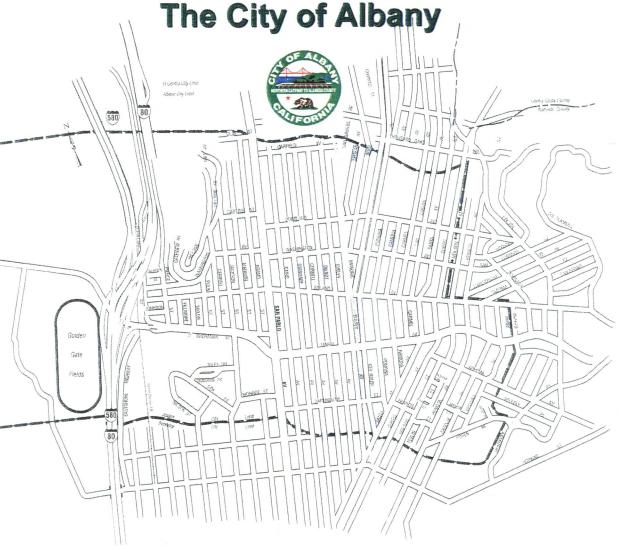
## TRAFFIC MANAGEMENT PLAN

for



Prepared for

The City of Albany

Prepared by



in coordination with

The City of Albany
Traffic and Safety Commission

## CITY OF ALBANY TRAFFIC MANAGEMENT PLAN

KORVE ENGINEERING, INC.

Prepared for:

## THE CITY OF ALBANY

Prepared by:

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Adopted on May 15, 2000 by the Albany City Council

## **ACKNOWLEDGEMENTS**

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Korve Engineering, Inc. In Association with Wiltec 

## A RESOLUTION OF THE ALBANY CITY COUNCIL APPROVING THE CITY OF ALBANY TRAFFIC MANAGEMENT PLAN

WHEREAS, the City of Albany held a Community Meeting, and 20 Citywide and Neighborhood meetings between February 1998 and January 1999 for the purpose of identifying key traffic and safety issues within neighborhoods and the entire City; and

WHEREAS, the Traffic and Safety Commission held a public hearing on February 25, 1999 to obtain additional public input; and

WHEREAS, the Traffic and Safety Commission reviewed the Plan and citizen comments during their meetings between February, 1999 and the January 2000; and

WHEREAS, the Bicycle Advisory Committee met in September 1999 to review the findings in the Plan, as they pertain to the committee's draft Bicycle Master Plan, and formulate recommended revisions to the Master Plan for consideration by the Traffic and Safety Commission; and

WHEREAS, the City Council and the Traffic and Safety Commission held a joint worksession to review the Plan on March 6, 2000; and

WHEREAS, the City Council held a meeting to review the Plan on March 20, 2000; and

WHEREAS, because the draft Traffic Management Plan is not all inclusive of transportation issues, and because additional activities are necessary for implementation, it is further recommended that the City Council direct the Traffic and Safety Commission and staff to perform a number of follow-up activities and tasks.

NOW, THEREFORE, BE IT RESOLVED that the City Council does hereby approve the City of Albany Traffic Management Plan and the Final Traffic Management Plan shall reflect the following modifications:

1. The City Council accepts the inclusion of Marin Avenue traffic alternatives and information pertaining to these alternatives in the Traffic Management Plan but without specific Council endorsement, approval or adoption at this time of these alternatives pending further planning and evaluation (see also item #1 below).

2. Peralta Street shall not be identified as a Class II Bicycle Route in the Bicycle Master Plan (and should not be referenced as such in the Traffic Management Plan) and should instead be evaluated as part of the Bicycle Master Plan approval process as a possible Class III (signed only) Bicycle Route.

3. Eliminate the proposed 35 mile per hour speed limit on Buchanan Street between Jackson Street and the Interstate 80/580 interchange.

4. Correct any graph, chart, table, or language that incorrectly identifies the existing 15 mile per hour speed limit locations (i.e., add the crest of Peralta Street between Marin and Sonoma Avenues and the crest of Solano Avenue between Cerrito and Taylor Streets to the language in Section 4.2.1 on page 38 and to Figure 4.1 on page 39).

