents of Middlefield affected by them.

1) In 2002, Palo Alto commissioned a traffic study to examine traffic flows of the proposed Mitchell Park community center. This study found that turning lanes are **not** required (See Page vii of "Mitchell Park Library and Community Center Expansion" report from Hexagon Transportation Consultants, attached at end of this document and available in its entirety at http://www.chesavage.com/middlefield):

> "Due to the increase in traffic generated by the project, the need for exclusive left-turn lanes on Middlefield at the project driveway/Mayview Avenue was evaluated. The analysis results indicate that the current lane configuration on Middlefield Road with shared through/left-turn lane and permitted left turns would operate acceptably under project conditions with only short delays, reasonable queue lengths, and no unusual safety hazard. **Thus, separate left-turn pockets are not required on Middlefield Road.**"

2) In May 2008, Palo Alto commissioned and released another traffic study of the same intersection, studying in detail the flows of the proposed Mitchell Park community center. This more extended study again found turning lanes are **not** required (see page 26 "Mitchell Park Library and Community Center Study", attached). Specifically, the 2008 report stated:

> "The operation of the permitted left turn movements and the effect on through traffic was analyzed using the methodology described in the 2000 Highway Capacity Manual (HCM). The analysis shows that both the northbound and southbound approaches would have an average control delay of less than 10 seconds per vehicle, which corresponds to level of service A .... **The analysis results indicate that the current lane configuration on Middlefield Road with shared through/left-turn lane and permitted left turns would operate acceptably under project conditions with only short delays and reasonable queue levels.**
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> "In actual operation, many vehicles traveling through on Middlefield Road may change lanes, switching from the inner to the outer lane in order to go around a vehicle that is waiting to turn left. However, even with one through lane blocked by left-turn traffic, the projected traffic volumes are within the capacity of the intersection. Thus the potential lane changing by through traffic is not expected to cause an unusual safety hazard. Even if traffic volumes on Middlefield Road increase above the projected levels, reducing the number of acceptable gaps for left turn movements, the projected left-turn volumes are low enough that all left turns could be accomplished during the clearance intervals. **Thus, separate left-turn pockets are not required on Middlefield Road.**

3) In 2008, Palo Alto held community outreach meetings, which included these traffic study results, which were publicly released, and available in the public libraries for inspection.

4) In August 2009, an unreleased traffic plan was internally drafted for Public Works/Transportation by Group 4 Architecture and BKF Engineers, and

approved in December 2009 which included turning lanes on Middlefield in northbound and southbound directions, and reduction of the bike lane to 4.5' wide, as requested by Transportation division of Public Works. We received a copy of this plan only after the striping was completed and we requested a copy of this plan last week.

5) The August 2009 striping plan was apparently hastily prepared and ill-reviewed, as no indication appears on that plan for the extensive "no parking" zone which is currently red-curbed, nor were any no-parking signs or markings called out in the extended stretch currently red-curbed. Apparently this omission was detected during the final inspection process for this phase of the work, and the city inspector ordered the curbs painted bright red to indicate this hazard. **Mar 23, 2012 appears to be the first public assertion that parking would not be permitted in the extensive length of Middlefield, and this came about because the inspector examining the completed work ordered the curb painted red.**

6) The Middlefield residents are opposed to a turning lane that creates the many associate hazards of squeezing in the additional lane into existing space which is adequate for its current use. Given the 10 year period that the library was under consideration, the neighborhood residents are astonished that a decision was made to introduce a turning lane by removing the bike lane when the entire frontage of Middlefield at the community center could have been moved back to accommodate this turning lane - the entirety of which was removed for many months. The many hazards which now exist could have been largely abated by simply moving the library frontage back to create the additional street width the turning lane required, and the entire problem avoided. As there was no public notice of the turning lane which created this hazard, there was no opportunity to provide this clear input - which I can assure could have been done a decade ago, if the decision to override the consultant's two separate recommendation was made public then. **In short, the opaque approach taken in introducing the turning lane has directly resulted in the safety problems that now exist.**

E) After intense public outcry by residents directly to Karen Bengard of Public Works and copied to the Planning Commission over the many safety hazards this past week, she has agreed to **temporarily** return the striping to the original 2 lanes each direction with no turning lane at Mayview until the library opens in approximately one year, at which time it will revert to its objectionable current configuration with turning lanes, an unusable narrow bike lane, and the many hazards listed above.

