WINE COUNTRY
INTERREGIONAL PARTNERSHIP (IRP)

FINAL REPORT

IRP Actions to Address Jobs-Housing Imbalance and Imbalance Impacts

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Prepared for
State of California
Housing & Community Development Dept.

Prepared by
Mendocino Council of Governments
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INTRODUCTION

The State of California has recognized the need for a higher level of interregional cooperation to address a range of land use, planning, and economic issues. AB 2054 (Torklakson), signed by the Governor in November 2000, established a statewide program to address the interregional consequences of jobs, housing and transportation imbalances. The program is funded by a $5 million State budget authorization and is administered by the Department of Housing and Community Development.

This is a one-time allocation of funds to develop and implement plans to promote and accommodate housing in areas rich in jobs as well as job creation in areas rich in housing. An integrated planning approach will utilize geographic mapping, appropriate computer models, and targeted policies/incentives to evaluate housing, transportation, and environmental issues to alleviate housing and job creation imbalances.

The Mendocino Council of Governments (MCOG) was awarded a grant of $260,000 under this program, as lead agency for the Wine Country Inter-Regional Partnership (IRP). Matching funds are provided by Local Transportation Funds (MCOG and Lake County/City Area Planning Council), Rural Planning Assistance and Planning, Programming, and Monitoring funds (State of California Department of Transportation).

In November of 2001 MCOG began implementing the Wine Country IRP work program. The goal of the program was to identify and then address jobs-housing imbalances between jurisdictions within the four counties of Napa, Sonoma, Lake and Mendocino. The policy options addressed fall into three general areas:

1) Creation of employment opportunities in areas of housing concentration,
2) Creation of affordable housing in areas of employment concentration, and
3) Reduction of access barriers between jobs and housing.

The Wine Country IRP’s main work plan includes:

- Develop an existing conditions background report for the four-county region
- Identify stakeholders and engage them with the initial results of the analysis
- Develop existing trends and projections to learn which problems are easing and which are being exacerbated
- Develop a set of issues that will identify specific problems, discuss potential solutions, and recommend policies for consideration by the counties, cities, special districts, industry groups and others
- Create a policy group of stakeholders willing to create an ongoing forum to discuss and solve the issues raised during the earlier tasks
- Draft an implementation plan to continue efforts initiated by the IRP.
We would like to thank the professionals who provided new research and analyses for this project:

- Applied Development Economics (ADE) – housing and economics issues, stakeholder outreach and organization
- T. Y. Lin International/CCS (formerly CCS Planning and Engineering) – transportation technical issues
- Cambridge Systematics – transportation technical issues
- VESTRA Resources, Inc. – geographic information systems (GIS) database and mapping

We also extend our thanks to these people and organizations who assisted the IRP:

- Association of Bay Area Governments
- Metropolitan Transportation Commission
- Caltrans Office of Travel Forecasting
- City of Healdsburg
- Mark Thayer, Media Consultant
- Wine Country IRP Leadership Team Members
EXECUTIVE SUMMARY

The findings and actions of the Wine Country InterRegional Partnership (IRP) documented in this report are summarized as follows.

**Wage Growth and Change.** In the Wine Country, the influx of high wage jobs associated with the “dot-com” boom along the US-101 corridor overlaid an existing employment base dominated by low-wage jobs. The loss of these jobs has returned the economic base to reliance on tourism, the wine industry, retail and service sector activities. The wage gains of 1990-2000 will not be continued into the next decade without a significant change in the local community attitudes toward economic base diversification; and major realignment of resources to support employment activities.

**Housing Cost Dynamics.** The volatility of the Wine Country is now of such a nature that in 2004 the average cost of housing has increased by over $100,000 in a single year. The impact of such dramatic shifts in housing costs between counties and regions is a certain amount of panic by home buyers. With ever-shrinking income levels based on the real value of wages, buyers are looking across jurisdictional boundaries and regional boundaries to find affordable housing that meets buyers’ needs.

**Housing Affordability.** The relatively low wages earned in the Wine Country region limit the ability of workers to enter the home-ownership market. The Wine Country region benefited less from the wage gains in the 1990s than did the Bay Area and California. The dramatic increase of housing prices within the Wine Country region have far exceeded wage gains and have left housing unaffordable to the majority. Long distance work trip commutes will be inevitable if current patterns persist.

The production of moderately priced workforce housing by the private sector “market-priced” home builders has become virtually nonexistent. There is a glaring lack of supply of moderately priced “starter” or workforce housing for both the Bay Area and the Wine Country. Until building workforce housing becomes a priority on a level with other public need priorities, the conditions creating jobs-housing imbalance and separation will significantly worsen.

The rate and scope of change for housing and employment for the first part of this decade have been quite dramatic--and show little sign of leveling out.

**Workforce Housing Shift and Work-Trip Commute Impact.** The Projections data show sub-areas of the Wine Country that stand out as contributing to the process of jobs-housing imbalance and separation. The Santa Rosa Metro sub-area and the Petaluma Metro sub-area will be the areas of employment concentration within the Wine Country area. The Calistoga and Saint Helena sub-areas will also be subject to a workforce housing shift because of the relatively high level of unaffordability associated with each sub-area. The sub-areas that will provide locations for shifted housing supply are Cloverdale, Ukiah Valley, Middletown, Hopland, Lower Lake, and American Canyon.
Transportation Impacts. When all of the Projections data are taken in context, what appears is a picture of where market forces will drive jobs-housing imbalance symptoms. The most prevalent symptom is the impact on the roadway system connecting sub-areas of high housing unaffordability with sub-areas where housing is significantly more affordable. Indeed, for the majority of the other IRPs statewide, the issues that triggered interest in pursuing an IRP work program were roadway congestion and safety issues.

In addition to the housing and economic development issues and problems identified in this report, the following access problems will have to be addressed:

- The majority of connecting roadways are two-lane, rural, substandard traveled ways.
- There is no interregional transit service available.
- Key roadway segments connecting Lake, Napa, Sonoma, and Mendocino Counties are through rugged, mountainous terrain with limited sight distance and passing lanes.
- Usable capacity on these roadways is limited. It will not take much of an increase in commute traffic to create safety and access problems.
- At present there are no viable alternatives to the roadway system.

“Compelling Message” for Stakeholders. The fundamental information contained in this consideration of the market forces that shape jobs-housing imbalance and separation, and the impacts on the roadway system connecting the Wine Country area, make what we believe is a compelling message for stakeholders to absorb and, we hope, to motivate effective and appropriate actions. The key elements of the message are:

- In the decade of 1990 to 2000, the four-county Wine Country area led both the Bay Area and California in the rate of job growth and population growth.
- The wage level for the average worker in the Wine Country is substantially below those of the Bay Area and California, both in the real value of wages and in the rate of growth in wages.
- Housing costs in the Wine Country have risen at a faster rate of increase than in the Bay Area and statewide, so much so that by 2004 the average home price in the Wine Country is within a few thousand dollars of Bay Area home prices.
- The roadway system connecting the four-county Wine Country is composed of two-lane rural highways and county roads. The only expressway-level facility is US-101 linking Mendocino and Sonoma Counties. These roadways are not designed for work-trip commute traffic.
- The 2020 horizon year projections identify a significant gap between workers’ wages and the average home price for all of the Wine Country area except Lake County. The ability of the average worker to qualify for purchase of the average home has deteriorated to the point that 4.1 wage earners are required to purchase a home in Sonoma County, with similar values for Napa and Mendocino Counties.
- A shift of workforce housing is estimated for the 2020 horizon year based on the projected housing, employment, population and wage data. Using work trip commute
factors, the projected housing unit shift was converted to commute trips between sub-areas across regional and county boundaries.

- The roadway segments that connect the sub-areas and counties within the Wine Country area will undergo severe congestion and safety problems as result of the work-trip commute increases.

The affordability of housing to meet workforce needs is pivotal to either maintaining sustainable communities or seeing them dissolve into a two-tier society of haves and have-nots.

**Stakeholder Outreach.** The IRP conducted a thorough process of identifying, contacting, and interviewing potential stakeholders and formed a Leadership Team to look at the issues and recommend actions. A variety of public and private sector representatives were consulted. The Team met three times, and a General Assembly of stakeholders also was held. (A compact disc of notes and material from this conference is available.) Some of the lessons learned from this outreach process are:

- The need for a champion among the media outlets emerged as an essential ingredient for conducting a successful IRP work program.
- Nothing short of a perceived major crisis will motivate attention and participation of contending stakeholder groups to address the interregional aspects of jobs-housing imbalances.
- Funding for an emerging IRP should be at a greater or at least equal, rather than a lesser, level than for an established IRP.
- Once a Leadership Team drawn from the stakeholders was established, the turnover and absenteeism were probably no different than one would expect from a group of all elected officials with finite terms of office.
- A small core of leaders and stakeholders stayed with the work program throughout the entire process.

**Implementation Plan.** The core Leadership Team members decided to start with small, achievable actions and then build on the successes of these early steps toward broader measures. The following tasks were adopted for immediate action, some of which have already been initiated.

- Coordinate the Workforce Investment Boards in each of the four counties.
- Coordinate workforce housing development activities of affordable housing advocacy groups.
- Develop a coordinated strategy for promotion of tourism within the four-county Wine Country area.
- Develop an on-going transportation planning and programming coordination group from the existing regional transportation organizations in the four-county area.
- Maintain a website for communication and coordination activities between stakeholders and implementation action groups (www.mendocinocog.org/irp).
Recommendations. The interregional partnership process is an extremely important tool for fostering the coordination and joint action that can resolve the many multi-jurisdictional problems that face much of the State. The Wine Country provides a model of an exurban area that has yet to face the crises level symptoms of urban areas IRPs, but the symptoms can clearly be seen to be on their way.

Continued funding of this effort is essential to the long-range welfare of the State. In the short term, making changes in the restrictions of RTPA organizations to engage in growth and land use issues, particularly environmental review of transportation impacts associated with land use decisions would be helpful. The MOU that supports the ongoing activity of the Wine Country IRP should be modestly supported from transportation planning funds to allow the regional transportation planning agencies to coordinate and monitor stakeholder activities.

In reflecting on the findings presented to the stakeholders and their response to a call for action, we see two areas of jobs-housing imbalance impacts that need further study and definition.

First, the lack of adequate supply of workforce housing presents a significant barrier to employment development and economic base diversification. This creates a “double whammy” for the Wine Country: the loss of the dot-com high-tech jobs has pushed the economy back to reliance on tourism, service industry, and wine production sectors--all predominantly low-wage job producers--and the lack of new workforce housing construction has seen the cost of the existing housing stock move out of reach of the average worker. New employers, when considering locating in the area, have as a key criteria affordable housing for their workforce, including their managers. To what extent the lack of workforce housing retards the diversification of the economic base is not clearly known. Providing a better connection between adequate workforce housing and a sustainable economic base could stimulate stakeholder action.

Second, the threshold at which long-distance work-trip commuting becomes disruptive to community life and to individual home life is not well known. The costs to a given community that serves as a residential reservoir when a significant portion of workers commute out of the region can be socially and fiscally negative. Again, estimates of these impacts can serve to move dealing with the jobs-housing imbalance phenomenon higher on the priority list of stakeholders.

We hope that further attention to these impacts will build from the actions of the stakeholders and the State Legislature.
PREFACE

This Final Report is really two reports in one: Parts I through III deal with the findings and methods used for the projections of housing costs and job wages; Parts IV through VI deal with stakeholder participation and the potential for developing cooperative strategies to address jobs-housing imbalances. The key ingredient for understanding our IRP work program is to fully comprehend the fact that the four-county Wine Country area does not have an immediate, recognizable crisis associated with jobs-housing imbalance and separation.

Our grant application to H&CD was as an “emerging or developing IRP,” the category for areas where no previous interregional coordination had occurred. The main difference between emerging IRPs and established IRPs is that the established IRPs have already documented the extent of jobs-housing imbalance and the impacts on infrastructure associated with the imbalances. Emerging IRPs must first document the full extent of the imbalances and the impacts on communities and infrastructure.

APPROACH and METHODOLOGY

As an “emerging” IRP, our approach was first to document the imbalance and its impacts based on existing trends, and second, to engage stakeholders with a “compelling message” from existing conditions and trends data, so as to begin organizing for the task of addressing the imbalance and separation of jobs and housing.

The questions at the heart of the “compelling message” were: “What are the key measures of the market forces that drive jobs-housing imbalance and separation?” and “Are these measures readily available in a form that can used?” The two variables that fit into the answer to these questions are worker wages and housing costs.

The sources of the data could provide readily available information by postal zip code boundary. Wages were reported by Standard Industrial Classification (SIC) groups, and the housing data was by average housing cost for single family dwelling units. These became the indicators for jobs-housing balance evaluation. In reviewing the reports and findings from established IRPs, it was clear that the balance of total housing to total jobs did not accurately reflect the nature of jobs-housing imbalance. The shortage of workforce housing, defined as housing that is affordable on at least two average worker wages, is at the heart of the imbalance impacts.

This leads to explanation of the phrase “separation of jobs and housing,” which has been included in our discussion of the jobs-housing imbalance phenomenon. The impacts or symptoms of workforce jobs-housing imbalance is measured in the distance and time that separates job locations and affordable worker housing desired by workers.

Other measures are the number of families per dwelling unit and substandard, deteriorated dwelling units remaining in the housing inventory. As workers chase the housing type and quality that is desired at prices that they can afford, the distances that the work trips will require become longer and the impacts on inter-regional access links become greater.
We made no attempt to quantify the social and economic disruptions associated with long-distance work trip commuting. Coming to grips with the gap between workforce wages and housing costs presents a challenge of truly daunting proportions.

The selection of roadway system impacts as one indicator of jobs-housing imbalance impacts was not a difficult choice. First, the connection between increased time and distance for work trips, and the roadway systems that these trips must use, is quite clear. Second, in looking at the other established and emerging IRP work programs throughout the state, we noticed it was the traffic flow impact of work trips on inter-connecting roadways that triggered a crisis of some kind and served as the impetus for IRP development.

The analysis of the Wine Country existing conditions and trends data indicated that the scene was set for crisis-level impacts, but that the impacts had not yet reached a crisis. Thus the role of the projections data and its evaluation would be pivotal in fleshing out the “compelling message” for stakeholder action.

**PROJECTIONS DATA and COMPELLING MESSAGE**

The role of the projections data when coupled with the existing conditions information led the viewer to the conclusion that housing affordability will worsen and the likely areas of workforce housing shift will be from the Santa Rosa-Petaluma metro area to southern Mendocino and Lake Counties. The projection data was developed from 30 years of wage and housing cost data collected by the two data source firms used in our study.

The housing cost and wage data by sub-area was converted to housing units and work commute trips. The amount of housing shortfall in the Santa Rosa and Petaluma sub-areas were assigned to sub-areas in Mendocino and Lake Counties based on the relative affordability of the housing and the travel impedance between sub-areas. The impact of the added long-distance work trips to the estimated 2020 horizon trips was calculated for selected roadway segments at the county and regional boundaries. The increases in county-to-county work-trip interchanges were also calculated.

Taken all together, this information provided the context for our message to the IRP stakeholders. It is most likely too early to determine whether the message contained information that will motivate sustained attention on cross-regional and cross-county impacts of jobs-housing imbalances. In general the message was received as confirmation of trends and impacts of which most stakeholders were already aware. During the ensuing discussion of the imbalances, impacts, and possible mitigations, stakeholders have decided to focus on limited actions that offered potential for early achievement in making progress toward solutions.

**STAKEHOLDER INVOLVEMENT**

At the outset of defining the work program and identifying the role of stakeholder participation, the legislation that created funding for the IRP effort provided clear direction. Stakeholder involvement should lead to ultimate stakeholder ownership of the IRP process. Based on feedback from the established IRPs, it was decided that the stakeholder outreach
should target a cross-section of participants who have a direct connection to creating housing and jobs. General categories of stakeholders were identified so that outreach efforts could begin. Basic categories included:

- Local Elected Officials
- Planning and Economic Development Agencies
- Nonprofit Housing Development Agencies
- Wine and Grape Grower Associations
- Housing Advocacy Groups
- Employment Development Groups
- Environmental and Open Space Groups
- Banking and Financial Institutions
- Water Resource Agencies
- General Business Community
- Transportation Planning Agencies

For the Wine Country IRP to rely solely on elected officials, for developing policy and identifying an effective implementation strategy, would have invited failure. First, as an emerging IRP there was no existing, historical pattern of communications between the elected officials of the four counties. In some cases local jurisdictions had not made any direct communications with other jurisdictions, although in close physical proximity. Second, elected officials are in a difficult position to adopt or approve strategies and actions that might be at odds with their constituents’ interests. Real leadership and risk taking is seldom rewarded with re-election. Third, we were convinced that the real-world market forces that drive jobs-housing imbalance and separation are composed of elements other than those impacted by local elected officials’ actions.

