

TAMING **TRAFFIC** IN FREMONT

Addressing the Traffic
Congestion Dilemma



Photograph of a congested Fremont neighborhood near I-680 taken from a drone camera

Fremont is facing a significant challenge that is impacting the quality of life for our residents and businesses. Regional cut-through traffic is clogging our local roadways with motorists that do not live or work in Fremont. For example, approximately 40% of the cars on Mission San Jose area are just passing through. These drivers use our streets as a freeway bypass to get to a final destination over

the Sunol Grade. There are several factors that have created this rise in traffic congestion: a severe jobs and housing imbalance in Silicon Valley and the Peninsula, Fremont's location at the crossroads between the jobs and the affordable housing over the Sunol Grade, the rise of navigation apps that direct regional commuters to our residential streets to save a few minutes during peak traffic times, not to mention an extreme 2017

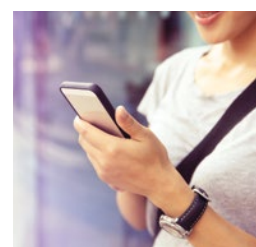
winter season that closed or constrained commuter routes like Niles Canyon Road and Interstate 680. Fortunately, there is hope on the horizon: the BART extension to San Jose will start service in 2018, a new northbound express lane on Interstate 680 will open in early 2020, and Fremont is modernizing its traffic signal system to enhance efficiency. Additionally, Fremont has created a Mobility Task Force that plans to further address citywide traffic congestion issues.



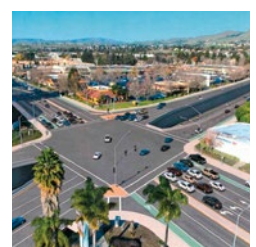
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A community survey conducted in 2016 revealed that traffic congestion is the top concern among our residents. We understand that increased congestion has made it difficult for community members to drive around Fremont, drop kids off at school and extracurricular activities, and even access their neighborhoods and homes. Some of our quiet neighborhood streets have slowly become inundated with motorists bypassing the freeway to shave a few minutes off their commute.

Our staff has been hard at work developing innovative projects and partnerships aimed at improving the quality of life in our neighborhoods. For example, we are receiving national attention for our efforts in managing the impacts of navigation apps on our community. Our partnership with Waze, which consists of sharing real-time information (see page 5 for details), has resulted in changing routes on the app to keep motorists on freeways rather than cutting through Fremont streets. Also, to further assist, we are using technology and placing video cameras on drones to identify traffic issues, monitor improvements, and explore solutions.

In May, Fremont's Mayor and City Council approved the creation of a Mobility Task Force and subsequently appointed a group of residents (see page 7) with varying backgrounds and experiences to guide the preparation of a Mobility Action Plan. The plan will focus on traffic congestion as a top priority.

Through working with our regional partners, as well as the community, we are committed to finding solutions that improve the quality of life in our neighborhoods.