F) Upon detailed questioning of how so many different safety hazards could possibly have been introduced by the turning lane configuration, and upon asking which groups were advocating the turning lane configuration, Karen indicated that the directive has come from Palo Alto City Council to implement turning lanes in available intersections (including existing Cubberley/Montrose which currently has none), and further that the "bike lane" of the photos had the approval of both the Palo Alto Bicycle Transportation Committee, and the City Council. Both of these assertions seem surprising to me, or perhaps there was a misunderstanding of what

was intended, or perhaps at the time the directive was made, it was not entirely clear what side-effects that directive would mean in actual practice. When I pressed the matter further, I was told that since City Council had made turning lane recommendations for Edgewood center, it was understood by Public Works/Transportation that, by extension, City Council was also recommending them for the extent of Middlefield Road (Mitchell Park currently, and Cubberley/Montrose next). **I am requesting clarification of that directive to put turning lanes into available residential intersections, if that directive indeed came from Palo Alto City Council. If no such directive was issued, I respectfully request that Public Works/Transportation be so advised, as they appear to be operating on different information.**

Again, On behalf of myself and my neighbors, who are in unanimous agreement with this proposal, we respectfully request that City Council direct the Transportation division of Public Works to permanently revert the lane striping at Middlefield to two lanes each direction, without turning lanes, at Middlefield and Mayview/Mitchell Park community center, and return the bike lanes to their full previous width. Public works has agreed last Weds 4/4 to restripe back to 4 lanes (no turning lane, full bike lane) on a temporary basis, but we are asking for this change to be made permanently, with the traffic signal providing either a protected left turn for through traffic, or using the combined straight/left turn configuration in long-time use at the intersection of Middlefield and Montrose/Cubberley.

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Annotated Photos follow:

Middlefield Road after restripe, looking North (Original bike/traffic lanes annotated in yellow)

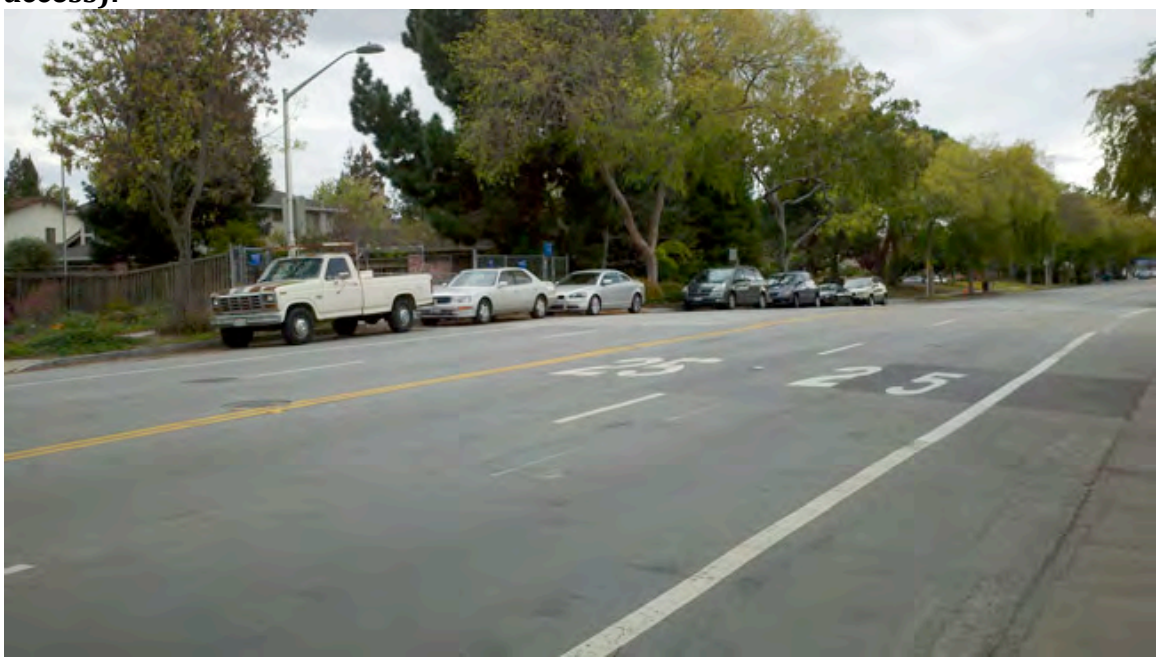
Looking North on Middlefield at Mayview Signal: Traffic is directed into the bike lane at the pinch point - VTA busses commonly veer into the bike lane now. Note the vehicle's reaction to the bicyclist.