A mix of stakeholders from a cross-section of interests, priorities and attitudes concerning housing and job development offered the greatest probability of creating an effective implementation/action plan. Once candidate stakeholders had been identified, an outreach plan was prepared and initiated. Contacts were made by telephone calls followed by personal interviews. From a group of stakeholders who indicated interest in participating on an ongoing basis, individuals were selected to serve on a “Leadership Team” to provide guidance and input to the overall work program. The aim was to build interest in the outcome of the technical studies and a sense of urgency in addressing jobs-housing imbalance issues.

**IRP WORK PROGRAM ORGANIZATION**

The direction and final authority for the decisions involved in the Wine Country IRP work program has rested with the MCOG management team. The Wine Country IRP Program Manager has retained final authority regarding the technical and stakeholder outreach programs. The MCOG Deputy Director for Administration has been responsible for the programming and expenditure of grant and matching share funds.
The initial consultant team was restructured after ten months of effort as a result of clear differences in work task definition and priorities between management and consultants. Three new consultant firms were retained and the work program was reorganized to reflect changed time frames and remaining funds. After this transition we began to see results.

The consultant staff needed to be able to act independently once the overall set of work tasks had been agreed upon, while understanding that at key points MCOG management must provide direction. Clear lines of communication via all modes were instrumental in keeping the program on track to create meaningful products. Conference calls and email were used to great effectiveness with a minimum of face-to-face meetings among H&CD staff and the entire team. The last year-and-a-half of the work effort required almost daily monitoring by MCOG management staff, so the avoided travel translated to greater productivity. We recommend this approach of using communications technology wherever feasible.

Laurence N. Wright, P.E.
Wine Country IRP Program Manager
MCOG Deputy Director for Long Range Planning
I. EXISTING CONDITIONS UPDATE

When the findings of the Existing Conditions Report dated August 15, 2003, were presented to the Wine Country IRP Leadership Team at its initial meeting on August 28, 2003, several members pointed out that several of findings were out of date and no longer accurate. The Leadership Team identified significant changes both in the employment picture and in housing cost increases since the existing conditions period ending July 2000. They requested that the consultant team update the analysis and base data to reflect the dramatic changes taking place within the four-county study area over the subsequent three years. The changes identified as most troublesome were:

- Significant losses of manufacturing, computer programming and telecom jobs from 2000 through 2002: the collapse of the “dot-com” industry, off-shoring of manufacturing and data processing jobs, and drastic reduction of computer equipment manufacturing in the greater Bay Area has significantly impacted the Sonoma County dot-com corridor (Santa Rosa and Petaluma metro areas).
- The increase in housing costs has continued at a rate significantly higher than in the Bay Area or statewide. Housing production is decreasing in the four-county Wine Country area and is rapidly becoming unaffordable to the majority of the work force within the four counties.

The consultant team and MCOG management agreed that an update would be appropriate in meeting the goals of developing a compelling message and engaging stakeholders in our process. The update would also serve as the initial test for projections methodology and provide a picture of the rapidly changing environment within which the Wine Country IRP must function.

REVIEW of 1990-2002 EXISTING CONDITIONS

The updated existing conditions findings revealed these key points.

- The Wine Country has developed its own interrelated economy that functions separately from Bay Area economy
- The Wine Country’s economy expanded more rapidly than Bay Area or California in all measures of employment, population, and housing
- Employment continued to expand in the Wine Country Region 2000-2002:
  - Wine Country gained 6,200 jobs
  - Bay Area lost more than 200,000 jobs and California lost more than 30,000 jobs
- Real wages earned in the Wine Country are nearly half the value of wages earned in the Bay Area
Recent growth rates of real wages in the Wine Country continue to lag behind the Bay Area and California.

Housing affordability is a larger problem in the Wine Country than in the Bay Area, due to:
- Rapidly increasing housing costs
- Relatively stagnant wage earnings
- Workforce housing not being constructed

**Consequence:** A significant segment of the workforce chooses to commute long distances.

**Job Growth and Economic Base Change**

Employment changes were dealt with in detail by the Existing Conditions Report, which looked at specific SIC groupings and the average wages attached to each classification. The growth in employment from 1990 to 2000 for the Wine Country exceeded both the seven-county Bay Area and the rest of California.

The comparative growth in employment is shown in **Figure 1.1**, indicating that the rate of growth for the Wine Country was almost double that of the State. The Wine Country changes in employment were predominantly in agriculture, manufacturing, retail and service, and construction. It should be noted that wine production is classified under manufacturing.

**Figure I-1**

*Percent Change In Employment, 1990 – 2002*

**Wine Country Counties, Seven-County Bay Area, and California**

<table>
<thead>
<tr>
<th></th>
<th>Wine Country</th>
<th>Bay Area</th>
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**Summary: Job Creation 1990 – 2002**

- Wine Country: 39,000
- Bay Area: 197,000
- California: 1.27 million

Source: Applied Development Economics
Based on Data Collected from California Employment Development Department
The chart presented in Figure 1.2 compares the growth rates for the past decade and the 2000-2002 period. One of the reasons for the Leadership Team members’ concern about basing the existing conditions evaluation on data from the decade of 1990–2000 can be seen in the 2000-2002 data. The Bay Area went from a gain of just under 200,000 jobs (+2.1%) for the ten-year period to a loss of 201,000 jobs (-2.4%) during the most recent three-year period. Even more remarkable is that the Wine Country area showed a gain of over 6,000 jobs (+6.8%) even with the loss of approximately 7,000 high-tech jobs, from dot-com losses in Sonoma County alone. The bad news is that the vast majority of the jobs gained are low-wage jobs associated with agriculture, tourism, and the service sector.

**Figure I-2**

Annual Rates of Employment Growth in Wine Country Counties, Seven-county Bay Area, and California

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine Country</td>
<td>-0.1%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Bay Area</td>
<td>-2.4%</td>
<td>2.1%</td>
</tr>
<tr>
<td>California</td>
<td>0.8%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

**Summary: Job Creation 2000 – 2003**

- Wine Country ............ 6,250
- Bay Area .................. -201,757
- California ............... -31,885

**Wage Growth and Change**

The changes in job numbers only tells a part of the story. The job losses identified for 2000-2002 were predominantly higher wage jobs associated with dot-com, data processing, computer assembly and manufacturing, and financial services. The jobs gained, as noted above, were mostly lower-wage jobs that have relatively flat wage rate increases. The average wages earned by all jobs in the three comparison areas for the 2000 base year area are as follows:

- Four-county Wine Country Region $33,012
- Seven County Bay Area $60,612
- State of California $41,182
As can be seen, the average wages for the Wine Country area substantially lag behind the Bay Area and statewide wage levels. The changes in the real value of wages from the 1990 base year to 2002 are shown in Figure 1.3. The wages were adjusted for the inflation and consumer indices in each of three comparison areas.

Figure 1-3
Changes In Real Value Of Wages
Wine Country Counties, Seven-County Bay Area, and California
1990 - 2002

A comparison of the annual gains of real wages for the two time periods is shown in Figure 1.4, and again the Wine Country wage gains are significantly lower than either of the other two areas. The wage gains indicated in the Existing Conditions Report for the Wine Country have been drastically reduced, while real wage gains in the Bay Area remain robust, even in the face of the job losses. This means that the job losses are concentrated in specific SIC clusters, and wage gains in unaffected sectors continue at a robust pace for the Bay Area.

In the Wine Country area the impact of the jobs losses during 2000-2002 was very different. The influx of high wage jobs associated with the dot-com boom along the US-101 corridor overlaid an existing employment base dominated by low-wage jobs. The loss of these jobs has returned the economic base to reliance on tourism, the wine industry, retail and service sector activities. The wage gains of 1990-2000 will not be continued into the next decade without a significant change in the local community attitudes toward economic base diversification; and major realignment of resources to support employment activities.
**Figure I-4**
Annual Gains of Real Wages
in Wine Country, Bay Area, and California

<table>
<thead>
<tr>
<th></th>
<th>Wine Country</th>
<th>Bay Area</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-2000</td>
<td>0.6%</td>
<td>1.5%</td>
<td>0.7%</td>
</tr>
<tr>
<td>2000-2002</td>
<td>2.0%</td>
<td>4.3%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Source: Applied Development Economics
Based on Data Collected from DataQuick and California Association of Realtors

**Housing Cost Dynamics**
The Existing Conditions Report documented the increases in housing costs from 1990 to 2000. The basic pattern of housing cost increases contained in that report showed housing cost increases in the Wine Country at a growth rate above both the Bay Area and statewide. However, because the starting point for the Wine Country housing costs were lower than either the Bay Area or the State, the housing costs in the Wine Country area are still slightly less than in the Bay Area.

**Figure I-5**
Housing Values In
Wine Country Counties, Seven-County Bay Area, and California
1990 - 2002

Source: Applied Development Economics
Based on Data Collected from DataQuick and California Association of Realtors
Figure 1.5 presents the housing value changes for the three areas for three time periods. In looking at the 2002 values, a counter-intuitive phenomenon emerges. In the face of massive job losses in the Bay Area, the housing costs continued to increase at an accelerated rate. The increases in housing costs for the Wine Country were minimal for the same time period.

This condition really becomes apparent in Figure 1.6, which compares the housing cost changes for the two time periods. The increase in housing cost during 2000-2002 were almost two-and-a-half times higher for the Bay Area than for the Wine Country area. Of even more concern is that the rate of acceleration in costs for the two-year period 2000-2002 is significantly greater for the Bay Area and statewide than for the Wine Country area.

The volatility of the Wine Country is now of such a nature that in 2004 the average cost of housing has increased by over $100,000 in a single year. The impact of such dramatic shifts in housing costs between counties and regions is a certain amount of panic by home buyers. With ever-shrinking income levels based on the real value of wages, buyers are looking across jurisdictional boundaries and regional boundaries to find affordable housing that meets buyers’ needs.

**Housing Affordability Indicators**

Talking about housing affordability measures can be tricky business, particularly when looking at market segmentation and individual equity positions. The affordability index is based on a formula developed by the IRP consultant team that estimates the minimum cost to qualify for purchase of the average-priced single-family dwelling unit. Using the current standard percent of gross income
to qualify for home purchase, the number of wage earners at average wage levels can also be estimated. Thus an index based on the number of wage earners that would be required to purchase the average-priced dwelling unit can be calculated.

The changes in housing affordability indicators from 1990 to 2002 is presented in Figure 1.7. The trend lines are very similar for the Bay Area and statewide, with housing affordability showing marked improvement. For both the Bay Area and the State the majority of this improvement is due to solid gains in wages earned during this decade. The Wine Country area is a different story. The housing affordability index only improved slightly, moving from 2.87 wage earners to 2.72 wage earners to qualify for the average-priced house.

**Figure I-7**

Indicators of Housing Unaffordability in
Wine Country Counties, Seven-County Bay Area, and California
1990 - 2002

The comparison of indicator change for 2000-2002 is shown in Figure 1.8 for the three areas evaluated. Reflecting the changes in housing prices and the wage increases, the Bay Area and the California affordability indicators were slightly higher, while the Wine Country indicator continued to show improved affordability. At this point it is important to note the relative position of the housing indicator lines. The Wine Country line never drops below 2.25 wage earners to qualify for the average priced house. The Bay area and statewide numbers have dropped below 2.0 wage earners to qualify for an average-priced home.

It is important to note that the distribution of the data around the average values is not reported. The degree that the data is skewed in one direction or another is not known. The data sources do
not provide data distribution information for either housing costs or wage levels, so care must be taken in interpreting the data. The following general points can be interpreted from the housing affordability indicator changes:

- Housing became more affordable throughout California by 2000
  - Real wages increased faster than housing prices
  - National interest rates declined

- Housing remains unaffordable in Wine Country
  - Purchase of average house requires 2.31 employed workers
  - 20% down payment requires more than $60,000 of household capital

- Affordability indicators deteriorated in the Bay Area and California between 2000 and 2002
- Affordability indicators improved slightly in Wine Country between 2000 and 2002
- Data is not available to measure the percent of households capable of purchasing housing, but by all reports from newspaper and general media coverage of jobs-housing issues, housing demand and sales remains high across all housing types and costs.

- Housing indicators will continue to worsen at an accelerated rate in the near term based on 2000–2002 data and general background conditions.

### Figure I-8

**Housing Affordability Indicators in Wine Country Counties, Seven-County Bay Area, and California 2000 - 2002**

[Graph showing data measures # of wage earners required to purchase home with values 2.48, 2.31, 1.86, 1.66, 1.63, 1.58 for Wine Country, Bay Area, and State respectively.]

Source: Applied Development Economic
Note: Data reflects an interest rate decline from 7.6% in 2000 to 6.2% in 2002

### TRENDS by COUNTY

The impact of these short-term trends from the updated existing conditions were examined for each of the four counties comprising the Wine Country area. The sub-areas that make up each county were also evaluated in tracking the trends implicit in the housing affordability indicator values. While these trends should be treated with caution, when viewed against the background of the past decade, they can definitely point to the potential for cross-regional impacts of jobs-housing imbalance.
The geographic boundaries of the sub-areas which comprise the four-county are presented in Figure 1.9 along with the basic roadway system. The housing affordability area indicators for 2000 to 2002 within each of the four counties are presented in Table 1.1 showing the changes in affordability for each county. Again, the index is the number of wage earners at the average wage for the county, to purchase the average priced single family house in each respective county.

**Figure I-9**
While three of the counties showed modest improvements in affordability, Lake County showed deterioration in housing affordability, although when compared with the other three counties, Lake County remains significantly more affordable. As previously discussed, any value above 2.0–2.3 indicates a serious workforce housing problem. The change in housing prices to wages is the imbalance impact that has most affected Lake County.

Housing costs have risen steeply over the two-year period, while wages have remained flat. **Figure 1.10** clearly demonstrates the impact of the changes in wages to housing costs on the affordability indicator for each county. The impact of a 29% increase in housing costs to a 7% gain in wages in Lake County contributed to the almost 5% decrease in housing affordability. When viewing the results of the changes in these numbers, remember that the base from which percentage change is calculated can vary.