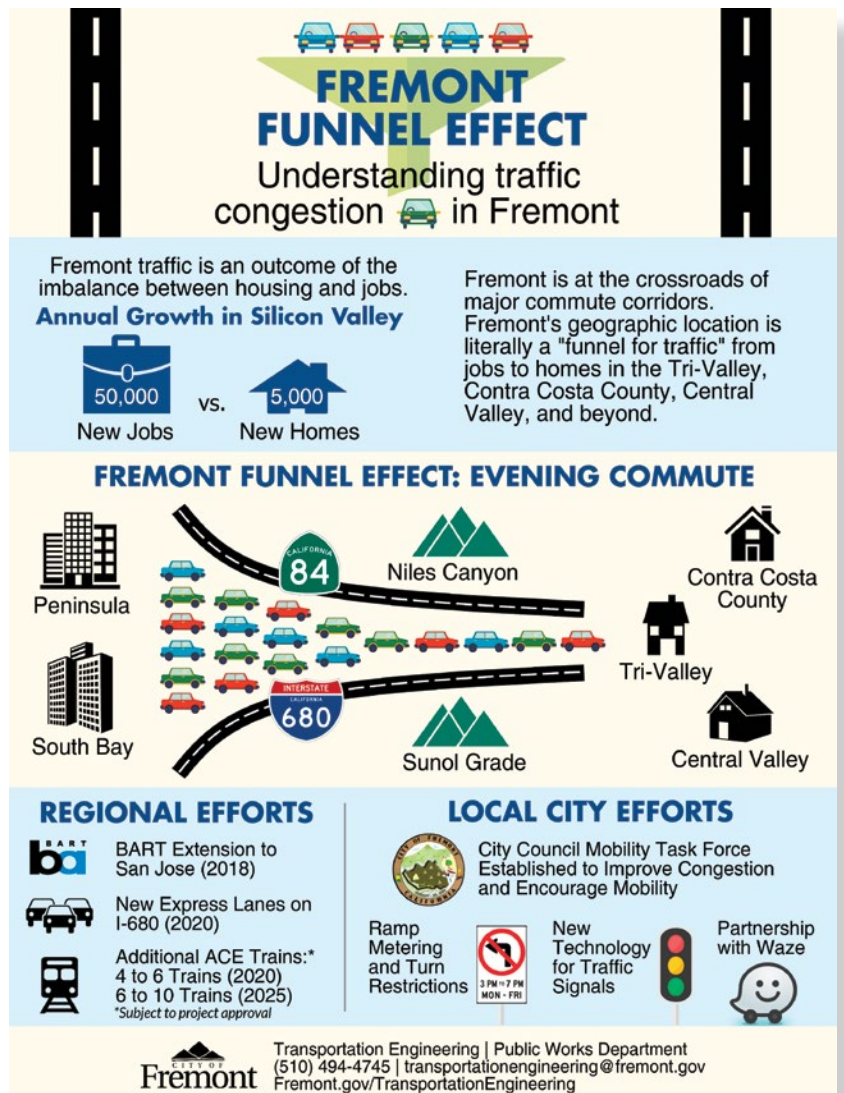
Fred

Fred Diaz, City Manager

Understanding the Causes of Congestion

Fremont Funnel Effect

To help illustrate the traffic congestion in Fremont, the City has developed an infographic to explain how Fremont's location between jobs and housing contributes to the traffic—we are calling it the "Fremont Funnel Effect." It also lists the regional and City projects in the works to help alleviate traffic.

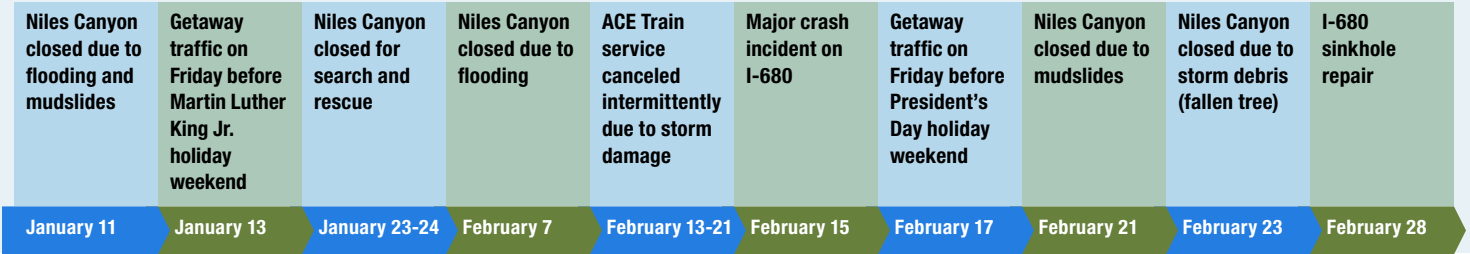


Severe Winter Impacts

It is common knowledge that traffic congestion can go from bad to worse when severe weather conditions and roadway incidents occur. In winter 2017, roadway congestion in Fremont was heavily influenced by record rainfall that caused mudslides and road closures on Niles Canyon Road (State Route

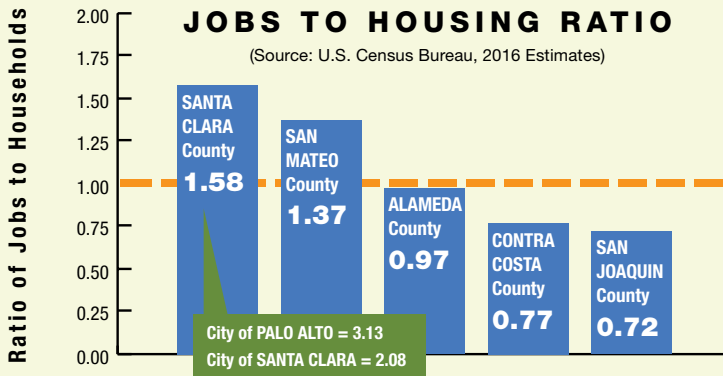
84) and Morrison Canyon Road. When incidents occur on State Route 84 and Interstate 680 that cause road and lane closures, regional commuters try to seek gridlock relief on Fremont's local streets. The timeline below shows the severe weather conditions, roadway incidents, and holiday weekend "getaway" traffic that led to major traffic congestion in the Fremont community. The timeline includes

a sinkhole repair on Interstate 680 (nicknamed "Carnageddon Day") that closed all but one lane for the entire day, as well as the north Mission Boulevard on-ramp. As a result, navigation apps directed regional commuters onto Fremont streets, causing complete gridlock on the entire roadway system in the southern half of Fremont from the early afternoon until late into the evening.