5. Add the Solano Avenue/Taylor Street intersection to the list of those intersections with substandard sight distances on pages 4 and 60; and

BE IT FURTHER RESOLVED that the City Council does hereby direct the Traffic and Safety Commission and staff to:

1. Move forward with the next stage of Marin Avenue Planning. This shall include identification and planning of measures to reduce speeds and enhance pedestrian and bicycle safety on Marin Avenue such as further evaluation of the alternatives in the Traffic Management Plan to convert Marin Avenue from four traffic lanes to three traffic lanes and two bicycle lanes and evaluation of other alternatives, including, but not limited to, alternatives that maintain four traffic lanes.

The next stage of Marin Avenue Planning shall include:

- Conceptual design
- Neighborhood input
- Detailed operational analysis
- Assessment of unsignalized intersections
- · Assessment of pedestrian crossing opportunities
- Develop a plan to temporarily test alternatives.
- 2. Develop criteria and procedures for evaluating and implementing neighborhood traffic calming implementation requests and other safety measures (e.g., level of consensus, costs, benefits).
- 3. As initiated by Albany citizens through the procedures developed in #2 (above), and as City funding or other funding becomes available, implement neighborhood traffic calming projects based on, but not limited to, the prioritization procedures described in Table 6.2 (Proposed Point System for Priority Traffic Calming Projects). If and when requests exceed available funding, incorporate projects into the City's five-year Capital Improvement Program.
- 4. Develop a community based education and outreach program to improve safety for pedestrians, bicycles and vehicles.
- Complete the Bicycle Master Plan (currently in Draft form and shown as an attachment to the Traffic Management Plan) for approval by the City Council. This shall include holding additional public meetings to discuss bicycle route alternatives and issues not yet resolved.

- 6. Develop a Transit Improvement Plan as specified in the city's Transit Preference Policy, working closely with AC Transit and existing and potential bus riders.
- 7. Develop a Pedestrian Enhancement Plan, including recommended measures to increase pedestrian safety and to encourage more walking to school, shopping, business, and for pleasure.
- 8. Aggressively pursue existing and new sources of funding to implement the many traffic, bicycle, transit, and pedestrian projects identified in the Plan and in the follow-up activities listed above.
- 9. Continue to review and revisit parking and student drop -off safety around all schools.

Mayor Jon Ely



# City of Albany

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- Senior Center PH. (510) 524-9122 FAX (510) 524-8940
- Teen Canter PH. (510) 525-0576

RESOLUTION NO. 00-32

PASSED AND APPROVED BY THE COUNCIL OF THE CITY OF ALBANY,

this 15th day of May .2000 by the following votes:

AYES: Council Members Maris, McManus, Thomsen & Mayor Ely

NOES: Council Member Good

ABSENT: None

WITNESS MY HAND AND THE SEAL OF THE CITY OF ALBANY, this 6th

JACQUERNE L. BUCHOLZ, CMC

CITY OF ALBANY

JUN 06 2000

COMMUNITY DEVELOPMENT DEPARTMENT

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## Glossary of Terms

AASHTO American Association of State Highway and Transportation

Officials

ACMA Alameda County Congestion Management Agency

ACYA Alameda County Youth Authority

ACTAC Alameda County Technical Advisory Committee

ADT Average Daily Trips

CIRC Circulation Element in reference to General Plans

CMAQ Congestion Management Air Quality
CMA Congestion Management Agency
CTC California Transportation Commission
ITS Intelligent Transportation Systems

LOS Level of Service

MTC Metropolitan Transportation Commission

RIP Regional Improvement Program

ROW Right-of-way

STIP State Transportation Improvement Plan
SWITRS Statewide Integrated Traffic Records System
SYNCHRO System for Evaluating Signalized Intersections

TAC Technical Advisory Committee
TMP Traffic Moderately Platooned

TRAFFIX Analysis Tool for Evaluating Non-Signalized Intersection

TTE Thompson Traffic Engineers

UC University of California VMT Vehicle Miles Traveled

WCCTAC West Contra Costa County Transportation Advisory Committee WCCTACTAC West Contra Costa County Transportation Advisory Committee