**TRENDS by SUB-AREA**

In looking at the changes in affordability indicators in the 21 sub-areas that comprise the four-county Wine Country area, some specific islands of affordability can be identified. **Table 1.1** shows the sub-areas that are affordable under our definition for wages to housing cost qualifications. Basically, all of **Sonoma County** is unaffordable in terms of workforce housing, and all of **Lake County** remains affordable for workforce populations in the four-county region. **Mendocino County** has two sub-areas that are affordable, along the US-101 Corridor, and **Napa County** has one sub-area, composed of South Napa and American Canyon. **Tables 1.2** through **1.5** present the housing indicator changes for the update period of 2000–2002. In reviewing the data for Sonoma County, only the **Cloverdale** sub-area approaches affordability. The **Sonoma Coast** remains the sub-area with the highest housing cost and is the least affordable based on sub-area wages. The numbers for Napa County, as mentioned above, showed the **South Napa–American Canyon** sub-area affordability with a slight decrease, but still remaining the one affordable housing sub-area in the county.
### Table I-1

**Small Islands Of Affordability In Wine Country Region, 2002**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Required to Purchase Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonoma County</td>
<td>None</td>
</tr>
<tr>
<td>Mendocino County</td>
<td></td>
</tr>
<tr>
<td>Ukiah 101 Corridor</td>
<td>2.07</td>
</tr>
<tr>
<td>North Mendocino County</td>
<td>1.13</td>
</tr>
<tr>
<td>Napa County</td>
<td></td>
</tr>
<tr>
<td>South Napa-American Canyon</td>
<td>2.09</td>
</tr>
<tr>
<td>Lake County</td>
<td>1.53</td>
</tr>
</tbody>
</table>

### Table I-2

**Sonoma County Housing Affordability Indicators**

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>Number Wage Earners Needed to Purchase Home</th>
<th>Affordability Improvements 2000 - 02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petaluma</td>
<td>2.67 - 2.62</td>
<td>1.9%</td>
</tr>
<tr>
<td>Valley of the Moon</td>
<td>3.47 - 3.39</td>
<td>2.3%</td>
</tr>
<tr>
<td>Santa Rosa Metro</td>
<td>2.71 - 2.45</td>
<td>9.6%</td>
</tr>
<tr>
<td>Russian River/Guerneville</td>
<td>2.14 - 2.28</td>
<td>-6.5%</td>
</tr>
<tr>
<td>Healdsburg/Alexander Valley</td>
<td>3.23 - 3.04</td>
<td>5.9%</td>
</tr>
<tr>
<td>Cloverdale</td>
<td>2.41 - 2.17</td>
<td>10.0%</td>
</tr>
<tr>
<td>Sonoma Coast</td>
<td>4.32 - 4.60</td>
<td>-6.5%</td>
</tr>
<tr>
<td><strong>Sonoma County</strong></td>
<td>2.88 - 2.65</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

Source: Applied Development Economics

### Table I-3

**Napa County Housing Affordability Indicators**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Needed to Purchase Home</th>
<th>Affordability Improvements 2000 - 02</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Napa - Yountville</td>
<td>2.45 - 2.42</td>
<td>1.2%</td>
</tr>
<tr>
<td>St. Helena</td>
<td>3.42 - 3.35</td>
<td>2.0%</td>
</tr>
<tr>
<td>South Napa - American Canyon</td>
<td>2.00 - 2.09</td>
<td>-4.5%</td>
</tr>
<tr>
<td>Calistoga</td>
<td>2.20 - 2.20</td>
<td>0.0%</td>
</tr>
<tr>
<td>Napa County</td>
<td>2.49 - 2.45</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Source: Applied Development Economics
**Mendocino County** and **Lake County** have sub-area numbers that reflect their distance from the greater Bay Area economic and employment centers. While Mendocino County actually experienced some improvement in the affordability indicators (which has since deteriorated), Lake County saw large decreases in the affordability indicators during the same time period. Two factors to keep in mind are that the housing prices rose sharply in comparison to wages for Lake County, yet the base numbers were so low, that Lake County still remained affordable by the four-county standards. Mendocino County saw some improvements in wages to offset housing costs for 2000-2002, but has again moved into lower affordability as housing costs have subsequently escalated.

**Table I-5**

**Lake County**

**Housing Affordability Indicators**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Needed to Purchase Home</th>
<th>Affordability Improvements 2000-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kelseyville-Middletown</td>
<td>1.58</td>
<td>-15.2%</td>
</tr>
<tr>
<td>Lakeport</td>
<td>1.97</td>
<td>26.9%</td>
</tr>
<tr>
<td>Clearlake-Lowerlake</td>
<td>0.89</td>
<td>-48.3%</td>
</tr>
<tr>
<td>Mendo National Forest-Glenhaven</td>
<td>1.59</td>
<td>-5.0%</td>
</tr>
<tr>
<td>North Lake County</td>
<td>1.29</td>
<td>-17.1%</td>
</tr>
<tr>
<td>Lake County</td>
<td>1.44</td>
<td>-6.3%</td>
</tr>
</tbody>
</table>

Source: Applied Development Economics

The rate and scope of change for housing and employment for the first part of this decade have been quite dramatic—and show little sign of leveling out.
II. PROJECTIONS

METHODOLOGY

This section builds on the 2000-2002 update to the Existing Conditions data analysis of the 1990-2000 period. The changes in economic base, housing costs and general fiscal environment since early 2000 have been nothing short of phenomenal. We have gone through a loss of dot-com and light manufacturing jobs, seen major employers in wood products and extraction industries close plants and leave the region and, while most employment and wages have remained flat, witnessed a growth in housing costs approaching 20 percent a year.

Trying to juggle all of the short-term factors that impact housing affordability, and making a determination as to which factors signal long-term changes is always risky in projecting future circumstances. Never-the-less, we identified what we believe are the key elements of the market forces and developed a method for forecasting these elements. The methodology for preparing the projections is contained in Appendix A.

The projections are based on long-term data from 1970 to 2000 for estimating future housing costs and wages by sub-area and by County. Housing costs were determined using DataQuick breakdowns of U.S. Census data, and wages were projected by sub-area based on data supplied by Woods & Poole Economics, Inc., a nationwide source of salary and wage information.

One of the first steps was to develop a 20-year projection of population and employment. After discussion with the consultant team, it was decided by MCOG management to use the base data from the regional travel forecasts available for each of the counties in the Wine Country project area. This would require converting the data from a Census Tract/Block Group boundary system to a postal “Zip Code” boundary system. This would be a critical link in the projection process between the land use (demographic) projections and the transportation system impact evaluations based on the projections. By maintaining consistency with the basic population and employment projections used by the traffic models, the development of Wine Country future year traffic volume estimates will be consistent with household and employment projections by Zip Code boundaries.

The data from each of the regional forecasts used a 2000 base year and a 2020 horizon year. Forecast data was obtained from the Lake County/City Area Planning Council, the Mendocino Council of Governments (MCOG), and the Metropolitan Transportation Commission (MTC) for Sonoma and Napa Counties. The computer model software used by Mendocino and Lake Counties was the QRS II travel forecasting model, and the MTC software is TP-Plus, a much more sophisticated forecasting package.

The GIS consultant created overlay maps of the Zip Code boundaries and Census Block Group boundaries so that a percentage conversion table from Census Tract/Block Group to Zip Code boundaries could be developed. Essentially, the overlay maps were visually inspected and appropriate percentages assigned. In the case of the MTC data, the overlay maps for Sonoma and Napa Counties were compared with a computer output that estimated percentage share strictly on gross land area percentages. These percentages were adjusted based on visual inspection of boundaries and topographic features. The results of this conversion process is shown in Appendix B.
Geographic Analysis Units

The units employed for the projections are essentially the same as used in the initial Existing Conditions and the Existing Conditions update. The approximately 85 Zip Code geographic units were aggregated to 21 sub-areas which served as basis for reporting existing conditions and developing future year projections. The correspondence table for this aggregation is shown in Appendix C. Again, the primary reasons for using these geographic units were the availability of housing and wage data, and the ability to convert census-based demographics to zip code boundaries. While it would have been preferable to have the data assembled by local jurisdiction boundaries, the need to have a system with data that could capture the market forces that drive jobs-housing imbalances and separation dictated the use of the basic zip code unit. The sub-areas referred to above are shown in Figure II-1 (see also Figure I-9 in previous section) for the entire Wine Country area.

Figure II-1
Projections and Geographic Detail

The projections data is not presented in quite the same level of detail as the Existing Conditions information. There are several basic reasons for this difference in detail. First, the Existing Conditions Report and its update were based on historical data collected from different sources with the ability to be cross checked. The projections are based on trend lines and estimations of cycles in economic activity. Second, the discussion of each sub-area contained in the Existing Conditions Report is not the priority of the projections evaluation and impacts assessment. This report will look at each of the four counties and selected sub-areas that will be involved in cross regional impacts on the circulation system, rather than examine each sub-area in detail.

A third reason is that the level of detail that was provided in the Existing Conditions Report was needed to clearly establish the foundation for defining jobs-housing imbalance and separation in the Wine Country area. The potential impacts of this imbalance on the transportation system connecting the four-county area were also identified in the Existing Conditions Report. This report will build on the foundation of Existing Conditions Report information and focus on sub-areas and imbalance impacts that directly affect interregional boundaries.

EMPLOYMENT AND HOUSING PROJECTIONS

The employment and housing projections were developed using the data sources and methods discussed in the preceding Methodology section. The following assumptions framed the projections process:

**EMPLOYMENT and WAGE PROJECTION ASSUMPTIONS**

- Rely on employment forecasting models prepared by U.S. Bureau of Economic Analysis
- Allocate sub-area employment using Regional Transportation Forecast Data

**HOUSING UNIT and PRICE PROJECTION ASSUMPTIONS**

- Housing demand projections based on California Department of Finance
- Allocate sub-area housing using Regional Transportation Forecast data
- 32 years of housing price data trends
- Assume same mortgage rate and no inflation
The results of the projection process are shown in tabular form in Appendix D. This is a straightforward listing of the values associated with each of variables projected. Again, the variables were Dwelling Units, Employment (jobs), Wages (average) and Housing Cost (average). These variables define the market forces that drive the jobs-housing imbalance phenomenon. What triggers these market forces is a very simple, yet overwhelmingly powerful desire of those individuals and families that act in this market place. The desire to own their home, to be in charge of their living environment at the most intimate level, to have complete authority over the physical building where they sleep at night, where they cook and bathe, and where they raise their children. To ignore or discount this desire has led to many poor planning and land use decisions.

Projections were also prepared for the seven-county Bay Area and for California from existing completed forecast data from ABAG, the California Department of Finance, and the U. S. Bureau of Economic Analysis. By evaluating these projections, the projections prepared for the Wine County can be put into perspective. Figure II-2 compares the projected growth in employment based on current and anticipated trends. The Wine Country is expected to increase employment by 33% over the next twenty years, exceeding both statewide and Bay Area rates of growth.

**Figure II-2**

*Percent Change In Projected Employment, 2002 – 2025*
*Wine Country Counties, Seven-County Bay Area, and California*

![Graph showing employment growth](chart.png)

Source: Applied Development Economics
Based on Data Collected from California Employment Development Department

Table II-1 compares the changes in actual employment 1990-2002 with the projected change through 2020. The expected growth in employment reflects internal growth and in-migration
from outside the United States. The total amount of employment in the Wine Country area is not large when compared with the Bay Area or the State. The crucial issue will be the employment mix and occupations associated with the growth.

Table II-1

Job Growth Comparisons
Wine Country Counties,
Seven-County Bay Area, and California

<table>
<thead>
<tr>
<th></th>
<th>1990 – 2002</th>
<th>2002 - 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine Country</td>
<td>67,000</td>
<td>85,000</td>
</tr>
<tr>
<td>Bay Area</td>
<td>347,000</td>
<td>583,000</td>
</tr>
<tr>
<td>California</td>
<td>1.27 million</td>
<td>3.14 million</td>
</tr>
</tbody>
</table>

One of the traditional measures of jobs-housing balance has been to compare aggregate job growth and housing unit growth, and to calculate the ratio of jobs to housing. The Statewide IRP program is still using this ratio as an indicator of community health. However, we did not find this indicator useful, as we have discovered in our data compilation that this does not accurately reflect workforce housing needs. It compares total employment to total housing, assuming there is sufficient workforce housing in that total, which is not the case in the Wine Country. To be compatible with other IRP efforts, though, we will look at this measure.

Table II-2.1

Projected Expansion of Housing and Jobs
in Wine Country Counties,
Seven-County Bay Area, and California
1990 – 2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine Country</td>
<td>268,000</td>
<td>194,000</td>
<td>.72</td>
</tr>
<tr>
<td>Bay Area</td>
<td>2.2 million</td>
<td>2.3 million</td>
<td>1.08</td>
</tr>
<tr>
<td>California</td>
<td>11.2 million</td>
<td>10.7 million</td>
<td>.96</td>
</tr>
</tbody>
</table>

Table II-2.1 is the first in a series of tables that show projected growth in jobs and housing over the next twenty years. As a basis for comparison in evaluating these changes, Table II-2.1 provides the jobs and housing for 1990 jobs to housing ratio. For 1990, this ratio was a reasonable measure of jobs-housing balance, because the market-priced housing units being constructed still provided a range of housing size and costs for potential buyers.
The gains of jobs over housing during 1990-2002 is shown in Table II-2.2 with the resultant jobs-to-housing ratio. The gains in the Bay Area and the Wine Country along with the change in new housing construction have created a seriously unbalanced jobs-to-housing situation. This situation is not sustainable and a slowdown in job growth can be expected.

Table II-2.2
Projected Expansion of Housing and Jobs in Wine Country Counties, Seven-County Bay Area, and California 1990 – 2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine Country</td>
<td>.72</td>
<td>28,000</td>
<td>1.71</td>
</tr>
<tr>
<td>Bay Area</td>
<td>1.08</td>
<td>150,000</td>
<td>1.76</td>
</tr>
<tr>
<td>California</td>
<td>.96</td>
<td>3,600</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table II-2.3 shows the projected changes in numbers of jobs greater than housing units produced during each time period; and the resultant jobs-to-housing unit ratio. 1990-2002 shows significantly greater growth in jobs than housing with resultant imbalances in the jobs-to-housing ratios for both the Bay Area and the Wine Country. The projections for 2002-2020 indicates a slowing in job growth and a fairly flat increase in housing, but sufficient to bring the jobs-to-housing ratio closer to 1.00. The State is projected to maintain a comfortable balance between jobs and housing at the aggregate level. However, regions of the State vary significantly in the mix and availability of housing.

Table II-2.3
Projected Expansion of Housing and Jobs in Wine Country Counties, Seven-County Bay Area, and California 1990 – 2020

<table>
<thead>
<tr>
<th></th>
<th>Jobs-Housing Balance 1990</th>
<th>Gain of Jobs Over Housing Units 1990 - 2002</th>
<th>Projected Gain of Jobs over Housing Units, 2002-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine Country</td>
<td>.72</td>
<td>28,000</td>
<td>1.71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10,400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.14</td>
</tr>
<tr>
<td>Bay Area</td>
<td>1.08</td>
<td>150,000</td>
<td>1.76</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>87,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.18</td>
</tr>
<tr>
<td>California</td>
<td>.96</td>
<td>3,600</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10,800</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>
In reviewing the projections data to this point, a significant piece of the market force variables has not been addressed: wages and housing costs. The following graphics point out the large discrepancy between average wages and average housing costs projected for the future. The past several years have seen phenomenal increases in Wine Country housing prices, moving from approximately 80% of Bay Area housing prices to almost equivalent housing prices.

**Figure II-3** shows the comparative housing cost increases and projected 2020 housing prices for the Wine Country, Bay Area, and statewide. Clearly the costs of housing in the Wine Country are going to be among the highest in the State. The impact of this fact is dramatically demonstrated in **Figure II-4**, which compares increases in wages and housing costs for 2002-2020.

![Figure II-3](image)

The wage gains projected for the Bay Area are significantly higher than either the State or the Wine Country. However the projected raise in housing costs when compared to the minimum increase in wages illustrates the potential for workforce housing shifts and crippling jobs-housing imbalances for the Wine Country. Again, the purpose of projecting these variables into the future is to capture the impact of the market forces that these variables represent on creating the long-distance work-trip commutes between sub-areas of the Wine Country area.
The graph in Figure II-5 clearly demonstrates the dilemma of workers and employers in the Wine Country. While increases in unaffordability indicators are flat for the State and the Bay Area, the index (number of wage earners required to purchase a home) for the Wine Country moves from 2.7 to 4.1 in the time period of 2002 to 2020. The need for workforce housing is, and will be, the most pressing issue for the Wine Country area. Keep in mind that 2.7 is already significantly above the 2.0 wage earners that is the threshold for unaffordability.
The final piece of the picture is a review of new dwelling unit construction during the past five years. This period most probably points to the housing construction trends likely to be in place for the remainder of this decade. While there is no accurate set of data available to provide a thorough evaluation of housing construction, total demand, and total supply; it is possible to construct a plausible diagram of the housing supply and demand relationships. The relationships depicted in Figure II-6 are based on newspaper articles, housing studies conducted by the Bay Area Council, by the New Economy, Working Solutions (NEWS), and by the Service Employees International Union, Local 707.

