

Appendix B: Husing Review

**Response to
Barstow Analyst's Review of December 18, 2010 Report:
Potential Economic Impact of DesertXpress
On the City of Barstow**



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**Response to
Barstow Analyst's Review of December 18, 2010 Report:
Potential Economic Impact of DesertXpress On the City of Barstow**

Executive Summary

Ronald Barbieri, a real estate economist working for the City of Barstow, released a commentary (*Barbieri Commentary*) reviewing the economic impact on Barstow of the proposed DesertXpress high speed rail line between Victorville and Las Vegas authored by this analyst (*Husing Study*). Earlier, he had authored his own report on the economic impact of the DesertXpress on Barstow (*Barbieri Report*).

The Barbieri Commentary purports to show where the Husing Study was correct and where it was flawed in analyzing the proposed high speed rail line on Barstow. This report is a response to that document explaining in some depth why the Husing Study remains valid.

Does the Husing Study understate total Traveler Spending in Barstow? No.

There is no basis offered in the Barbieri Commentary for changing the Husing Study's **\$286,249,289** figure for total sales to travelers moving through Barstow. The Commentary simply assumed that the earlier Barbieri Report which yielded a \$295,600,000 figure was a more valid estimate. It did so without any criticism of the methodology or assumptions used in the Husing Study and explained in detail.

Does the Husing Study underestimate Las Vegas traveler spending? No.

The Barbieri Commentary takes issue with the degree to which traveler spending in Barstow is from people not involved in a trip with a Las Vegas destination. It does so due to a misunderstanding of the meaning of Caltrans's estimate of Annual Average Daily Trip (*AADT*) counts for private vehicle travel. It argues that Las Vegas destination travel volumes must be increased because most spending by them occurs on weekends. In fact, the agency's *AADT* work already allows for weekend spikes in spending and thus it is inappropriate to raise volumes to Las Vegas simply based upon weekend travel.

In the Husing study **\$197,880,658** of the **\$286,249,289** in traveler spending in Barstow is calculated as due to Las Vegas traveler expenditures in Barstow. The other \$88,368,632 is calculated as from north-south travelers involved either with destinations beyond Las Vegas or moving east-west on the I-40 and SR-58. The Barbieri Commentary inappropriately chose to use a \$275,000,000 figure for Las Vegas bound travelers, ignoring the important role that Caltrans data show comes from spending by travelers making trips unrelated to that city.

Did the Husing Study Rely Upon An Unrealistically Low Estimate of Traveler Capture? No.

In the Husing Study, it is estimated that **18.3%** of Las Vegas bound travelers will be captured by DesertXpress. This equates to the 20.3% rate originally estimated by URS when the system is operating at 100%, lowered by a 10% factor as advised by Federal Railroad Administration's (*FRA*) peer review of the ridership estimate. This reduced rate is the appropriate factor.

In the Barbieri Commentary, as well as in the earlier Barbieri Report, the argument is made that the appropriate figure would be the 20.3% level scaled up to 33.33%. This is justified since a comment made by one firm using the URS and peer reviewed data seemed to comment that the

20.3% level was consistent with the system operating at 60% of its capacity, and therefore it could be scaled up to 33.33%. A review of the source material showed that the Barbieri Commentary and Report were incorrect in this belief.

Is Direct Impact of the DesertXpress on Barstow's Taxable Retail Sales by the Husing Study Inappropriately Low? No.

Combining the data discussed above and defended in detail in the body of this report, the Husing Study estimated that Barstow's retail sales losses would be \$36,875,921 a year due to DesertXpress's diversion of travelers involved with a Las Vegas destination.

The Barbieri Commentary used higher estimates of traveler sales, lower estimates of the amount of those sales made by travelers not bound for Las Vegas, and a 33.33% capture rate of Las Vegas bound travelers by DesertXpress to calculate the loss of \$91,666,667 in sales by Barstow. It was demonstrated and documented, as summarized above, that in all three of the calculations used to determine that figure were invalid.

Are the Husing Study's Direct, Indirect & Induced Impacts of Lost Retail Activity Too Low? No.

Once the level of decline in Barstow's retail activity is determined, the full economic impact of the DesertXpress diversion of travelers is simply a matter of running models like IMPLAN to ascertain the direct, indirect and induced effect of this occurring. In doing so, this report calculated a revised loss of 511 direct jobs, 90 indirect and induced jobs and a total loss of 600 jobs (*rounding error eliminated*). This is the result of DesertXpress causing \$36,875,921 in retail sales declines in the city.

The Barbieri Commentary arrived at a 1,981 job loss figure based upon the inflated estimate that DesertXpress would reduce retail spending in the city by \$91,666,667. While the 600 job loss will be harmful, it is not of the order of magnitude of a 1,981 job loss.

What are the sales tax revenue losses due to the loss of retail sales from DesertXpress?