Crossroads between Jobs and Housing

One of the major factors in Fremont's increased traffic congestion is a severe jobs and housing imbalance in Silicon Valley. Over the last few years, our economy has thrived. Silicon Valley has added jobs at a rate of 50,000 new jobs per year. Unfortunately, housing in the South Bay and Peninsula has not kept pace, adding only 5,000 new homes per year during the same time period. These new workers are settling into affordable housing found in the fastest growing cities over the Sunol Grade, in the Central Valley and Tri-Valley area. In fact, San Joaquin County is the fastest growing county in the state, and Dublin is one of the fastest growing cities. This puts Fremont at the center of the jobs and housing imbalance crisis that has amplified traffic in the Bay Area.



The chart above shows the ratio of jobs to housing at the county level. For example, in Alameda County, there is relatively good balance with one job for every household in the county. Santa Clara County and San Mateo County have an unbalanced number of jobs compared to households which causes long-distance commuting from "bedroom counties" like Contra Costa and San Joaquin that have a low ratio of jobs compared to households. These commute routes, between where the jobs are and where the homes are, pass right through Fremont and are a main source of our traffic congestion. It is noted that cities like Palo Alto and Santa Clara have a particularly severe imbalance between jobs and housing.



The Problem with Navigation Apps

Our regional cut-through traffic issue is intensified with commuters' use of navigation apps such as Apple Maps, Google Maps, and Waze. These apps redirect regional traffic onto our local streets to save users a few minutes of travel time. Reducing a regional motorist's commute by a few minutes has come at the expense of our residents' quality of life. Many quiet residential streets have become a commuter's shortcut route in Fremont, and in some cases, this cut-through traffic has prevented our residents from accessing or leaving their homes. Fortunately, there is a plan in place to take back Fremont's neighborhood streets from commuters using navigation apps. Read about our Neighborhood Cut-Through Traffic Relief Project and Waze partnership on page 5.

Hope is on the Horizon

Regional Projects

I-680 Express Lane

The I-680 express lane project will provide an express toll and high-occupancy vehicle (HOV) lane on northbound I-680 from State Route 237 in Milpitas to State Route 84 in Sunol. Construction will start in late 2017 and is planned for completion in early 2020.



Alameda CTC Funded Projects

The Alameda County Transportation Commission (Alameda CTC) is delivering on the promises of Measure BB to fund critical transportation projects in Alameda County. In April 2017, the Comprehensive Investment Plan, a five-year plan with over \$400 million in funding, was approved. Funded projects in Fremont include:

- Modernizing the traffic signal system along Fremont Boulevard
- Optimizing the timing of traffic signals on Paseo Padre Parkway, Decoto Road, and Auto Mall Parkway
- Upgrading streets in the Centerville District
- Enhancing the bikeway along Walnut Avenue



BART Extension

The Valley Transportation Authority (VTA) is scheduled to open the Milpitas and Berryessa BART Stations in 2018. The BART extension to San Jose will provide direct access to Silicon Valley jobs from Alameda County, Contra Costa County, and the Tri-Valley area. The extension will connect with three VTA light rail routes.



- BART Route
- BART Extension
- VTA Light Rail

ACE Trains

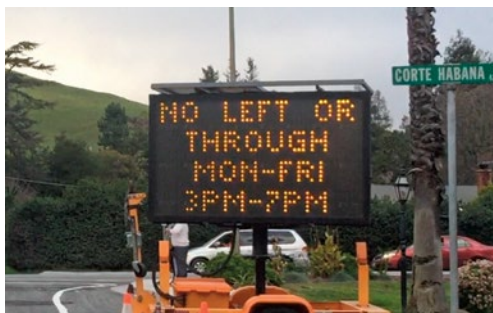
The San Joaquin Regional Rail Commission (SJRRRC) is preparing an Environmental Impact Report for ACEforward. It is a phased improvement plan to increase service reliability and frequency, enhance passenger facilities, and reduce travel times along the existing Altamont Corridor Express (ACE) service corridor. Subject to project approval, the near-term improvements will increase service from four daily roundtrip trains to six daily trains, and the long-term improvements will increase service to 10 daily trains.