Figure II-6

Housing Demand / Supply Chart

The bottom line is that the production of moderately priced workforce housing by the private sector “market-priced” home builders has become virtually nonexistent. Contributing factors are many and embedded in the accumulation of public and private sector policy decisions. What is true about the relationships charted is the hole in the supply of moderately priced “starter” or workforce housing for both the Bay Area and the Wine Country. Until building workforce housing becomes a priority on a level with other public need priorities, the conditions creating jobs-housing imbalance and separation will significantly worsen.
The preliminary conclusions from the above evaluation can be stated as follows:

- **Wine Country region housing rich in 1990 and will remain housing rich in 2020**
- **No housing shortage – Developers taking care of market rate demand**
- **Enormous shortage of workforce housing**

### HOUSING AFFORDABILITY by COUNTY

The data that forms the basis for the evaluation of affordability is presented in **Table II-3**, summarizing the Jobs, Wages, Housing and Home Prices by forecast year for each county. The key to evaluating this table is the percent change column at the end of each row of projections. The change in wages is dwarfed by the increases in home prices. The changes in percentage versus actual numerical values should be kept in mind, as Lake County shows the largest growth in jobs, but is growing from the smallest base, with far smaller existing employment than the other three counties.

**Table II-3**

#### JOBS

<table>
<thead>
<tr>
<th>County</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>Change from 2000 - 2020</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake</td>
<td>13,503</td>
<td>17,551</td>
<td>22,985</td>
<td>9,482</td>
<td>70%</td>
</tr>
<tr>
<td>Napa</td>
<td>52,646</td>
<td>60,649</td>
<td>67,827</td>
<td>15,181</td>
<td>29%</td>
</tr>
<tr>
<td>Mendocino</td>
<td>28,083</td>
<td>33,897</td>
<td>41,031</td>
<td>12,948</td>
<td>46%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>159,900</td>
<td>182,431</td>
<td>213,686</td>
<td>53,786</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>254,132</strong></td>
<td><strong>294,528</strong></td>
<td><strong>345,528</strong></td>
<td><strong>91,397</strong></td>
<td><strong>36%</strong></td>
</tr>
</tbody>
</table>

#### WAGES

<table>
<thead>
<tr>
<th>County</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>Change from 2000 - 2020</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake</td>
<td>$26,567</td>
<td>$28,403</td>
<td>$31,284</td>
<td>$4,717</td>
<td>18%</td>
</tr>
<tr>
<td>Napa</td>
<td>$36,847</td>
<td>$39,211</td>
<td>$43,469</td>
<td>$6,622</td>
<td>18%</td>
</tr>
<tr>
<td>Mendocino</td>
<td>$23,361</td>
<td>$26,793</td>
<td>$29,429</td>
<td>$6,068</td>
<td>26%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>$33,988</td>
<td>$38,064</td>
<td>$41,642</td>
<td>$7,654</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$30,278</strong></td>
<td><strong>$33,233</strong></td>
<td><strong>$36,463</strong></td>
<td><strong>$6,185</strong></td>
<td><strong>20%</strong></td>
</tr>
</tbody>
</table>
HOUSING

<table>
<thead>
<tr>
<th>County</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>Change from 2000 - 2020</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake</td>
<td>32,528</td>
<td>38,845</td>
<td>48,183</td>
<td>15,655</td>
<td>48%</td>
</tr>
<tr>
<td>Napa</td>
<td>48,554</td>
<td>53,611</td>
<td>59,050</td>
<td>10,496</td>
<td>22%</td>
</tr>
<tr>
<td>Mendocino</td>
<td>36,937</td>
<td>44,380</td>
<td>55,632</td>
<td>18,695</td>
<td>51%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>183,153</td>
<td>200,201</td>
<td>218,577</td>
<td>35,424</td>
<td>19%</td>
</tr>
<tr>
<td>Total</td>
<td>301,172</td>
<td>337,037</td>
<td>381,442</td>
<td>80,270</td>
<td>27%</td>
</tr>
</tbody>
</table>

HOME PRICES

<table>
<thead>
<tr>
<th>County</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>Change from 2000 - 2020</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake</td>
<td>$128,556</td>
<td>$181,340</td>
<td>$228,630</td>
<td>$100,074</td>
<td>78%</td>
</tr>
<tr>
<td>Napa</td>
<td>$323,161</td>
<td>$516,826</td>
<td>$764,487</td>
<td>$441,325</td>
<td>137%</td>
</tr>
<tr>
<td>Mendocino</td>
<td>$211,062</td>
<td>$314,062</td>
<td>$446,569</td>
<td>$235,507</td>
<td>112%</td>
</tr>
<tr>
<td>Sonoma</td>
<td>$344,663</td>
<td>$505,717</td>
<td>$720,094</td>
<td>$375,431</td>
<td>109%</td>
</tr>
<tr>
<td>Total</td>
<td>$267,111</td>
<td>$409,889</td>
<td>$583,331</td>
<td>$316,220</td>
<td>118%</td>
</tr>
</tbody>
</table>

The evaluation of housing affordability is based on the estimated number of wage earners, at the average wage for an area, that it would take to qualify for purchase of the average priced dwelling unit in a given area. The index number created can be treated as either an unaffordability index or a measure of affordability. The index changes for each county is shown in Table II-4. The change in affordability is the greatest in Napa County and smallest in Lake County. Indeed, Lake County is the only county to remain affordable based on a threshold of two wage earners to qualify for the average home in the county. In comparing the 2002 base year to the 2020 forecast year, with the continued lack of workforce housing, pressure for economic development will significantly impact the quality of life in the Wine Country area.

Table II-4

Indicators of Housing Unaffordability
Wine Country Region, 2002-2020

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Required to Purchase Home</th>
<th>Affordability Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonoma County</td>
<td>2.81</td>
<td>4.48</td>
</tr>
<tr>
<td>Mendocino County</td>
<td>2.47</td>
<td>3.93</td>
</tr>
<tr>
<td>Napa County</td>
<td>2.74</td>
<td>4.55</td>
</tr>
<tr>
<td>Lake County</td>
<td>1.50</td>
<td>1.89</td>
</tr>
<tr>
<td>Wine Country Regional Total</td>
<td>2.72</td>
<td>4.14</td>
</tr>
</tbody>
</table>
Sonoma County

The affordability evaluation for Sonoma County in Table II-5 presents indicators for each of the Zip Codes that compose the county.

Table II-5

Indicators of Housing Unaffordability
Sonoma County, 2002-2020

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Required to Purchase Home</th>
<th>Affordability Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2000</td>
<td>2020</td>
</tr>
<tr>
<td>Petaluma</td>
<td>2.70</td>
<td>4.62</td>
</tr>
<tr>
<td>Valley of the Moon</td>
<td>3.54</td>
<td>5.75</td>
</tr>
<tr>
<td>Santa Rosa Metro</td>
<td>2.66</td>
<td>4.06</td>
</tr>
<tr>
<td>Russian River/Guerneville</td>
<td>3.04</td>
<td>5.25</td>
</tr>
<tr>
<td>Healdsburg/Alexander Valley</td>
<td>3.26</td>
<td>5.64</td>
</tr>
<tr>
<td>Cloverdale</td>
<td>2.39</td>
<td>3.92</td>
</tr>
<tr>
<td>Sonoma Coast</td>
<td>4.20</td>
<td>6.88</td>
</tr>
<tr>
<td><strong>Sonoma County</strong></td>
<td><strong>2.81</strong></td>
<td><strong>4.48</strong></td>
</tr>
</tbody>
</table>

The most important thing about this table is that both Petaluma and Santa Rosa sub-areas are by far the largest job growth areas of the county. Appendix E contains all of the relevant projection data for Sonoma County sub-areas and reflects the data summarized in Table II-3 discussed at the beginning of this section. Figure II-7 presents a graphic of the county and the sub-area boundaries, along with embedded tables that show the projected variables for each sub-area.

In summary, none of the sub-areas are close to affordable, and the Sonoma Coast rates at the top of unaffordability indicators. Given the market and policy dynamics which govern residential development along the coast, the entire coast from the Mendocino-Humboldt County line south to San Francisco will rank at the highest levels of unaffordability.
Figure II-7

Wages Earned Compared to Housing Prices in Sonoma County Subareas, 2000 and 2020

Data Compiled by Applied Development Economics based on U.S. Census, U.S. Bureau of Economic Analysis, MPO Planning Data, and DataUSA, Inc.

Legend
- State Highway
- U.S. Highway
- Waterbody
- County

Created by VESTRA Resources, Inc. June 21, 2004
Mendocino County

The evaluation of affordability indicators for Mendocino County is presented in Table II-6, and the detailed data that support the indicators are contained in Appendix F. Mendocino County shows modest growth in wages, yet shows substantial increases in both jobs and housing during 2002-2020. It is in home prices that Mendocino County shows more than a doubling of cost during the same period, according to Table II-3, as previously noted.

Table II-6

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Needed to Purchase Home</th>
<th>Affordability Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
<td>2020</td>
</tr>
<tr>
<td>North Mendocino Coast</td>
<td>3.26</td>
<td>5.51</td>
</tr>
<tr>
<td>South Mendocino Coast</td>
<td>3.06</td>
<td>5.03</td>
</tr>
<tr>
<td>Anderson Valley</td>
<td>2.81</td>
<td>7.56</td>
</tr>
<tr>
<td>North Mendocino County</td>
<td>1.48</td>
<td>2.36</td>
</tr>
<tr>
<td>Russian River Valley</td>
<td>2.51</td>
<td>3.58</td>
</tr>
<tr>
<td>Mendocino County</td>
<td>2.47</td>
<td>3.93</td>
</tr>
</tbody>
</table>

While both the North and South Coast are high on the list of unaffordable sub-areas, the Anderson Valley sub-area has a very high unaffordability indicator value at 7.56. The radical increase in home value coupled with modest increases in wages is what has created this high indicator. Issues of water availability for residential growth and the rapid development of viticulture point to this sub-area as a problem area for workforce housing.

Figure II-8 presents the sub-areas in Mendocino County and embedded tables containing the projected variables from which the unaffordability indicators are calculated. The embedded tables have an interesting measure at the end of each sub-area row of data, called “percent of wage-to-home price” which indicates the value of the wages compared to the home value. As an example of evaluation, Anderson Valley changes from a value of 10% to a value of 3% for 2000-2020. As a general rule this measure is reduced by about one-half for each sub-area.
Napa County

Napa County unaffordability indicators are presented in Table II-7 by sub-areas within the County. The county is divided into four major sub-areas that mask, to some degree, the real nature of the wage-to-housing cost disparity that is projected. In Appendix G, data by Zip Code is tabulated and helps in understanding the projection implications for the county.

There is another factor in the evaluation of housing that must be considered, and that is the agreement reach by Napa County League of Governments (NCLOG) that allows the County and City of Napa to meet a portion of their housing requirements by housing constructed in the City of American Canyon. This shift of housing demand is not reflected in the projections, as this arrangement is not yet approved by the State of California.

**Table II-7**

**Indicators of Housing Affordability**

**Napa County, 2002-2020**

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Required to Purchase Home</th>
<th>2002</th>
<th>2020</th>
<th>Affordability Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yountville – East Napa</td>
<td></td>
<td>2.68</td>
<td>4.26</td>
<td>-59%</td>
</tr>
<tr>
<td>St. Helena</td>
<td></td>
<td>4.24</td>
<td>9.39</td>
<td>-122%</td>
</tr>
<tr>
<td>Napa - American Canyon</td>
<td></td>
<td>2.42</td>
<td>3.77</td>
<td>-56%</td>
</tr>
<tr>
<td>Calistoga</td>
<td></td>
<td>2.76</td>
<td>4.67</td>
<td>-69%</td>
</tr>
<tr>
<td><strong>Napa County</strong></td>
<td></td>
<td><strong>2.74</strong></td>
<td><strong>4.55</strong></td>
<td><strong>-66%</strong></td>
</tr>
</tbody>
</table>

Again, in reviewing Table II-3 at the beginning of this section, Napa County shows modest gains in wages and phenomenal increases in housing costs. Wages will go up by a modest 18% and housing goes up by 137%. In reviewing the sub-areas listed in the following table, the remarkable difference between the Saint Helena and Napa-American Canyon sub-areas highlights the reason for the NCLOG housing agreement.

The sub-areas within Napa County are shown in Figure II-9 along with embedded tables that contain the variables from which the affordability indicators are calculated. As with the other sub-areas, the “percent wages-to-home price” indicator value was cut approximately in half for 2000-2020. While the wages in Napa County are higher than the other counties, the increases in wages do not come close to matching the increases in home prices, thus the issues of affordable housing will be significant for Napa County.
Lake County

Lake County sub-areas continue to be the most affordable, both in absolute terms and in relative terms for the Wine Country. The reason for this becomes apparent when the access system, as discussed in the Existing Conditions Report, is reviewed. Lake County has no travel route that makes the County accessible from any direction and by any mode. The sub-areas that comprise Lake County and their affordability indicators are presented in Table II-8 for 2002-2020.

Table II-8
Indicators of Housing Affordability
Lake County, 2002-2020

<table>
<thead>
<tr>
<th>Location</th>
<th>Number Wage Earners Needed to Purchase Home</th>
<th>Affordability Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
<td>2020</td>
</tr>
<tr>
<td>Kelseyville-Middletown</td>
<td>1.97</td>
<td>2.76</td>
</tr>
<tr>
<td>Lakeport</td>
<td>1.58</td>
<td>2.02</td>
</tr>
<tr>
<td>Clearlake-Lowerlake</td>
<td>1.15</td>
<td>1.31</td>
</tr>
<tr>
<td>Mendo National Forest-Glenhaven</td>
<td>1.86</td>
<td>2.13</td>
</tr>
<tr>
<td>North Lake County</td>
<td>1.48</td>
<td>1.63</td>
</tr>
<tr>
<td>Lake County</td>
<td>1.50</td>
<td>1.89</td>
</tr>
</tbody>
</table>

What is striking about the Lake County indicator numbers in comparison to the other counties in the Wine Country is that in the 2020 forecast year the affordability is significantly better for the entire county; and still at or below the 2.0 threshold for three of the sub-areas. If access were not a major impediment to residential development, Lake County would be a major recipient of workforce housing demand from the other three counties. When the information contained in Table II-3 is reviewed, the increase in wages is the same as Napa County (18%) but the increase in housing price is almost half of Napa County at 78% compared to 137% increase between 2000 and 2020.

The sub-areas in Lake County are shown in Figure II-10 with the projected variables for each sub-area in the embedded tables. A quick inspection of this data reveals that changes in both the “jobs-to-housing” and “percent of wage-to-home price” between 2000 and 2020 are modest in both absolute and relative terms. And while starting wages are low and increases modest, the relatively low increase in home price has helped to keep Lake County the most affordable area in the Wine Country.

The support data for Lake County sub-areas and Zip Code boundaries are contained in Appendix H. This data provides more detail on the changes that the projections show for each of the sub-areas.
SUMMARY

When all of the above data are taken in context, what should appear is a picture of where the market forces (described by the projected variables) will impact jobs-housing imbalance symptoms. The most prevalent symptom is the impact on the roadway system connecting sub-areas of high housing unaffordability with sub-areas where housing is significantly more affordable. Indeed, for the majority of the other IRPs statewide, the issues that triggered interest in pursuing an IRP work program were roadway congestion and safety issues:

- For the ABAG-San Joaquin-Stanislaus County COG IRP it was traffic congestion over the Altamonte Pass (I-580);
- For the ABAG-AMBAG IRP it was traffic congestion and safety on SR-17 between Monterey and San Jose;
- For the Santa Barbara-Ventura County IRP it was traffic congestion on US-101 between the City of Santa Barbara and north Ventura County;
- For the SANDAG-WRCOG it was traffic congestion and safety on I-5 between Rancho California/Temecula and San Diego County.

As we have said in the introduction to this report, we believe there is clear evidence that similar access issues will create a crisis in the Wine Country. It simply has not yet reached crisis proportions. Would it not be unique and unprecedented to address this issue before crisis management is necessary? Our understanding was that good planning for crisis prevention was the goal of the legislation that funded the IRPs.

The next section of this report will identify the dimensions of the roadway impacts associated with the jobs-housing imbalance potential discussed here.
III. JOBS-HOUSING IMBALANCE IMPACTS:
LONG-DISTANCE WORK-TRIP COMMUTING

TRANSPORTATION SYSTEM BACKGROUND

The transportation system that serves the four-county Wine Country area is predominantly a roadway access system. There is a very minor proportion of person trips that use aviation via local airports, however no scheduled air service is currently available. Air freight and package service is a growing segment of the urban goods movement capacity, but is at present a very minor part of the capacity. The roadway system carries the bulk of passengers and freight travel demand that connects the Wine Country internally and externally. The passenger modes include the private automobile, busses (private and public) and taxi cabs. Freight is carried by trucks of all sizes and specialization. Railroad tracks are available through Mendocino, Sonoma and Napa Counties, however no rail service is available. Planning efforts are ongoing in each of these counties for some type of rail service.