**Technical Advisory Committee** 

WTC Water Transportation Commission

## 0.0 Executive Summary

## 0.1 Traffic Management Plan Background and Goals

The Traffic Management Plan (TMP) presents a set of goals and actions intended to enhance the City's quality of life. The plan is designed to create more livable streets by promoting safer travel and increasing bicycle, pedestrian, and transit travel. In tandem with other city plans, policies, and goals, such as the proposed Bicycle Master Plan and the Transit Preference Policy, the Traffic Management Plan sets forth a blueprint for preserving Albany's small-town ambiance. Overall, the plan aims to enhance community identity, cohesion, and a sense of this city as a great place to live, work, shop, eat and visit.

The Traffic Management Plan was produced via a comprehensive public input process and large-scale data collection and analysis designed to investigate residents' concerns regarding traffic and travel in the City. To achieve this, the city was divided into three Neighborhood Areas. Over 100 people attended 20 Working Group meetings to discuss neighborhood, as well as citywide, traffic issues. The Plan also describes the current traffic system, including details of the roadway system, transit system, and bikeway system, and provides information on related city policies and plans.

Via the public input process, the following key transportation goals were identified:

- Provide equal rights of access for non-automobile modes.
- · Reduce automobile trips in the City by encouraging use of non-automobile modes.
- Create conditions throughout the City for safer and more convenient walking and bicycling, especially for children going to and from school.
- Improve AC transit service and transit amenities in the City.
- Take measures to calm traffic on Marin Avenue so it no longer "divides" the community.
- Make traffic management a citywide priority through education and public outreach.
- Take a proactive leadership role in working with other agencies and jurisdictions to effect sound decisions regarding transportation funding, transit service, highway improvements, and other transportation issues.

The TMP does not attempt to directly or fully address all of these goals, but rather focuses on travel safety and traffic calming. Recommendations are also presented for next steps in realizing the full range of goals identified.

Albany was designed in the early 1900s in a grid street pattern characteristic of transit-oriented community. This pattern is the most efficient street pattern for walking and bicycling, and also for traveling by automobile, since it provides the most direct routes to and from destinations.

At today's levels of automobile use, where vehicle miles traveled continue to increase and each household in the City owns an average of 1.43 vehicles, the grid pattern contributes to the City's attractiveness as an automobile reliever route for Interstate 80/580 and as a through route to UC Berkeley and other destinations. These factors, along with others, generate many of the traffic concerns voiced by citizens.

## 0.2 Data Collection and Analysis

In the initial meetings held in three areas of the City, as well as a citywide meeting, more than 150 issues or problems were identified. A systematic review and investigation of each of the issues was then conducted with the following results.

#### 0.2.1 Speeding

All but two of the 12 streets where speed studies were performed did in fact reveal significant speeding concerns. (San Pablo Avenue and Solano Avenue were the exceptions.) On these streets, speed survey data showed that the 85<sup>th</sup> percentile speed¹ was greater than 6 mph over the posted speed limit. This indicates that most drivers routinely exceed the speed limit, traveling at 32 mph or greater in at least one direction during the AM or PM peak hour. These streets are:

- Buchanan Street
- Cleveland Avenue north of Washington
- 900 block of Pierce Street
- Marin Avenue
- Santa Fe Avenue south of Marin Avenue
- Pomona Avenue south of Marin Avenue
- Sonoma Avenue
- Peralta Avenue south of Marin Avenue
- Ordway Avenue south of Marin Avenue
- Brighton Avenue west of Masonic Avenue
- Garfield Avenue west of Masonic Avenue
- Portland Avenue west of Masonic Avenue
- Washington Avenue west of Masonic Avenue
- Masonic Avenue north of Marin Avenue
- Key Route Boulevard south of Portland Avenue

<sup>&</sup>lt;sup>1</sup> It has been shown that reasonable drivers perceive the 85<sup>th</sup> percentile speed as the speed the roadway was actually designed to accommodate—regardless of the posted speed limit.