Ramp Metering

Caltrans uses ramp meters to enhance freeway traffic flow by regulating the volume and spacing of vehicles that enter freeways. As a result of a collaborative effort between Caltrans and the City of Fremont, ramp meters began operation in December 2016 on northbound I-680 from Auto Mall Parkway/Durham Road to Mission Boulevard (north). I-680 is already metered in the southbound direction during peak morning hours. A smoother flow of traffic on I-680 attracts motorists to remain on the freeway and eliminates the need to use local streets to bypass congestion. Caltrans and City of Fremont staff are continuously monitoring the metering ramps and making timing adjustments as needed.



Neighborhood Cut-Through Traffic Relief Project

The City of Fremont's Public Works Department and Police Department have imposed peak period turn restrictions on Fremont streets to make bypassing freeway congestion difficult, unproductive, and potentially costly (due to traffic tickets). Turn restrictions were implemented in four neighborhoods that have been severely impacted by commuter traffic: Canyon Heights/Vallejo Mills/Niles Crest, Mission San Jose, Mission Valley, and Vineyards/Avalon. In each neighborhood, enforceable signs that prohibit drivers from making turns and cutting through the residential streets were placed at key locations frequently used by commuters. Follow-up traffic studies have shown a 70% to 90% elimination of cut-through traffic.

Local Efforts



Stop Signs

Paseo Padre Parkway runs parallel to I-680 and Mission Boulevard and originally did not have any traffic control between Durham Road and Washington Boulevard. As a result, Paseo Padre Parkway became a heavily-traveled cut-through route. Stop signs were installed at three locations on Paseo Padre Parkway—at Camino Del Campo/Upland Way, Pine Street, and Vista Del Mar. With the new stop-controlled intersections, cut-through traffic has dropped and residents can more easily access their neighborhoods.

Waze Partnership

Increased use of navigation apps like Google Maps and Waze is causing an unmanageable rise in traffic around Fremont neighborhoods from people outside of our community who are looking to save time and avoid sitting in traffic. The City's Public Works Department and Police Department have developed a strategy to reduce commute period traffic movements along key neighborhood cut-through routes by eliminating such routes from drivers' navigation technology. The City of Fremont has partnered with Waze through the Connected Citizens Program, joining a growing list of cities from around the world. The free program is a two-way exchange of information between Waze and city government to develop better driving route options. Since implementation of the turn restrictions, Waze has removed the cut-through routes from their navigation algorithms, keeping commuters on the freeway and major roads that are designed for high traffic volumes.



It's Working!

The map below shows the reduction in traffic congestion as a result of the City's local efforts. Congestion in the area highlighted in orange is down 33%.



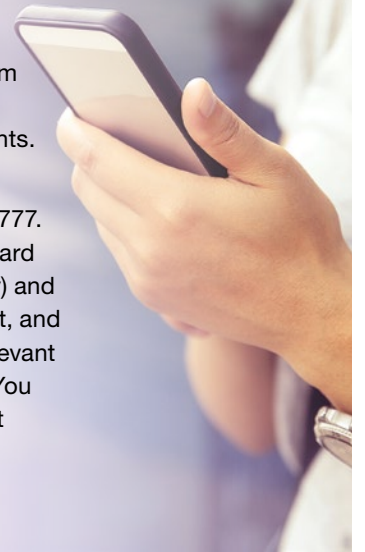
Communicating and Managing **Incidents**



Nixle Traffic Alert System

With the City's Nixle messaging platform, Fremont Police and Fremont Fire are able to text alerts to subscribers notifying them of road closures, severe traffic, and critical incidents.

To sign up, just text your Fremont ZIP code to 888777. The system is free (standard text message rates apply) and provides a quick, efficient, and secure way to receive relevant and critical information. You can also sign up online at www.Nixle.com for email notifications.



Caltrans and California Highway Patrol Partnerships

The regional highways used by commuters in Fremont—including Interstates 680 and 880 and State Routes 84, 238, and 262—are operated and maintained by the California Department of Transportation (Caltrans) and the California Highway Patrol (CHP). With the frequency of weather and traffic incidents that occurred over the past year on Niles Canyon Road (State Route 84) and the Sunol Grade (I-680) causing severe impacts for the Fremont community, City and state officials recognized the need for an enhanced level of coordination and communication. The City of Fremont Police, Fire, and Public Works Departments initiated the development of a comprehensive Traffic Incident Management Plan with Caltrans and CHP. The plan identifies the various levels of incident response actions depending on the severity of the traffic incident. The plan has enhanced communication between agencies, led to better outreach with regional commuters, and allowed Fremont to be prepared for the upcoming winter and storm season.