Residents south of Mayview are now backing out into oncoming traffic, the view of which is blocked by the rows of cars now parked in the only remaining parking south of the "red curb" zone. Oncoming cars are unaware of these motorists as the rise in the road at Adobe Creek, combined with the cars parked along Middlefield makes this a blind approach for both motorist and resident leaving their driveway.

Traffic islands associate with turning Lanes for library north of Mayview now prevent residents from making left turns into or out of their own driveways:

Same problem is created for residents on Middlefield south of Mayview:

Middlefield Parking South of red-curb is typically bumper-to-bumper extending to Ensign Way (gap in cars is not an open space, but creek gate access):



Middlefield parking North of Mayview after red-curb on right side is also typically bumper to bumper now:

Google Maps image two blocks south at Montrose/Cubberley and Middlefield. Why can't the same configuration work for Mayview/Mitchell Park? Apparently Public Works/Transportation disagrees, as it plans to add turning lanes at this intersection next, which will create the identical hazards newly introduced at Mitchell Park/Mayview.

2002 Hexagon Transportation Consultants report issued by Palo Alto for traffic study at the proposed Mitchell Park Library (page vii):

2002 REPORT "MITCHELL PARK LIBRARY AND COMMUNITY CENTER EXPANSION"

Intersection Operations Analysis

Due to the increase in traffic generated by the project, the need for exclusive left-turn lanes on Middlefield Road at the project driveway/Mayview Avenue was evaluated. The analysis results indicate that the current lane configuration on Middlefield Road with shared through/left-turn lane and permitted left turns would operate acceptably under project conditions with only short delays, reasonable queue lengths and no unusual safety hazard. Thus, separate left-turn pockets are not required on Middlefield Road.

The analysis indicates that the Middlefield Road driveway would operate acceptably with only a single lane in each direction. A driveway width of 26-30 feet is recommended.

Signal Warrant Analysis

The peak-hour volumes under project conditions at the project driveway intersection on E. Meadow Drive were evaluated to determine if the intersection would warrant signalization. The project volumes do not satisfy the peak-hour warrant. Therefore, the installation of a traffic signal at the unsignalized study intersection is not justified.

Project Roadway Analysis

The TIRE (Traffic Infusion on Residential Environments) analysis results for roadway segments are summarized in Table ES 2. Measured against the City of Palo Alto impact criteria, none of the study roadway segments would be significantly impacted by the project. All of the study roadway segments would operate at the same TIRE Index as under existing conditions. The estimated increase in roadway traffic volumes caused by the project will not be noticeable to the residents.

Transit, Bicycle and Pedestrian Analysis

The project site is well served by the existing transit routes in the vicinity. The Crosstown shuttle stops directly in front of the project site. Given the planned expansion of the Mitchell Park Library and Community Center and the popularity of the existing park facilities, it may be fitting to improve the amenities at this shuttle stop by providing a bench and/or shelter. One southbound through lane on Middlefield Road is blocked when the shuttle bus stops. This condition is acceptable given that the shuttle runs only twice per hour and through traffic would be able to proceed meanwhile in the second through lane. Thus, it is concluded that the proposed project would not have a significant adverse impact on transit service in the area.