The Existing Conditions Report contained an extensive examination of the transportation system and its characteristics. It would be inappropriate to review all of this information in depth here, as nothing has substantially changed since that analysis. However, a quick overview of the status of the transportation system would be helpful for the first-time reader who has not yet read the Existing Conditions Report.

The roadway system can be seen in Figure III-1, which contains the State Highway system and Primary County Roadway system that serve the Wine Country area. The examination of this roadway system focuses on the roadway segments that cross county (and regional) boundaries. What should be apparent is that the roadway connecting the four counties is relatively sparse with few alternative routes available. Route US-101 serves as the primary north-south access route to areas outside the Wine Country area. The status of existing and future traffic demand is shown in Table III-1 with key roadway segments highlighted for ease of review. The change projected between 2000 and 2020 is

Figure III-1
Communities and Study Roadway Segments
highlighted in the last column and indicates the traffic increases without taking into consideration the jobs-housing imbalance impacts across county lines.

**Table III-1**

**Existing Traffic Demand on Roadway System**

<table>
<thead>
<tr>
<th>Hwy</th>
<th>County</th>
<th>Description</th>
<th>1990</th>
<th>2000</th>
<th>%Change</th>
<th>2020</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mendocino</td>
<td>Jct. Rte. 128 East</td>
<td>3,300</td>
<td>4,500</td>
<td>27%</td>
<td>6,840</td>
<td>52%</td>
</tr>
<tr>
<td>1</td>
<td>Mendocino</td>
<td>Point Arena, Lake Street</td>
<td>4,300</td>
<td>4,400</td>
<td>2%</td>
<td>7,080</td>
<td>61%</td>
</tr>
<tr>
<td>1</td>
<td>Sonoma</td>
<td>Jct. Rte. 116 East</td>
<td>5,500</td>
<td>5,300</td>
<td>-4%</td>
<td>6,360</td>
<td>20%</td>
</tr>
<tr>
<td>128</td>
<td>Mendocino</td>
<td>West Limits Philo</td>
<td>7,550</td>
<td>7,500</td>
<td>-1%</td>
<td>8,775</td>
<td>17%</td>
</tr>
<tr>
<td>128</td>
<td>Mendocino</td>
<td>Mendocino-Sonoma County Line</td>
<td>4,650</td>
<td>4,300</td>
<td>-8%</td>
<td>4,620</td>
<td>7%</td>
</tr>
<tr>
<td>128</td>
<td>Sonoma</td>
<td>South Jct. Rte. 101, Canyon Rd Interchange</td>
<td>5,200</td>
<td>4,750</td>
<td>-9%</td>
<td>7,410</td>
<td>56%</td>
</tr>
<tr>
<td>128</td>
<td>Sonoma</td>
<td>Kellogg, Franz Valley Road</td>
<td>3,350</td>
<td>4,500</td>
<td>26%</td>
<td>9,270</td>
<td>106%</td>
</tr>
<tr>
<td>128</td>
<td>Napa</td>
<td>Tubbs Lane</td>
<td>11,800</td>
<td>10,950</td>
<td>-8%</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>128</td>
<td>Napa</td>
<td>Lover Chiles Valley Road</td>
<td>1,700</td>
<td>2,420</td>
<td>30%</td>
<td>3,895</td>
<td>61%</td>
</tr>
<tr>
<td>101</td>
<td>Mendocino</td>
<td>Moore Avenue Exchange</td>
<td>38,400</td>
<td>49,600</td>
<td>23%</td>
<td>62,100</td>
<td>25%</td>
</tr>
<tr>
<td>101</td>
<td>Mendocino</td>
<td>Mendocino-Sonoma County Line</td>
<td>20,800</td>
<td>25,200</td>
<td>17%</td>
<td>35,280</td>
<td>40%</td>
</tr>
<tr>
<td>101</td>
<td>Sonoma</td>
<td>Lytton Springs Road Interchange</td>
<td>40,800</td>
<td>48,300</td>
<td>16%</td>
<td>75,500</td>
<td>56%</td>
</tr>
<tr>
<td>101</td>
<td>Sonoma</td>
<td>Shiloh Road Interchange</td>
<td>84,000</td>
<td>118,000</td>
<td>29%</td>
<td>136,700</td>
<td>16%</td>
</tr>
<tr>
<td>20</td>
<td>Mendocino</td>
<td>Redwood Valley Road Exchange</td>
<td>16,600</td>
<td>20,400</td>
<td>19%</td>
<td>43,200</td>
<td>112%</td>
</tr>
<tr>
<td>20</td>
<td>Lake</td>
<td>Scott Valley Road</td>
<td>11,400</td>
<td>14,400</td>
<td>21%</td>
<td>32,400</td>
<td>125%</td>
</tr>
<tr>
<td>175</td>
<td>Mendocino</td>
<td>East Side Road</td>
<td>5,000</td>
<td>5,300</td>
<td>6%</td>
<td>12,160</td>
<td>129%</td>
</tr>
<tr>
<td>175</td>
<td>Lake</td>
<td>Jct. Rte. 29 South, Kelseyville</td>
<td>2,840</td>
<td>2,470</td>
<td>-15%</td>
<td>6,500</td>
<td>163%</td>
</tr>
<tr>
<td>29</td>
<td>Lake</td>
<td>Jct. Rte. 53 North, Lower Lake</td>
<td>11,700</td>
<td>19,100</td>
<td>39%</td>
<td>27,580</td>
<td>44%</td>
</tr>
<tr>
<td>29</td>
<td>Lake</td>
<td>Napa-Lake County Line</td>
<td>8,000</td>
<td>14,200</td>
<td>44%</td>
<td>21,300</td>
<td>50%</td>
</tr>
<tr>
<td>29</td>
<td>Napa</td>
<td>Jct. Rte. 128 East, Rutherford</td>
<td>32,500</td>
<td>42,200</td>
<td>23%</td>
<td>50,640</td>
<td>20%</td>
</tr>
<tr>
<td>29</td>
<td>Napa</td>
<td>Trancas-Redwood Road</td>
<td>51,600</td>
<td>80,000</td>
<td>36%</td>
<td>170,400</td>
<td>113%</td>
</tr>
<tr>
<td>12</td>
<td>Napa</td>
<td>Jct. Rte. 29 South, Napa</td>
<td>31,000</td>
<td>53,000</td>
<td>42%</td>
<td>82,000</td>
<td>55%</td>
</tr>
<tr>
<td>12</td>
<td>Sonoma</td>
<td>Napa-Sonoma County Line</td>
<td>NA</td>
<td>28,000</td>
<td>NA</td>
<td>57,100</td>
<td>104%</td>
</tr>
<tr>
<td></td>
<td>Calistoga Rd.</td>
<td>Sonoma</td>
<td>NA</td>
<td>14,785</td>
<td>NA</td>
<td>22,030</td>
<td>49%</td>
</tr>
<tr>
<td></td>
<td>Petrified Forest Rd.</td>
<td>Sonoma</td>
<td>NA</td>
<td>10,890</td>
<td>NA</td>
<td>13,395</td>
<td>23%</td>
</tr>
</tbody>
</table>

The changes range from a 79% increase on SR-128 at the Mendocino-Sonoma County line to a 125% increase on SR-20 at the Lake-Mendocino County line for the 2020 horizon year. However, before evaluation of the 2020 projections, we should review the highlights from the 1990 to 2000 time period for traffic demand increases on the circulation system serving the Wine Country area. The Annual Daily Traffic increases are highlights from 1990-2000:
44% increase on Highway 29 in Napa County at the Napa-Lake County line;
42% increase on Highway 12 in Napa County at Jct. Rte 29 South;
39% increase on Highway 29 in Lake County at Jct. Rte 53 North; and
36% increase on Highway 29 in Napa County at Trancas-Redwood Rd.

The traffic flow numbers reflect the tremendous growth in both employment and population during the decade from 1990 to 2000, particularly in the latter half of the ten-year period. Again, what is phenomenal in the changes from 2000 to 2002 is that in the face of very large losses of manufacturing, dot-com/Internet and computer programming jobs in the Bay Area, and in Sonoma County, the housing prices and job growth continued to increase in the Wine Country.

**AVERAGE DAILY TRIPS (ADT) PROJECTIONS METHODOLOGY**

A brief word about the 2020 projections methodology: what was planned did not take place. As often happens with approaches that rely on assumptions, no matter how reasonable, the approach turns out to be impracticable for implementation. What was intended was the use of the existing 2020 projections from the three regional agencies that provided transportation planning and programming for their respective regions. Unfortunately, the MTC model network coverage did not overlap the MCOG model network adequately, in fact it not meet the edges of the study area, leaving a gap of approximately 15 miles. The network and zone sizes along the northern edge of the MTC network when compared with the southern edges of the MCOG and Lake County APC model edges revealed large zone sizes and sparse networks, neither of which reflects the activity systems on the ground. Both hard copy plots and computer-generated network traffic assignments were inspected and compared, and the result was that it was clear that the merging of the assignments would not be possible.

Fortunately, the results of the assignments from the statewide traffic assignment model became available while we were evaluating the regional model assignment results. Plots of the Wine Country four-county area for the 2000 base year and the 2025 horizon year were prepared from data provided by Caltrans Headquarters, Travel Forecasting Section. The results of these plots did not provide directly usable traffic assignment volumes. The volume values were universally low and in many cases assignment volumes for the 2025 forecast year were below the Existing Conditions ground counts. In discussions with Caltrans staff, it was suggested that the relationship between the 2000 base year assignment and the 2025 horizon year assignment was a good measure of the traffic growth on any given link (roadway segment) in the Wine Country roadway system. The statewide roadway system, as described by the coded network, compared very favorably with the roadway system on the ground. That is, both major highway routes and county arterials and connector roads were accurately represented.

The following estimation procedure was used as the projection methodology:

1. Expansion Factors were calculated using values from the statewide model traffic assignments for key roadway segments to be evaluated:
Factors calculated for each individual segment
Factors calculated for links connecting to selected roadway segment
Based on assignment paths available, a composite segment factor is selected.

2. The Expansion Factor is applied to the 2000 base year ground count volume.

3. The calculated future year volume is compared to the appropriate regional assignment volume (if available from network plots).

4. If the Expansion Factor volume is higher than the assignment volume it is used; if the assignment volume is higher than the Expansion Factor volume, it will be used if within 10% of calculated volume.

5. Where a question as to applicable fit to the path or corridor of which the segment is a part, growth rates of population and employment in traffic zones adjacent to the corridor or path will be checked.

6. A segment volume could be adjusted to be consistent with corridor or pathway growth.

The documentation for the implementation of this methodology is available upon request from MCOG offices. The documentation consists of network plots, hand notes and hand written calculations. All of these documents will be kept in the project archives. The traffic volumes from this process serve as the base for projecting 2020 traffic plus workforce shift commute traffic.

2020 ADT PROJECTION RESULTS

The data in Table III-1 can now be looked at with an appreciation of how the numbers came into existence, and the connection to the employment and housing projections addressed in the imbalance evaluation section. The numerical and percentage changes for 1990-2000 compared with 2000-2020 have the difference of addressing change over ten years and over twenty years as a major distinguishing factor. To this is added the differing growth levels embedded in the socio-economic input data to the three regional traffic forecast models. The changes in traffic volumes will therefore not necessarily be an extension of the historical growth rate of the previous decade. The relationships between growth and traffic volumes should make sense, once the character of the roadway and area served is known. Lets look at some examples:

- SR-128 at the Mendocino-Sonoma County line showed a decline of 8% in 2000, and 2020 projects a modest 7% increase in ADT. This reflects the physical constraints associated with the roadway and the growth anticipated in the Anderson Valley sub-area. The traffic volumes are relatively small growing from 4,300 ADT in 2000 to 4,620 ADT in 2020.

- SR-128 at the Napa-Sonoma County line, however, shows significant growth from 4,500 ADT (17% increase in 2000) to 9,270 ADT (125% increase in 2020). This reflects the increases in employment and population in both counties, as well as being a pathway used to access Lake County.
- SR-29 at the Napa-Lake County line will show an increase of 50% in 2020, at 21,300 ADT, compared to 14,400 ADT in 2000, a 44% increase over 1990. This reflects the already documented affordability of housing in Lake County when compared with Napa and Sonoma County. This will continue to put pressure on this access link, particularly when the wage gap between Lake County and the other three counties in the Wine Country area is considered.

- Petrified Forest Road at the Napa-Sonoma County line shows an increase of 24% from a 2000 base of 10,800 to 13,395 ADT in 2020. Again, this increase reflects the growth of employment in Sonoma County and Napa County and housing located in Lake County.

The information in Table III-1 should be reviewed in light of the background data contained both in the Projections chapter and in the transportation data from the Existing Conditions Report. The examples given are some highlights extracted from that table. Once the workforce housing shift commutes have been estimated, they will be added to the 2020 projected volumes.

**WORK TRIP COMMUTE BASE DATA**

Before evaluating the impact of jobs-housing imbalance, in terms of workforce housing shifts, it would be helpful to review the 1990-2000 changes in county-to-county daily work trip interchanges. The basic data for this examination came from the 2000 Census Transportation Planning Package, made available in the summer of 2001. The information related to Lake County is presented in Figure III-2 shown below.

Only modest increases are shown between Lake County and Sonoma County, however Lake County home-based end-of-work trips between Lake and Mendocino Counties went up 108% and between Lake and Napa Counties increased by 199%. Yet the actual number of trips in the Napa County interchange was quite small. The work-trip interchanges for the other three counties are shown in Figures III-3, III-4, and III-5. It should be noted that interchanges between any one county and the other three counties are repeated again in each figure. The data shown here is dealt with in detail in the Existing Conditions Report, so only the highlights are presented in this report.

Table III-2 presents the heaviest commute patterns between the four counties. In addition to the information regarding Lake County work-trip commutes, the home-based work-trip commute from Mendocino County to Sonoma County increased by 38%, the home-based work trips from Mendocino to Napa County decreased by 61%, and the percent increase between Lake County and Sonoma County is almost identical. However the actual trip numbers are clearly unbalanced, with 1,415 home-based work trips from Lake County to Sonoma County and 323 home-based work trips from Sonoma County to Lake County. Finally, it should be noted that the home-based work-trip commute is greater from Sonoma County to Napa county than the reverse by almost a third, that is 3,033 trips from Sonoma County and 2,146 trips from Napa County in 2000.
Figure III-2

DAILY WORK TRIP: Origins and Destinations
LAKE COUNTY (1990 and 2000)
Figure III-4

DAILY WORK TRIP: Origins and Destinations
NAPA COUNTY (1990 and 2000)
Figure III-5

DAILY WORK TRIP: Origins and Destinations
SONOMA COUNTY (1990 and 2000)
The information discussed in the above section provides a basis for understanding the commute patterns based on the projections.

**PROJECTED COMMUTE PATTERNS FOR 2020**

The development of the projected future year commute interchanges is based on 2020 ADT forecasted volumes and the general employment, wage and housing trends addressed in the Projections chapter. No attempt is made however, to calculate the workforce housing shift at this point in the evaluation. The work-trip commute volumes presented in the following diagrams were calculated by applying an expansion factor reflecting the general growth in travel on a given pathway and the trends in county-to-county interchanges from 1990 to 2000. The worksheets and hand-calculated adjustments are available upon request from the project archives.

The results of the projected 2020 work-trip commute interchanges are presented in Figures III-6, III-7, III-8, and III-9, indicating the background growth in work-trip commute patterns for 2000-2020. In reviewing these figures, it is clear that much of the data is repeated as each county in turn is examined. Only the home-based daily work trips will be discussed in this evaluation.
LAKE COUNTY DAILY WORK TRIPS
2000 and 2020 Origins and Destinations
Figure III-7

MENDOCINO COUNTY DAILY WORK TRIPS
2000 and 2020 Origins and Destinations
Figure III-9

SONOMA COUNTY DAILY WORK TRIPS
2000 and 2020 Origins and Destinations
Lake County shows an increase of 108% (3,250 trips in 2020) to Mendocino County. The majority of these trips will use SR-20 as the primary path to connect to Mendocino County. This is consistent with the trends seen in the 1990-2000 data. An increase of 68% (2,360 trips in 2020) destined for Sonoma County is shown. Again, this is consistent with the 1990-2000 data and with the housing affordability impacts documented in the Projections chapter. Most of these home-based trips will originate in south Lake County and use SR-29 as the primary pathway. The increase of 162% (762 trips in 2020), while a modest number of trips, indicates the strong impact of housing affordability on work-trip commute patterns.