Future Efforts



Mobility Task Force

Fremont's Mayor and City Council approved the creation of a Mobility Task Force on May 16, 2017. The Task Force will develop a Mobility Action Plan that will further address Fremont's traffic congestion, improve the safety of all transportation modes, and prepare for future transportation trends, such as autonomous vehicles. A professional consultant team will assist the Task Force to help members understand current issues and plans, investigate solutions, engage with the community, coordinate with other stakeholders and experts, and prepare the final plan. The Task Force held their first meeting on October 19. For more information, visit www.Fremont.gov/MobilityTaskForce.

Mobility Task Force Representatives

Council District*

District 1	Sally Morgan
District 2	Laura Winter
District 3	Jitu Choudhury
District 4	Jason Sage
District 5	Jannet Benz
District 6	Judy Whaley

Commission/Committee

Bicycle & Pedestrian Technical Advisory Committee	Gary Suplick
Environmental Sustainability	John Rennels
Planning Commission	Reshma Karpineni

Professional/Business/Institutional

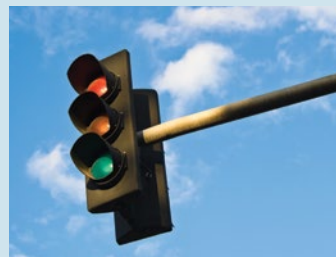
Business/Technology Professional	Balaji Sundaram
Fremont Unified School District	Raul Parungao
Ohlone College	John Worley
Transit Agency Professional	Diane Shaw
Transportation Engineering Professional	Mark Spencer

*For more information about Fremont's Districts and where they are located, visit www.Fremont.gov/DistrictElections.

Mission Boulevard/State Route 262 Upgrade

As part of the Alameda County Transportation Commission (Alameda CTC) Comprehensive Investment Plan, funding has been allocated for preliminary engineering and environmental clearance of the State Route 262 Cross Connector. This section of Mission Boulevard between I-880 and I-680 is congested with traffic on a nearly continuous basis. The project proposes a direct below ground connection between I-880 and I-680 that will remove regional pass-through traffic from Mission Boulevard. The current planning process is the first step in getting the project ready to compete for future state and federal grant funding.

Signal Modernization and Efficiency



The City of Fremont is committing to a comprehensive traffic signal modernization effort that will optimize system efficiency and provide the infrastructure to support advancements in connected and autonomous vehicle technology. The modernization effort will expand the adaptive traffic signal system, which adjusts signal timing to accommodate changing traffic patterns, reduces congestion

by creating smoother traffic flow, and improves travel time reliability by progressively moving vehicles through green lights. The latest in connected vehicle infrastructure technology will enable signal timing information to be communicated to vehicles. The integration of sensors will also allow bicyclists and pedestrians to communicate with the traffic signal system and ensure sufficient street crossing times for users. These efforts will also support Fremont's Vision Zero traffic safety policy to eliminate traffic fatalities on roadways and help reduce vehicle emissions and greenhouse gases, which is consistent with the City's Climate Action Plan.



Enhancements for Walking and Biking

Making Fremont streets safe and convenient for walking and bicycling is also a priority for the City and creates viable options for local travel. Projects are being implemented to enhance pedestrian crossings at major streets. Bikeways are also being improved with buffer areas, green lanes, and physical separation from traffic. New master plans for pedestrian and bicycle facilities have been recently completed to define future projects and priorities. To learn more about the City's new roadway markings and what they mean, watch our safety videos at www.Fremont.gov/VisionZero2020.



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Nixle

Sign up for Nixle and receive critical information from Fremont's public safety departments. Receive text message alerts with information on road closures, severe traffic, and critical incidents. Text your Fremont ZIP code to 888777 to sign up. Standard message rates and data charges apply when receiving Nixle text messages.



Waze

If you do not have the Waze GPS app already, consider downloading it now to assist you with your commute through Fremont. It will help you find the best route to and from work and take into account the new turn restrictions on Fremont streets. Visit www.Waze.com for more information.



Social Media

Follow us on Twitter to stay up-to-date on City news and traffic information.

City of Fremont: @Fremont_CA

Fremont Police: @FremontPD

Fremont Fire: @FremontFire



Traffic Incident Plan

Be prepared by creating a plan you can implement when a traffic incident occurs and roads are gridlocked. If possible, walk, bike, or take public transit to get around Fremont.



Fremont Open City Hall

The City of Fremont uses Fremont Open City Hall, its online civic engagement forum, to solicit comments and suggestions from the community on various topics of interest, including traffic and transportation. Sign up at www.Fremont.gov/OpenCityHall to be notified when new topics are posted so you can provide input.

Contact us

Transportation Engineering Public Works Department

traffic@fremont.gov

510-494-4745