Wide roadways and long blocks with minimal traffic control on many north-south streets are contributing factors that make speeding more attractive for drivers. These conditions ensure relatively unobstructed, lengthy roadway segments where automobiles can pick up speed.

#### 0.2.2 Accidents

Accident data for the City shows that the highest pedestrian and bicycle accident rates, and the highest rate of all accidents, occur on San Pablo Avenue. This is likely due to San Pablo Avenue's numerous access points, mid-block turning movements, stop-and-go peak hour congestion, and high on-street parking turnover.

Residential streets with a marked pattern of bicycle and pedestrian accidents include Marin, Portland, Santa Fe, and Brighton Avenues. The residential street with the highest number of pedestrian and bicycle accidents is Marin Avenue.

The following streets exceed the accident rates (for all modes) that would be expected based on Caltrans accident rates for similar streets and intersections.<sup>2</sup> Specific locations are listed in Table 4.1:

- Carmel Avenue
- Cleveland Avenue
- Buchanan Street (ramps to I-80)
- Pierce Street
- Polk Street
- San Pablo Avenue
- Stannage Avenue

#### 0.2.3 Child Pedestrian Safety

Child pedestrian safety is a significant community issue. Critical levels of traffic appear regularly during a very short time period at all schools surveyed. For several schools, the volume of cars cannot be handled by either on-site or street loading areas, resulting in many parents dropping off children in a risky manner. Crossing guards appear to adequately control children crossings near schools and appear to have had a positive effect on safety. Although there are relatively high speeds and traffic volumes near Marin School and the former Albany Middle School, there have been no reported pedestrian or bicycle accidents involving school children on their way to and from school at or near these locations, in recent years.

#### 0.2.4 Intersection Design

Sight distance is the line of sight available to the motorist, bicyclist, or pedestrian stopped at intersections. Data collection shows that inadequate sight distance was a valid concern for at least one approach at every intersection where residents indicated there was a problem.

<sup>&</sup>lt;sup>2</sup> "Basic average accident rate table for intersections," p. 86, 1996 Accident Data on California Intersections, California Department of Transportation.

Twelve locations do not meet the accepted 150-foot standard<sup>3</sup> for sight distance.

- Adams Street and Washington Avenue
- Washington Avenue and Cerrito Street
- Washington Avenue and Pierce Street
- Cerrito Street and Hillside Avenue
- Pierce Street (500 block)
- Pomona Avenue and Thousand Oaks Blvd.
- Pomona Avenue and Washington Avenue
- Ramona Avenue and Thousand Oaks Blvd.
- Marin Avenue and Santa Fe Avenue
- Peralta Avenue and Francis Street
- Solano Avenue and Ventura Avenue
- Solano Avenue between Taylor Street and Cerrito Street

Another six locations were shown to have confusing intersection channelization and design elements:

- Buchanan Street and Marin Avenue
- Pomona Avenue and Washington Avenue
- Santa Fe Avenue at Pomona Avenue
- Santa Fe Avenue at Ramona Avenue
- Santa Fe Avenue at Key Route Boulevard
- Marin Avenue at Ventura Avenue

#### 0.2.5 Parking

Although parking capacity was an issue raised in community meetings, data collection showed that while some residential streets near Solano Avenue have high parking occupancy rates, virtually none show full occupancy rates of 85 percent and over during the Thursday evening time-period of the parking study.

#### 0.2.6 Level of Service

Traffic level of service (LOS)<sup>4</sup> was analyzed at 10 signalized and 21 unsignalized intersections. All signalized intersections operate at LOS A or B except Marin Avenue and San Pablo Avenue, which operate at LOS D. All unsignalized intersections operate at LOS A or B except for Portland Avenue and Key Route Boulevard, which operate at LOS C.

<sup>&</sup>lt;sup>3</sup> The 150-foot standard is established by American Association of State Highway and Transportation.

<sup>&</sup>lt;sup>4</sup> Traffic levels of service (LOS) classifications range from LOS A through LOS F. Traffic at LOS A conditions is at free-flow. LOS B and LOS C indicate higher levels of traffic congestion, but these levels are generally considered to be acceptable.