Mendocino County home-based work trips show a modest increase over 2000-2020 which is consistent with the county’s currently projected limited growth in both jobs and population in absolute numbers. The most significant increase is the 47% growth in home-based work trips to Sonoma County (1,500 trips in 2020) which reflects the continuing trend of housing Sonoma County workers.

Napa County home-based work trips has its most significant interchange with Sonoma County in terms of absolute numbers. The interchanges are dramatically different, with 3,000 home-based trips to Sonoma County and 35 and 90 trips to Mendocino and Lake Counties respectively. The increase to 3,000 trips represents a 40% increase over the 2000 trip interchange. This reflects the housing affordability advantage of the American Canyon sub-area in Napa County, and the relatively efficient access via SR-12 between south Napa County and Sonoma County, Santa Rosa Metro sub-area.

Sonoma County home-based work trips also show moderate increases in home-based work trips to the other counties in the Wine Country. And like Napa County, the interchange with Sonoma County is dramatically higher than the other trip interchanges. In absolute numbers the home-based work trips to Napa is 4,210 trips in 2020, while the other trip interchanges are 700 and 600 trips to Mendocino and Lake Counties respectively. This reflects the role that Sonoma County plays as the economic engine of the Wine Country area and comparable housing affordability levels between Napa and Sonoma County. The percentage increase of work trips to Napa County is a moderate 39% for the 20-year period.

The projections of work-trip commutes based on the background increases in traffic flow during the 20-year period, and recognizing the shifts in population, employment and housing projections, will serve as the basis for examining the impact of jobs-housing imbalance and separation on the roadway system.

Workforce Housing Shift and Work-Trip Commute Impact

The purpose of this exercise is to examine the potential and likely impacts of the shift in housing supply from areas of relative unaffordability to sub-areas where workforce housing can be created. In reviewing the projections data, the sub-areas that stood out in contributing to the process of jobs-housing imbalance and separation became immediately apparent. The Santa Rosa Metro sub-area and the Petaluma Metro sub-area will be the areas of employment concentration within the Wine Country area. The Calistoga and Saint Helena sub-areas will also be subject to a workforce housing shift because of the relatively high level of
unaffordability associated with each sub-area. The sub-areas that will provide locations for shifted housing supply are:

- Cloverdale
- Ukiah Valley
- Middletown
- Hopland
- Lower Lake
- American Canyon

These sub-areas offer, to a greater or lesser degree, the ability to site residential land uses at workforce-affordable costs. In the cases of Middletown and American Canyon, the growth of residential development tied to workforce employment in other counties or sub-areas is already happening. A simple method was developed to estimate the number of dwelling units that will be shifted. The following procedure was followed:

1. The amount of workforce housing required in the employment concentration sub-areas was calculated by dividing the employment projection in the sub-area by 1.5 employees per dwelling unit. There was some discussion of using a higher number of employees based on the increase of migrant workers in the workforce. The argument is that Third World cultures include a larger number of workers per dwelling unit. It was decided that 1.5 workers per dwelling unit would reflect a long-term sustainable standard.

2. The dwelling unit total based on employees was then compared with the dwelling unit projection for the sub-area based on total population and housing supply trends from the market place in the sub-area.

3. If the total dwelling units based on employment is greater than the projected housing supply from the projections data, the projected total housing is subtracted from the workforce housing and the remainder identified as a housing deficit for that sub-area.

4. The housing unit deficit is converted to daily work trips by multiplying the number of dwelling units by 3.0 daily trips per dwelling unit. This number reflects the fact that many dwelling units have more than one worker per household, thus 3.0 trips per dwelling unit is a conservative factor.

5. The workforce housing and work trips associated with the dwelling units were then distributed to destination sub-areas based on an examination of housing affordability, average wages, and access impedance based on roadway characteristics and travel time.

6. The county-to-county work trip commute was then calculated and a square table of origin and destination for home-based work trips was prepared. This trip table was then added to the 2020 projected work-trip commute interchange previously discussed.
The results of applying steps 1 through 5 are shown in Table III-3. The table is in a “from/to” format so that the shifts in housing and commute can be clearly seen.

### Table III-3

#### Jobs-Housing Imbalance Impact: Work Force Housing Relocation

<table>
<thead>
<tr>
<th>Employed In: Residing In:</th>
<th>Dwelling Units</th>
<th>Work Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Rosa Metro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloverdale</td>
<td>500</td>
<td>1500</td>
</tr>
<tr>
<td>Hopland</td>
<td>1100</td>
<td>3300</td>
</tr>
<tr>
<td>Ukiah</td>
<td>150</td>
<td>450</td>
</tr>
<tr>
<td>Middle Town</td>
<td>350</td>
<td>1050</td>
</tr>
<tr>
<td>Lower Lake</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>2150</strong></td>
<td><strong>6450</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employed In: Residing In:</th>
<th>Dwelling Units</th>
<th>Work Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petaluma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Canyon</td>
<td>100</td>
<td>300</td>
</tr>
<tr>
<td>Cloverdale</td>
<td>700</td>
<td>2100</td>
</tr>
<tr>
<td>Hopland</td>
<td>500</td>
<td>1500</td>
</tr>
<tr>
<td>Ukiah</td>
<td>150</td>
<td>450</td>
</tr>
<tr>
<td>Middletown</td>
<td>300</td>
<td>900</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1750</strong></td>
<td><strong>5250</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employed In: Residing In:</th>
<th>Dwelling Units</th>
<th>Work Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calistoga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middletown</td>
<td>300</td>
<td>900</td>
</tr>
<tr>
<td>Cloverdale</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>Hopland</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>370</strong></td>
<td><strong>1110</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employed In: Residing In:</th>
<th>Dwelling Units</th>
<th>Work Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Helena</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middletown</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>Cloverdale</td>
<td>20</td>
<td>60</td>
</tr>
<tr>
<td>American Canyon</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>Lower Lake</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>100</strong></td>
<td><strong>300</strong></td>
</tr>
</tbody>
</table>

In reviewing the table it might be helpful to be able to visualize the sub-areas that participate in this interregional jobs-housing imbalance impact assessment. **Figure III-10** presents a graphic picture of the separation of jobs and housing created by lack of workforce housing in areas of job concentration.
The workforce housing shift created by the deficit of housing in employment-rich sub-areas was estimated by weighing the relative attraction of sub-areas deemed able to supply housing against impedance in the access to the sub-areas where jobs are concentrated. Therefore, while the Middletown sub-area has by far the most affordable indicator for housing, the access route via SR-29 is so difficult and potentially hazardous, that the Hopland sub-area with its superior access via US-101, (recently up-graded to a four-lane expressway between the Mendocino-Sonoma County line and the Hopland southern edge), received a greater amount of the housing shift. These decisions were a matter of judgment on the part of the study team staff.

The results of Step 6 in our method converts the trips associated with the workforce housing shift to intercounty work-trip commute numbers that can be added to the existing 2020 projected work-trip commute interchanges.

Figures III-11, III-12, III-13, and III-14 present the results of the adjustment of daily work-trip commute patterns with the added jobs-housing imbalance impacts. All of the major interchange adjustments can be demonstrated in four graphics. The important impacts seen in these figures include an increase of 604% in home-based work trips (a total of 7,200 daily commute trips) from Mendocino County to Sonoma County, an increase in home-based work trips from Lake County to Sonoma County of 215%, and to Napa County an increase of 310%, for a total daily commute of 4,460 and 3,185 trips respectively. The adjusted commute between Lake County home-based and Sonoma County (4,460 trips)) is now equal with the commute between Sonoma County home-based and Napa County (4,420 trips).

Table III-4 summarizes the findings related to jobs-housing imbalance impacts on the connecting roadway system.

### Table III-4
**KEY FINDINGS: Adjusted Work Trip Commute**

<table>
<thead>
<tr>
<th>Base 2000 – 2020 Work Trip Commute Changes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Increase of 68% (+ 945 trips) Lake Co. to Sonoma Co.</td>
</tr>
<tr>
<td>▪ Increase of 162% (+1,328 trips) Lake Co. to Napa Co.</td>
</tr>
<tr>
<td>▪ Increase of 108% (+ 2,237 trips) Lake Co. to Mendocino Co.</td>
</tr>
<tr>
<td>▪ Increase of 47% (+ 477 trips) Mendocino Co. to Sonoma Co.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Imbalance Impact adjusted 2000 – 2020 Work Trip Commute Changes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Lake to Sonoma increase of 215% (+ 3,045 trips)</td>
</tr>
<tr>
<td>▪ Lake to Napa Co. increase of 318% (+ 2,423 trips)</td>
</tr>
<tr>
<td>▪ Mendocino to Sonoma Co. increases by 604% (+ 6,177 trips)</td>
</tr>
</tbody>
</table>

- The increases in work trip commute with primarily occur on the peak hour periods of the daily traffic demand.
- With the exception of US-101 Highway these trips will have to be accommodated on rural two-lane roadways.
- Work trip travel times will increase, if some cases significantly.
Figure III-11

LAKE COUNTY DAILY WORK TRIPS
2000 and 2020 Adjusted* Origins and Destinations

The adjusted work trips reflect the impact of the jobs - housing imbalances associated with the projected housing cost and average worker wages for the 2020 horizon year.
The adjusted work trips reflect the impact of the jobs-housing imbalances associated with the projected housing cost and average worker wages for the 2020 horizon year.
The adjusted work trips reflect the impact of the jobs-housing imbalances associated with the projected housing cost and average worker wages for the 2020 horizon year.
The adjusted work trips reflect the impact of the jobs - housing imbalances associated with the projected housing cost and average worker wages for the 2020 horizon year.
Roadway Segment Impacts of Adjusted Work Trip Commute Patterns

Before examining the impact of the adjusted daily work-trip commute between the four counties, it would appropriate to review the methodology for determining the roadway segment volumes. The following steps were used in developing the roadway impacts:

1. The adjusted county-to-county commute trip-data are converted to a “square table” for each county trip distribution, that is a “from” and “to” with the appropriate trip value in each square of the table.

2. All likely pathways connecting the four counties are identified and roadway segments at regional and county boundaries identified.

3. Where more than one pathway is available to connect a county-to-county trip interchange, a percentage value is selected to reflect the probable usage of the pathway.

4. Once the pathways are identified and the assignment split determined, the additional increment of trips associated with the workforce housing shift is assigned to the appropriate roadway segments.

5. The assigned commute trip increment is than added to the 2020 projected work trip commute and to the 2020 ADT.

6. The results of the posting of the adjusted roadway segment data is presented in graphic and tabular form.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SR-20 @ Lake/Mendocino County Line</td>
<td>1,077</td>
<td>14,400</td>
<td>3,120</td>
<td>32,400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-101 @ Mendocino/Sonoma County Line</td>
<td>1,610</td>
<td>25,200</td>
<td>2,145</td>
<td>35,280</td>
<td>6,980</td>
<td>42,210</td>
</tr>
<tr>
<td>SR-175 @ Lake/Mendocino County Line</td>
<td>190</td>
<td>2,470</td>
<td>550</td>
<td>6,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-101 N/O SR-175</td>
<td>1,450</td>
<td>14,600</td>
<td>1,724</td>
<td>31,000</td>
<td>5,544</td>
<td>36,544</td>
</tr>
<tr>
<td>SR-29 @ Lake/Napa County Line</td>
<td>2,293</td>
<td>14,200</td>
<td>5,140</td>
<td>21,300</td>
<td>8,295</td>
<td>24,455</td>
</tr>
<tr>
<td>SR-128 @ Napa/Sonoma County Line</td>
<td>1,599</td>
<td>4,500</td>
<td>2,640</td>
<td>9,270</td>
<td>3,187</td>
<td>9,820</td>
</tr>
<tr>
<td>Petrified Forest Road @ Napa/Sonoma County Line</td>
<td>3,289</td>
<td>10,890</td>
<td>4,956</td>
<td>13,395</td>
<td>6,430</td>
<td>14,869</td>
</tr>
<tr>
<td>SR-12/SR-121 @ Napa/Sonoma County Line</td>
<td>2,071</td>
<td>28,000</td>
<td>2,884</td>
<td>57,100*</td>
<td>3,020</td>
<td>57,304</td>
</tr>
</tbody>
</table>
The results noted in Step 6 are shown in Table III-5 for the key roadway segments that connect the four-county area.

This table summarizes the impact of the workforce housing shifts on both the work-trip commute and the Average Daily Trips (ADT). While the majority of the work-trip interchanges will occur during the typical morning and afternoon peak-hour periods, not all of the trips will do so. So the totals in the roadway segment estimates may not be exactly equal to the those shown in the county-to-county commute diagrams. The typical peak hour to ADT relationships may not hold for all of the roadway segments. This is partially explained by the differences in sources of the data: the peak-hour data was included in the 2000 Census Transportation Planning Data Package, while the ADT data came from ground counts and transportation modeling data from various regional and state sources.

There is no attempt to apply the standard traffic engineering analysis to the results of this exercise. To use such analytic tools with the estimated impacts developed for this report would be wholly inappropriate. By examining those segments where the adjusted work-trip commute is significantly increased, the impacts on peak-hour capacity and level-of-service can be seen to have a negative impact on both the quality of the travel experience and travel time. Graphic representations of these impacts on the roadway segments can be viewed in Appendix I.

Rather than create a table of technical analysis data to communicate the meaning of increasing work-trip commutes on the circulation system connecting the Wine Country counties, it was decided to visually present some of the characteristics of travel involved. Figures III-15 and III-16 depict the location of the most dangerous roadway segments and the segments with the worst terrain in the Wine Country roadway system. The designation of “dangerous” included characteristic variables of accident rates, sight distance restrictions, roadway obstructions, and roadway width/shoulder width limitations. As can be seen in reviewing the these graphics, SR-29 at the Napa-Lake County line and SR-128 at the Napa-Sonoma County line are identified locations under these definitions.

What makes this situation important is that when the currently programmed improvements presented in Figure III-17 are reviewed, clearly SR-29 and SR-128 are not on the improvement list. Indeed, they are not even on the programming radar screen for consideration. The description of the programmed improvements is contained in Table III-5. These improvements as listed are about three years old, but still valid as of the report preparation.
Figure III-15

Figure 3.4.2 Wine Country IRP Map of 2001 Dangerous Roadway Locations for Selected Regional Cross-County Highways
Table III-6

Wine Country IRP
Currently Funded and Planned State Highway Transportation Improvement Descriptions

<table>
<thead>
<tr>
<th>County</th>
<th>Highway</th>
<th>Location</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake</td>
<td>Rte 29</td>
<td>Diener Dr to Rte 175</td>
<td>Convert to 4-lane expressway</td>
</tr>
<tr>
<td>Mendocino</td>
<td>US 101</td>
<td>Haehl Road to Reynolds Hwy</td>
<td>Convert to 4-lane freeway bypassing the town of Willits</td>
</tr>
<tr>
<td>Napa</td>
<td>Rte 12</td>
<td>Redemeyer Rd North to Lake Mendocino Dr</td>
<td>Jamieson Canyon Widening Project</td>
</tr>
<tr>
<td>Sonoma</td>
<td>US 101</td>
<td>Old Redwood Hwy to Rohnert Park Expressway</td>
<td>Construct HOV Lanes</td>
</tr>
<tr>
<td></td>
<td>US 101</td>
<td>Rohnert Park Expressway to Wilfred Ave Interchange</td>
<td>Construct HOV Lanes</td>
</tr>
<tr>
<td></td>
<td>US 101</td>
<td>Steele Lane to Windsor River Rd</td>
<td>Construct HOV Lanes</td>
</tr>
<tr>
<td></td>
<td>US 101</td>
<td>Rte 37 (Marin County) to Old Redwood Hwy</td>
<td>Marin/Sonoma Widening Project</td>
</tr>
</tbody>
</table>

While there are preliminary alignment studies and environmental studies underway for the Hopland Bypass on US-101 in Mendocino County, the construction of this improvement has not yet been programmed. MCOG had to vigorously campaign with Caltrans’ support, to keep this improvement from being deleted from the project study list.