Because a detailed site plan has not been finalized yet, an evaluation of pedestrian and bicycle circulation within the project site is not possible at this time. The ultimate site design should include pedestrian paths and bikeways that minimize conflicts with vehicular traffic, provide logical and direct pathways between building entrances, and connect building entrances and parking areas. Furthermore, pedestrian and bicycle pathways within the site should connect to the sidewalks and bike lanes on the adjacent public streets and the existing pathways through Mitchell Park. Bicycle parking should be provided according to zoning ordinance standards.

Parking Analysis

The project architects (Group 4 Architecture Research & Planning, Inc.) have estimated the parking requirements based on the City's zoning ordinance. Summing the requirements for the individual uses (120 spaces for the library, 135 spaces for the community center, 135 spaces for the park) yields a total of

2008 Hexagon Transportation Consultants report on Mitchell Park Library Project (page 37 - full reports are at http://www.chesavage.com/middlefield)

MAY 2008 REPORT "MITCHELL PARK LIBRARY & COMMUNITY CENTER INITIAL STUDY"

vehicles per signal cycle for the northbound left turn and less than 1 vehicle per signal cycle for the southbound left turn.

The operation of the permitted left-turn movements and the effect on through traffic was analyzed using the methodology described in the *2000 Highway Capacity Manual (HCM)*. The analysis shows that both the northbound and southbound approaches would have an average control delay of less than 10 seconds per vehicle, which corresponds to level of service A. (Note that the relationship between delay and level of service in the 2000 HCM differs from that in the 1985 HCM.) The average queue would be about 7 vehicles for the northbound approach and 6 vehicles for the southbound approach. At a 95 percent confidence level, the maximum back of queue would reach to 12 and 11 vehicles for the northbound and southbound approaches, respectively. The analysis results indicate that the current lane configuration on Middlefield Road with shared through/left-turn lane and permitted left turns would operate acceptably under project conditions with only short delays and reasonable queue lengths.

In actual operation, many vehicles traveling through on Middlefield Road may change lanes, switching from the inner to the outer though lane in order to go around a vehicle that is waiting to turn left. However, even with one through lane blocked by left-turn traffic, the projected traffic volumes are within the capacity of the intersection. Thus, the potential lane changing by through traffic is not expected to cause an unusual safety hazard. Even if traffic volumes on Middlefield Road increase above the projected levels, reducing the number of acceptable gaps for left-turn movements, the projected left-turn volumes are low enough so that all left turns could be accomplished during the clearance intervals. Thus, separate left-turn pockets are not required on Middlefield Road.

The analysis indicates that the driveway would operate acceptably (at LOS C) with only a single lane in each direction. The driveway is estimated to have an average queue of about 3 vehicles and a maximum queue (95th percentile) of about 7 vehicles. While providing multiple outbound lanes would reduce the delay and queue lengths, it would increase the crossing distance for pedestrians. Because the project is expected to attract many children, it is recommended that the project driveway on Middlefield Road have only one lane in each direction. A driveway width of 26-30 feet is recommended.

Signal Warrant Analysis

The peak-hour volumes under project conditions at the unsignalized project driveway on E. Meadow Drive were evaluated to determine if the intersection would warrant signalization. The project volumes do not satisfy the peak-hour warrant. Therefore, the installation of a traffic signal at the unsignalized project driveway intersection is not justified under project conditions. The signal warrant sheet is contained in Appendix E.

Project Roadway Analysis

The TIRE analysis results for roadway segments under project conditions are summarized in Table 8. Measured against the City of Palo Alto impact criteria, none of the study roadway segments would be significantly impacted by the project. All of the study roadway segments would operate at the same TIRE Index at which they are operating under existing conditions. The estimated increase in roadway traffic volumes caused by the project will not be noticeable to the residents (change in TIRE Index of less than 0.1).