#### 0.2.7 Conclusions

Of all the concerns initially raised by the community, 71 specific issues were validated by the data collected and analyzed. Marin Avenue clearly has the greatest number of concerns, which traffic studies have validated, including vehicles exceeding the speed limit, high volumes (especially through volumes), proximity to walking and bicycling routes to school, and accidents. Buchanan Street has a similar pattern of validated concerns.

San Pablo Avenue also has a relatively large number of validated concerns, including high accident rates, inadequate pedestrian crossing times, traffic volumes and poor intersection operations.

#### 0.3 Recommendations

In order to help the City set priorities for addressing traffic issues, and to provide options for how to address the issues and a possible timing scheme for doing so, the Traffic Management Plan includes the following:

- A ranking of the problem locations identified by the community. The point system used gives greater consideration to roadway segments and intersections with high traffic volumes, high levels of pedestrian and bicycle accidents, high levels of speeding, proximity to schools, and proximity to transit stops.
- A detailed description of traffic calming methods, including likely impacts and costs associated.
- A suggested phased approach to implementing traffic management strategies.

#### 0.3.1 Phase I Measures

Phase I measures are designed to be implemented within one year. They are largely community-based programs of surveillance and enforcement, police enforcement, and some smaller-scale infrastructure projects. The community-based programs bring residents and the City into a partnership to promote an attitude change in speeding drivers. Increased police enforcement entails greater use of the City's radar speed trailer and increased police presence. The infrastructure projects in this phase include removing sight-distance obstructions and installing stop signs.

#### 0.3.2 Phase II Measures

If Phase I measures have had little or no effect after approximately six months, the Traffic Management Plan recommends that Phase II measures be considered, addressing problem areas in order of the ranking suggested. Phase II measures include:

#### Marin Avenue Pedestrianization Project

This project, proposed in part within the Bicycle Master Plan, would provide pedestrian refuges, bicycle lanes, and speed control measures such as narrowed travel lanes and intersection neck-downs. The expected results would be lower vehicle speeds and improved safety and ease of travel for pedestrians and bicyclists. (For further clarification on City Council direction, see City Council Resolution #00-32.)

#### East-West Street Strategy

Reconfigure stop sign patterns north of Solano between San Pablo Avenue and Masonic Avenue so that more intersections are 4-way stop controlled. This would prevent the easy through movement that now exists on many east-west streets.

#### Midblock Speed Treatment Program

Since long blocks give vehicles an opportunity to speed on north-south streets, speeds could be reduced by installing hardscape or striped speed-control devices midblock. The possibilities include midblock curb extensions and chokers, speed humps and speed tables and a wide range of other potential solutions. City programs are relatively common where residents "adopt" one of these lower-cost speed treatments in order to defray the costs.

#### Other Projects

A number of projects to make complicated intersections more clearly defined with striping and median channelization are also proposed. Such projects include the Buchanan Avenue/Marin Avenue improvements, as well as intersection reconstruction at Santa Fe at Pomona Avenue, Ramona Avenue and Key Route Boulevard. In addition, a redesign of the loading area in front of Marin School, bicycle path/pedestrian crossing controls along the Ohlone Parkway, and network modifications at the I-80/I-580/Buchanan Street interchange are proposed.

#### 0.3.3 Phase III Measures

Phase III measures are dependent on securing large funding allocations through county, regional, and/or state revenue sources. These measures include the extension of Cleveland Avenue to connect to Taylor Street, further improvements near the I-80/I-580 interchange, and the completion of all hardscape improvements on Marin Avenue. (For further clarification on City Council direction, see City Council Resolution #00-32.)

#### 0.4 Future Studies and Plans

Because the Traffic Management Plan does not address the full range of issues related to transportation and mobility in the City, it is recommended that further studies and plans be developed as staff and volunteer time and resources permit. These would include:

- Pedestrian Preferential Plan
- Transit Improvement Plan
- Street-Lighting Assessment
- Truck Weight-Limits Assessment