Public and private transit service is available within the Wine Country, but on a very limited basis. Figure III-18 presents the transit service routes that connect the four-county area. The schedule and service description are shown in Table III-7 for the routes seen in the above figure. Greyhound provides limited service via route 20 and US-101 connecting to the North Coast and to the Central Valley.
Figure III-18

Figure 3.6.1 Wine Country IRP Map of Regional Transportation Service Routes
Wine Country IRP
Regional Transportation Service
Schedules and Descriptions

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Route Number/Name</th>
<th>Schedule</th>
<th>Service Description</th>
<th>Connections /Notes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mendocino Transit</td>
<td>65 - CC Rider</td>
<td>Once daily</td>
<td>Mendocino, Ft. Bragg, Willits, Ukiah and Santa Rosa</td>
<td>N/A</td>
</tr>
<tr>
<td>Authority</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>95 - Point Arena to Santa Rosa</td>
<td>Once daily</td>
<td>Point Arena, Gualala, Jenner, Bodega, Santa Rosa</td>
<td>Golden Gate Transit, Airporter service, Amtrak Bus</td>
</tr>
<tr>
<td>Lake Transit</td>
<td>3 - South County to St. Helena</td>
<td>Once daily MWTh</td>
<td>Clearlake, Middletown, Calistoga, St. Helena</td>
<td>Continuing service to Santa Rosa on Thursdays</td>
</tr>
<tr>
<td>Greyhound</td>
<td>Santa Rosa - Willits</td>
<td>Twice daily</td>
<td>Continuing service North and South on US Highway 101</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* All services provide connections to local transportation entities. Noted connections are in addition to that service.

The transit services also have institutional barriers to the funding of interregional services with coordinated schedules that can provide some level of work-trip commute service. In summary the access system connecting the Wine Country area presents two major issues:

- An increase in work-trip commuting between Wine Country counties, driven by workforce housing shortages already exists.
- Based on housing affordability and workforce employment distribution, Lake County and South Mendocino County will see increased housing demand from outside their boundaries.

In addition to the housing and economic development issues and problems identified in the proceeding chapters, the following access problems will have to be addressed:

- The majority of connecting roadways are two-lane, rural, substandard traveled ways.
- There is no interregional transit service available.
- Key roadway segments connecting Lake, Napa, Sonoma, and Mendocino Counties are through rugged, mountainous terrain with limited sight distance and passing lanes.
- Usable capacity on these roadways is limited. It will not take much of an increase in commute traffic to create safety and access problems.
- At present there are no viable alternatives to the roadway system.
SUMMARY

The fundamental information contained in this consideration of the market forces that shape jobs-housing imbalance and separation, and the impacts on the roadway system connecting the Wine Country area, make what we believe is a compelling message for stakeholders to absorb and, we hope, to motivate effective and appropriate actions.
IV. STAKEHOLDER OUTREACH AND INVOLVEMENT: AN ONGOING PROCESS

THE STAKEHOLDER MESSAGE

Before launching into the stakeholder outreach process and activities, a review of the message to be carried to the stakeholders and the purpose of the message would be useful. The strategy for motivating stakeholders was simple: find a compelling message that illustrates a future crisis related to jobs-housing imbalance and separation. We believed that we had such a message in the findings from the Projections section information. The key elements of the message are:

- In the decade of 1990 to 2000, the four-county Wine Country area led both the Bay Area and California in the rate of job growth and population growth.

- The wage level for the average worker in the Wine Country is substantially below those of the Bay Area and California, both in the real value of wages and in the rate of growth in wages.

- Housing costs in the Wine Country have risen at a faster rate of increase than in the Bay Area and statewide, so much so that by 2004 the average home price in the Wine Country is within a few thousand dollars of Bay Area home prices.

- The roadway system connecting the four-county Wine Country is composed of two-lane rural highways and county roads. The only expressway-level facility is US-101 linking Mendocino and Sonoma Counties. These roadways are not designed for work-trip commute traffic.

- The 2020 horizon year projections identify a significant gap between workers’ wages and the average home price for all of the Wine Country area except Lake County. The ability of the average worker to qualify for purchase of the average home has deteriorated to the point that 4.1 wage earners are required to purchase a home in Sonoma County, with similar values for Napa and Mendocino Counties.

- A shift of workforce housing is estimated for the 2020 horizon year based on the projected housing, employment, population and wage data. Using work-trip commute factors, the projected housing unit shift was converted to commute trips between sub-areas across regional and county boundaries.

- The roadway segments that connect the sub-areas and counties within the Wine Country area will undergo severe congestion and safety problems as result of the work-trip commute increases.
The basis for the findings and projected data is the assumption that all of the existing and identified future trends will continue unchanged. The above key elements essentially answer the question, “What will the Wine Country look like if the current market forces go unchallenged?” The purpose of this message is to motivate stakeholders to collaborate in identifying and implementing strategies to change the direction of market forces on jobs-housing imbalance and separation, and to recognize the impacts of jobs-housing imbalance and separation on infrastructure and quality of life measures.

The heart of the issue can be stated as: Will the response by stakeholders to a message of “A crisis is coming, a crisis is coming” be as persuasive as “We have a crisis, we have a crisis” in motivating action? As an emerging IRP, the Wine Country InterRegional Partnership will provide a test of the idea that California stakeholders can be energized and motivated by anything less than a full-fledged, roaring inferno, crisis-level problem.

**DEVELOPING and IMPLEMENTING an INVOLVEMENT STRATEGY**

As a prelude to the stakeholder outreach and involvement process several meetings were held with consultant Kathryn M. Studwell, AICP, Regional Development Strategist, to look at the criteria for designing an outreach process.

Our key criteria were based on lessons learned from the established IRP’s program experiences. The programs that focused solely on elected officials for identifying solution strategies and policy actions to address jobs-housing imbalance found that proposed actions were not very robust and generally impossible to implement. A second criterion that emerged from other IRP experiences is that the simple use of a jobs-to-housing ratio for determining actions to be taken, or areas of focus for developing stakeholder motivation, can lead to off-target participation efforts. A final key criterion is the early identification of all affected interest groups that impact the jobs-housing imbalance phenomenon.

Based on these meetings and internal discussions, a Process Design was developed by the consultant for guidance of our outreach efforts. The entire proposed design map can be seen in Appendix J. The initial steps in the process were implemented by interviewing and selecting individual stakeholders for participation on a Leadership Team to provide guidance to the IRP work program. In preparation for an inaugural Leadership Team meeting to be held in August 2003, the process was revised. This revision is summarized in Figure IV-1 and indicates the early road map for developing stakeholder participation. The details of the outreach effort are contained in Appendix K. The key to this process will be an ability to create stakeholder groups that will represent the various interests that affect the jobs-housing imbalance phenomenon.

The Leadership Team was asked to contact other individual stakeholders and invite their participation in the dialogue concerning the underlying market forces and the role of community leaders in addressing jobs-housing imbalance impacts. It should not come as a surprise that the process and attempts to find stakeholders able and willing to participate in our work program proved significantly more difficult than anticipated. The competition for stakeholder attention had reached major proportions by fall of 2002 when our consideration of how best to reach stakeholders began. The energy crisis in California was in full swing, the dot-com bubble had burst, full-scale recession had hit the Bay Area and US-101 corridor in
Sonoma County ("Telecom Valley"), the State Legislature and Governor’s office were beginning the process of wholesale raids on local government revenues, and the effort to recall Governor Gray Davis was beginning to gain momentum. Obviously this was not an ideal time to bring attention to committing time and energy to the process of addressing jobs-housing imbalance problems.

The implementation of the steps in this process have already been addressed in the quarterly reports to H&CD in some detail, therefore the basic activities and their results will be summarized as follows.

**Figure IV-1**

**Wine Country InterRegional Partnership Public Outreach**

**Proposed Process Design**

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Leadership Team</td>
<td>Leadership Team agrees on process and stakeholder groups</td>
<td>Leadership Team forms task forces</td>
<td>Leadership Team selects strategic initiatives</td>
</tr>
<tr>
<td>Complete issue analysis</td>
<td>Generate input on issues from stakeholder groups and General Assembly</td>
<td>Task Forces develop initiatives</td>
<td>Leadership Team leads implementation</td>
</tr>
<tr>
<td>Complete preliminary assessment of stakeholders</td>
<td>Leadership Team synthesizes input from stakeholder meetings and general assembly and agrees on Phase III workplan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March - July</td>
<td>July - January</td>
<td>Jan - September</td>
<td>Sept - Jan</td>
</tr>
</tbody>
</table>

**Step 1.** The importance of creating a group of stakeholders that represented a cross-section of interests and communities that would include, but not rely on elected officials was a basic component of stakeholder involvement. Various interest groups including housing builders, environmental organizations, employer organizations, nonprofit economic development...
organizations, housing advocacy organizations, and educational institutions were listed and likely representatives identified. A representative group of elected officials was identified by using the criteria of previous participation or evidence of interest in regional issues. A list of 60 potential stakeholders interviewed can be reviewed in Appendix L. The list of potential stakeholders was under constant revision as the referrals were checked against availability and interest in participation.

Step 2. Interviews by the consultant and the program manager were scheduled and carried out over three to four months. The interviews were conducted in person and by telephone, depending on the interviewee’s availability. The interviews had two main goals: first, to ascertain interest in participating in the jobs-housing imbalance work program and/or in serving on the Leadership Team; and second, to gain insights into the opinions and thoughts of the stakeholder candidate concerning the phenomenon of jobs-housing imbalance and separation. Appendix L summarizes results of interviews conducted by Kathryn Studwell and Laurence Wright (“Final Leadership Assessment of Issues”). These notes are by no means a complete record of the contacts made with potential stakeholder candidates, but reflect the level of effort made to gain stakeholder input and participation.

Step 3. Once the results of the interviews were compiled and evaluated by the Wine Country IRP management team and consultant, candidates who had shown an interest were invited to serve on the Leadership Team. Over the life of the work effort, the Leadership Team membership changed, with departing members replaced several times. A list of all members over the grant period (identifying those remaining to date) are presented in Appendix M. This group of stakeholders was instrumental in providing feedback and guidance during the course of the work effort.

Step 4. A list of concerns, issues and priorities was prepared from the stakeholder interviews. This information would provide the starting point for involving the Leadership Team in reviewing the goals and objectives of the interregional partnership. The initial meeting of the Leadership Team was on August 28, 2003, and one of the goals of that meeting was to sharpen the definition of issues by engaging the team in the assessment of the draft issues. Again, the final assessment of issues and list of those interviewed can be seen in Appendix L. While these statements are instructive about the attitudes and understanding of stakeholders concerning the jobs-housing imbalance condition, it also told the IRP management team where the gaps were in providing a clear message regarding the impacts of an increasing level of imbalance and the critical need to alter current trends in development of jobs and housing.

LEADERSHIP TEAM and STAKEHOLDER PARTICIPATION

The role of the Leadership Team was to serve as a sounding board for the Wine Country IRP and consultant team; and provide direction and guidance on stakeholder involvement issues. The Leadership Team also provided valuable feedback on understanding of the technical studies and relevance to the concerns of stakeholders. A key example is the feedback after presentation of the Existing Conditions Report at the first Leadership Team meeting. Team members pointed out that our 1999-2000 data was dated, as the following two-and-a-half years from 2000 to 2003 had seen unusually large increases in housing costs. We were strongly advised to update our existing conditions evaluation. We did so and found the feedback to be correct.
Leadership Team meetings were scheduled to keep pace with milestones in the work program and to obtain input for the next steps in the process. The following is a chronology of the meetings:

**August 28, 2003** at the Culinary Institute of America at Greystone, in Saint Helena (Napa County). The meeting focused on a review of the Existing Conditions Report findings and organization of the Leadership Team for ongoing participation.

**November 13, 2003** in the Culinary Pavilion of Fetzer Vineyards at Valley Oaks Ranch, in Hopland (Mendocino County). The meeting focused on an update of the Existing Conditions study findings, discussion of the projections approach, and plans for the stakeholder general assembly.

**March 25, 2004** General Assembly meeting (“Bridging the Gap Jobs-Housing Conference”) at the Villa Chanticleer conference facility, in Healdsburg (Sonoma County). This conference focused on results of the 2020 projections for jobs and housing, economic development models, examples of various housing projects, impacts on the circulation system connecting the four Wine Country counties, and interactive discussion time to gain feedback from stakeholders.

**April 29, 2004** at the Ukiah Valley Conference Center in Ukiah (Mendocino County). This meeting focused on findings and recommendations from the General Assembly and possible implementation actions to address jobs-housing imbalance and separation.

**Photos this page:** August 28, 2003 Leadership Team meeting at the Culinary Institute of America at Greystone, Saint Helena.  
- by Janet Orth
The record of these meetings can be found in Appendix N. Included with this record are some of the results of group discussions with Kathie Studwell facilitating the Team interaction.

Organizing a Leadership Team and a General Assembly were by no means the full extent of the stakeholder outreach effort. Throughout the life of the project every opportunity for presenting the jobs-housing imbalance and separation impact problems were used to advance the Wine Country IRP and the goals of our work effort. We made presentations and participated in a variety of meetings by other groups on topics including:

- Farmworker housing
- Affordable workforce housing
- Economic development
- Workforce investment
- Transportation planning
- Constituents’ concerns with elected officials.

The quarterly reports to H&CD have detailed most of these meetings and contacts. A target mail list was compiled and a conference invitation (Appendix O) was issued to over 800 people and organizations. The abilities of the staff and resources of MCOG and its consultants to overcome the unfamiliarity between various jurisdictions and the diversion of attention to other issues were stretched from the very beginning of the work effort and remained so throughout the work program.

In preparing for the Stakeholder General Assembly, the Program Manager and outreach consultant reviewed the necessary steps to maximize the promotion of the general assembly and to achieve a representative attendance of stakeholders. Both the consultant and Program Manager agreed that someone with media experience would be a clear asset to the outreach effort. Mr. Mark Thayer, a retired newspaper editor and marketing executive was contacted, and he agreed to develop a marketing strategy for promotion of the general assembly.

With Mr. Thayer’s assistance a contact list of media outlets was prepared, press kits with news articles and announcements were issued, and key individuals in the media were contacted. Most of the press kit can be found in Appendix P; it also included a brochure and a compact disc of the Existing Conditions Report. The meeting was promoted as the “Bridging the Gap: Jobs-Housing Conference.” Our success in getting major newspaper coverage was very limited. We were able to get some radio interviews and marginal coverage in local newspapers throughout the four-county area, including an opinion-editorial. Appendix Q contains a list of all who attended the General Assembly and the meeting agenda.

**LAYING the FOUNDATION for FUTURE ACTION**

While the initial intent was to invite Sonoma and Napa Counties to join the IRP by action of their Boards of Supervisors, ultimately we were successful in partnering with the Association of Bay Area Governments (ABAG), the regional planning organization of which Sonoma and Napa Counties are members. At an early stage of preparing MCOG’s grant application, contact with ABAG was made regarding support for the Wine Country IRP. At that time ABAG was in the process of forming a second interregional partnership with the Association...
of Monterey Bay Area Governments (AMBAG) to address jobs-housing imbalances between Monterey Bay and Santa Clara County.

It was not until early 2003 that serious discussions began regarding a formal relationship between ABAG, MCOG and Lake APC to provide a firm foundation for the Wine Country IRP and ongoing attention to jobs-housing imbalances within the four-county area. Beginning with the August 28, 2003 Leadership Team meeting ABAG staff took an active role in coordinating stakeholder outreach activities. Alex Amoroso and Gerald Raycraft of the ABAG staff deserve credit for facilitating an inter-agency Memorandum of Understanding (MOU) and attachments detailing IRP work program responsibilities. The MOU has been adopted by actions of the Boards of Directors of each of the three regional agencies and fully executed April 5, 2004. The MOU and attachments are presented in Appendix R. The content of the MOU should provide sufficient structure for support of future actions and strategies.

LESSONS LEARNED FROM the OUTREACH PROCESS

In the Preface to this report, the issue of finding motivation for interregional coordination with anything less that a full-fledged crisis of some kind was identified as the pivotal test for this work effort. We also purposefully tested whether relying on a broad set of stakeholder leaders is superior to relying on elected officials for guidance and work program input. These issues and other factors are addressed in the following lessons learned from the outreach process:

- **The need for a champion among the media outlets emerged as an essential ingredient for conducting a successful IRP work program.** The Wine Country IRP was unable to obtain the kind of news coverage that maintains public awareness, issues interest, and organization identity that is necessary to communicate a message to stakeholders. Where such media support is present, (as in the case of SACOG) the road to awareness is much easier to traverse. Where a media champion is not present (as in the cases of MCOG and AMBAG IRP work efforts), general stakeholder awareness and attention has not been shown to be successful.

- **Nothing short of a perceived major crisis will motivate attention and participation of contending stakeholder groups to address the interregional aspects of jobs-housing imbalances.** Not even a well-documented future crisis is enough to galvanize action and participation by stakeholders in the jobs-housing imbalance phenomenon to address the many associated problems. Historic animosities, out-of-date priorities, competing mini-crisis, and lack of understanding concerning the long-range impacts of continuing jobs-housing separation will blunt all but the most urgent message. With the passage of AB 2054, which funded the IRP grants, the State Legislature made a commendable effort to avoid crises, yet the results have been disappointing.

- **Funding for an emerging IRP should be at a greater or at least equal, rather than a lesser, level than for an established IRP.** The need for a clear and technically sound description of the jobs-housing imbalance and imbalance impacts must be matched with an equally well funded outreach and communication effort. We always had funds for one or the other, but never enough funds for both. An
emerging IRP must create new interregional relationships and forge new alliances with existing jurisdictions within each region, as there is no existing political or common interest organization in place to facilitate cross-regional coordination. Further, the more rural IRPs do not have the staff and the range of funding sources to augment the grant that are available to more urban IRPs.

- **Once a Leadership Team drawn from the stakeholders was established, the turnover and absenteeism were probably no different than one would expect from a group of all elected officials with finite terms of office.** Conflicting meeting, work, and travel schedules take their tolls, even with ample advance notice. The bottom line is that without a crisis of impending doomsday dimensions, participating in the work effort is not a priority for many.

- **A small core of leaders and stakeholders stayed with the work program throughout the entire process.** These are individuals who get the “big picture” and understand the consequences of inappropriate actions or inaction. These are “keepers” and offer the only hope for the future of the Wine Country IRP.

A core group of stakeholders from the Leadership Team met on April 29, 2004 to develop strategies for addressing jobs-housing imbalance issues. The final section of this report deals with their decisions and an appraisal of proposed actions.
V. ACTION STRATEGIES AND IMPLEMENTATION PLAN

The final report outline prepared by H&CD for the InterRegional Partnerships identifies a series of items to document actions taken by the stakeholder Leadership Teams leading to specific Implementation Plans to address jobs-housing imbalances. For the Wine Country IRP, as an emerging IRP with a weak base of support from the local elected officials and local agency professional staff, formal documents containing long lists of strategies and recommended policy changes have not been developed.

The implementation plan discussed in this report comes from the core stakeholder group, most of whom served on the Leadership Team based on their review of market force causes identified from individual stakeholders, existing conditions and projections information from the consultant team, and direct information from experts in various areas involved in the jobs-housing imbalance and separation creation. The roles of environmental preservation, water allocation and use, land use regulation, development permits and fees, economic base changes and job creation, market-priced housing and workforce housing providers, and local government actions all have been evaluated by our Leadership Team participants.

STRATEGIES and PLAN

The group decision was to move forward with “easy win” actions for implementation; and then build on these “wins” to move to more difficult action areas. The implementation strategy will be based on the use of volunteers who will take the lead in contacting other stakeholders and moving actions forward. The implementation of the specific actions will be based on grassroots commitment of the stakeholders and their supporters.

While many ideas and recommendations were discussed at the April 29, 2004 Leadership Team meeting, the following tasks were adopted for immediate action:

- **Coordinate the Workforce Investment Boards (WIBs)** in each of the four counties to address permit streamlining for workforce housing, encouraging job and occupational skill training programs that focus on higher wage jobs, and to review the Wine Country IRP MOU for sources of regional agency support.
  
  **Stakeholders responsible for implementation:** Marty Lombardi, Joel Clark, Wilda Shock, and Eliot Hurwitz

- **Coordinate workforce housing development activities** of affordable housing advocacy groups including Rural Communities Housing Development Corporations, Community Development Commissions, Affordable Housing Task Forces, Affordable Housing Coalitions, and Affordable Housing Trusts to bring about greater awareness of workforce housing needs for sustainable communities. One of the specific actions of this group would be the creation of an affordable housing trust in each of the four counties.
  
  **Stakeholders responsible for implementation:** Marty Lombardi, Hal Wagenet, and Jim Leddy
Develop a coordinated strategy for promotion of tourism within the four-county Wine Country area. Specific actions may include:

1. Integrate lists of hotels and motels including seasonal and off-season rates.
2. Coordinate calendars of events including dates, times and nature of event.
3. Develop connections between annual events and local arts and entertainment.

Stakeholder responsible for implementation: Wilda Shock, Hal Wagenet

Develop an on-going transportation planning and programming coordination group from the existing regional transportation organizations in the four-county area. Potential members of this group include:

1. Regional Transportation Planning Agencies
2. County Transportation Departments
3. County and City Transit Operators
4. Rail programming and planning authorities

Stakeholder/Staff responsible for implementation: Eliot Hurwitz, Phil Dow

Maintain a website for communication and coordination activities between stakeholders and implementation action groups. The website, along with email, will enable the Leadership Team to communicate with one another and to access information regarding the ongoing activities of the implementation groups.

Staff responsible for implementation: Janet Orth, Stephen Attaway

(www.mendocinocog.org/irp)

There is no deadline for accomplishing these actions and reporting also will be voluntary.

FIRST STEPS TAKEN

There has been movement on three of the action items listed for implementation. Specifically:

- The Workforce Investment Boards have met and Marty Lombardi has been appointed as chairman of a Program Coordination Committee made up of members from each individual board.

- MCOG staff and Executive Director Phil Dow were instrumental in organizing a North Bay Transportation Organization meeting held on June 21, 2004 to review the findings from the Wine Country IRP Projections and to discuss the need for ongoing interagency coordination. Common ground was found and the group has agreed to meet as issues and program actions warrant. An annual meeting as a minimum will be organized to review interregional transportation improvement needs.

- Mendocino County has formed the A-1 Task Force (housing element section number) to address the development of affordable housing in the county. The task force has met six times (beginning around the first of May, 2004) and has worked toward coordination with other housing coalitions and groups in the Wine Country counties regarding the creation of affordable (workforce) housing. The group is moving
forward with setting up a housing trust to directly support or build workforce housing. Clark Blasdale of the Sonoma County Housing Trust and Mark Garwood of the Marin County Housing Trust have been contacted, and gaining information on the process of setting up a nonprofit housing trust was identified as the goal of future contacts.

The program manager for the Wine Country IRP has been instrumental in moving the latter two action items forward, sitting in several meetings with Martin Lombardi and attending the past four A-1 Task Force meetings. The core stakeholder group from the Leadership Team has already established recognition among other constituent groups in the greater Wine Country community.

Photos this page:
March 25, 2004
General Assembly at Villa Chanticleer in Healdsburg.

- by Jessica Frykman
VI. ASSESSMENT OF ANTICIPATED OUTCOMES FROM IMPLEMENTATION ACTIONS

The assessment of the likelihood for success of any of the above actions is directly linked to the opportunities and constraints that have existed in the environment that has fostered the jobs-housing imbalance and separation documented in the Projections section of this report.

The constraints are many. Some of them are rooted in the availability of natural resources like water and developable land, while others are politically created, such as zoning and regulations that determine land use potential, and others are philosophy based, such as open space preservation and maintaining a cultural character of an area. Finally there are economic constraints associated with land use consideration, as demonstrated by the grape growing and wine making priority of much of the Wine Country area.

The opportunities are also a part of the character of the area, the reliance on a respect for the physical beauty of the area, and a recognition that sustainable communities can only be established and maintained if there is equal access to physical, social and cultural resources for all of the people who choose to live in the area, both newcomers and long-time residents. As the awareness of the impact that unchecked market forces have on the quality and nature of Wine Country communities becomes a part of each stakeholder’s understanding, the opportunities for effective action will grow.

WORKFORCE HOUSING STRATEGY

The positive actions take by Marin County, Sonoma County and Mendocino County are a direct recognition that creating workforce housing is essential to maintaining a viable and healthy economic base. Awareness of the inadequacy of market-priced home builders to provide modestly priced housing has led to local housing coalitions finding ways to develop and build workforce housing outside of the market place, and without relying on government subsidized housing programs. This action strategy is in its infancy, yet offers a real opportunity for creating work force housing.

ECONOMIC BASE and JOB CREATION CHANGES

The situation with the economic base implementation strategy is not as optimistic. While a great deal of discussion and thought was given to the need for higher wage job creation, actually moving on incentives to change the economic structure proved to be too risky for the Leadership Team. What came out of the search for an action strategy is the old standby “tourism” and somehow enhancing the flow of tourist dollars into the Wine Country. This is clearly meant to be short-term action, but is still aimed toward a very economically limiting direction. The vast majority of tourism-related jobs are low-wage, dead-end jobs. The hope put forward was that if tourism sufficiently increased, the need for worker housing and transportation would be recognized by business owners and managers and industry wide solutions would be developed. This action will have to be revisited as the role of tourism in the economic base is weighed against livable wage requirements of residents within the four-county area.
TRANSPORTATION IMPROVEMENTS COORDINATION

Assessment of outcomes from the coordination activities of responsible agencies is guardedly optimistic. The constraints facing the participating transportation planning and programming entities are significant:

- Severe underfunding due to the wholesale borrowing of gas tax funds for general fund subsidy by the Legislature and Governor’s office
- Historic non-priority of highway improvements in northern Napa County and northern Sonoma County by Caltrans District 4
- Limitations on transit system funding for service outside of a specific transit district’s jurisdiction
- Gaps in the coverage of networks and planning data at regional boundary connection points by the Metropolitan Transportation Commission (MTC provides transportation modeling support for Napa and Sonoma Counties).

On the opportunity side for successful implementation of coordination is the positive attitude of the most of the participants. The information from the IRP’s projections and transportation impact evaluation was thoroughly discussed and the need for adjustment of project priorities acknowledged. Among specific actions agreed to:

- Coordination among Sonoma, Napa, Mendocino and Lake counties in developing traffic models for each county. Napa County is in the final calibration stages for their traffic model, Sonoma County Transportation Authority has recently hired a transportation planner with modeling experience and will undertake the development of its own transportation model. MTC is refining its current traffic assignment model and will monitor each county’s traffic modeling activities.

- The revisions to the transportation planning rules recently adopted by the FHWA and FTA call for consultation between large Metropolitan Planning Organizations (MPOs) and rural Regional Transportation Planning Agencies (RTPAs) that share boundaries. The purpose of this consultation process is to allow the smaller, less populated areas to review MPO planning and programming and offer comments related to impacts and mutual concerns. Both Lake County and Mendocino County are in such a position with MTC planning activities.

- The need for public transit (bus service) coordination has already been recognized around issues of access to healthcare and social services. The issue of work-trip commute service has been raised, but not actively addressed by transit operators serving the four-county area. Lake Transit Authority, Mendocino Transit Authority, and Napa County transit agencies are all looking for ways to provide better intercounty service. The future role of rail transit in the US-101 Corridor can be added to the mix of opportunities at such time as an operating passenger rail service appears feasible.

While the role of transportation improvements in affecting land use changes is often pointed to by anti-growth advocates as “growth inducing”, for the Wine Country the growth shifts caused by the differentials in housing price and availability will far outweigh any impact from changes in access. Access improvements, if provided in a timely fashion, can significantly improve safety and congestion on the connecting circulation system.
COMMUNICATIONS and INFORMATION SHARING

The development of a Wine Country IRP communication and information sharing capability will revolve around the establishment of an interactive website. The website will be expanded from the IRP web pages residing currently on the MCOG website, which itself resides on the ABAG server.

The likelihood of successfully expanding this website is very good. As ABAG took on a more active role in the Wine Country IRP work program, their webmaster was instrumental in posting the General Assembly information and online registration pages. Janet Orth has been maintaining the MCOG website and will commit some time in the next fiscal year, depending on requirements of funding and other mandated duties, to work further on the website with ABAG staff. The goal is to create an interactive website to facilitate communication among stakeholder groups and to make publicly available any actions and results.

The working group discussions and correspondence may require limited password access on the website to ensure confidentiality of data and information before release to the general public. Email listserves may be used in combination with posting of large files to the web. Regardless of the method, because of the busy schedules and often difficult process of contacting and exchanging information between stakeholders, the Internet will be an essential tool in maintaining effective communications.
VII. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The Wine Country IRP project has had both successes and failures. The technical work clearly demonstrates the scope and level of jobs-housing imbalance and impacts on the transportation system from the shifts in workforce housing. More importantly, the evaluation of jobs-housing imbalance and separation is based on the real world market forces that drive workforce housing shifts – changes in wages associated with employment availability and changes in housing costs for employees. The affordability of housing to meet workforce needs is pivotal to either maintaining sustainable communities or seeing them dissolve into an two-tier society of haves and have-nots. This message was clearly developed and communicated.

The general understanding and acceptance of this message, that is, the ability of the message to motivate significant action, was for the most part unsuccessful. The sense of urgency that could be generated by this message was simply not enough to overcome all the distractions and immediate mini-crises that occupied most stakeholders’ attention.

The overriding dynamic that will determine the necessary changes in resource allocation and policy determination is the willingness to examine and change priorities by all of the players who influence the jobs-housing imbalance phenomenon. Many of the special interest groups and policy makers who directly affect the creation of workforce housing and higher wage jobs are acting on priorities set in motion twenty and thirty years ago. To engage in a no-holds-barred, open discussion of the priorities and belief systems that led to the creation of many of the current policies and single-purpose organizations may be too threatening for many.

Within the Wine Country, the opportunity for open debate and consideration of the impacts of continuing shortages of workforce housing, and continued reliance of the economic base on sectors with low-wage jobs for the many and high incomes for the few, has a limited window. The character of the current residents of the four-county area will determine the future nature of the society and communities that make up this vital area of California.

RECOMMENDATIONS

The interregional partnership process is an extremely important tool for fostering the coordination and joint action that can resolve the many multi-jurisdictional problems that face much of the State. The Wine Country is a model of an exurban area that has yet to face the crises of the older urban areas, but the symptoms can clearly be seen to be on their way.

Continued funding of this effort is essential to the long-range welfare of the State. In the short term, making changes in the restrictions of RTPA organizations to engage in growth and land use issues, particularly environmental review of transportation impacts associated with land use decisions would be helpful. The MOU that supports the ongoing activity of the Wine Country IRP should be modestly supported from transportation planning funds to allow the regional transportation planning agencies to coordinate and monitor stakeholder activities.
In reflecting on the findings presented to the stakeholders and their response to a call for action, we see two areas of jobs-housing imbalance impacts that need further study and definition.

First, the lack of adequate supply of workforce housing presents a significant barrier to employment development and economic base diversification. This creates a “double whammy” for the Wine Country: the loss of the dot-com high-tech jobs has pushed the economy back to reliance on tourism, service industry, and wine production sectors--all predominantly low-wage job producers--and the lack of new workforce housing construction has seen the cost of the existing housing stock move out of reach of the average worker. New employers, when considering locating in the area, have as a key criteria affordable housing for their workforce, including their managers. To what extent the lack of workforce housing retards the diversification of the economic base is not clearly known. Providing a better connection between adequate workforce housing and a sustainable economic base could stimulate stakeholder action.

Second, the threshold at which long-distance work-trip commuting becomes disruptive to community life and to individual home life is not well known. The costs to a given community that serves as a residential reservoir when a significant portion of workers commute out of the region can be socially and fiscally negative. Again, estimates of these impacts can serve to move dealing with the jobs-housing imbalance phenomenon higher on the priority list of stakeholders.

We hope that further attention to these impacts will build from the actions of the stakeholders and the State Legislature. One thing is sure: the problems associated with continued jobs-housing imbalance and separation are not going away.