If Barstow loses \$36,875,921 in retail sales, there will be a direct loss of \$368,759 in sales tax revenue. Another \$94,315 will be lost as the general economy slows due to the reduction of monies flowing through it. The combined loss would be \$463,075 or a loss of 8.9% of the \$5,231,016 in retail sales tax revenue in 2009. By contrast, using the Barbieri Commentary's inordinately high input of lost sales, the degree of diversion to DesertXpress was estimated at \$1,177,693 or 22.5% of the city's sales tax revenue.

Will the operation of DesertXpress cause Barstow to be headed for a long term decline? No.

The Barbieri Commentary attempts to make the point that declines in the employment base of Barstow will lead to a long term permanent decline in the prosperity of the community. The logic of that position rests on the assumption that the Barstow area is a remote, stand-alone community with an economy separated from the balance of the High Desert. The Barbieri Commentary argued that the Barstow area's economy must expand internally or it will fail.

That contention is demonstrably untrue since 32% of the city's workers currently commute over 30 minutes to their jobs and 30% were doing so in 2000. This commuting pattern means that Barstow's economic health is not self-propelling but rather has become increasingly tied to the economic health of the balance of the High Desert, including Victorville, where one terminal for DesertXpress is proposed to be located. There is no reason to believe that long term job creation in the Victor Valley will not support residents in Barstow, if local job opportunities become an issue. Besides, in the last decade, when the Barstow economy was booming and when it was not, its population included a large share of residents on social security income or public assistance. Neither of these flows of funds are generated by its local employment.

Does the operation of DesertXpress condemn Barstow to a future with a declining population and permanent housing difficulties and related physical and social blight? No.

There is no necessary relationship between the level of population in Barstow, the success of its housing markets and the potential operation of DesertXpress. This is the case since the city's economy is and has been tied into the High Desert economy by commuters. It has also been inordinately and historically propped up by retirees and people on public assistance.

In fact, a close look at Barstow's housing data strongly suggest that Barstow's housing market is driven by the same forces affecting the wider High Desert market. When the general market accelerated, so did new and existing sales in Barstow. When it decelerated, the same occurred. Prices in Barstow followed a similar pattern and mimicked those for the full High Desert market. Significantly, these changes in the Barstow housing market occurred during a period when the Barstow markets employment was essentially static.

What the data strongly suggests is that Barstow has assumed the role as the affordable housing alternative within the High Desert. This is the role historically played by somewhat more distant locations, when a new market, in this case the Victor Valley, suddenly becomes a center of intense real estate activity. Thus, it is Barstow's lower relative prices as well as overall housing market conditions in the High Desert, not the city's fluctuations in the employment, that have been governing the demand for Barstow's housing. There is every reason to assume this will remain the case in the future.

True, Barstow's housing is facing pressure brought on by the fluctuations in the housing market in the Inland Empire and the High Desert. In this, however, it is not unique. These pressures will end when the mortgage crisis is resolved and the market can return to its natural rhythms. Forecasts by several economists put that in the 2015-2016 time frame, four to five years in the future. In the meantime, the community will be experiencing issues related to physical blight that accompany a housing market that is in trouble. Meanwhile, since Barstow is not an isolated market from a housing or jobs standpoint, employment in it, as affected by DesertXpress or any other single activity, will not be the determining variable as to the long term success of the city's housing market. In particular, by 2017, when DesertXpress reaches its full operation, any job losses created by it will be after the mortgage crisis has been resolved and should not impact physical decay in Barstow.

Is there a relationship between crime rates in Barstow and its economic activity? No.

One of the assertions in the Barbieri Commentary is that by negatively affecting Barstow's economy, DesertXpress will negatively affect public safety. In fact, looking at data since 1993 when the city's crime rate peaked, there is virtually no correlation between crime rates and employment. For instance, two of the three lowest crime rates recorded in the city were in 2009 and 2010 when unemployment rates in the city and the Inland Empire were at record high levels.

Is there a relationship between economic activity and the age profile of Barstow? No.

Another contention of the Barbieri Commentary is that Barstow is vulnerable to any fluctuations in its employment base because its history shows that a slow economy has caused it to become inordinately older with its younger, better educated workers moving away to find jobs. A look at the data however disproves that notion. The young adult 20-44 year old demographic included 35% of city residents in 2000 and 36% in 2007-2009. The county average is 35%. The share of city residents with bachelor's degrees and above was 9.1% in 2000 and 9.2% in 2007-2009. The share who have completed high school or higher levels of education was 77.6% in 2000 and 81.1% in 2007-2009.

Did the Husing Study over-estimate DesertXpress construction employment in Barstow? No.

In looking at the 3 year construction period for DesertXpress, the Husing Study estimated that 1,600 of the 18,361 construction jobs per year estimated by a UNLV economist to be created in San Bernardino County would end up in Barstow. This was based upon the Barstow area's 1.74% share of the county's employment and the fact that this major construction effort would be near the city. This should therefore allow its workers to capture a disproportionate share of the jobs (8.7%).

In reviewing the UNLV study, the Barbieri Commentary reduced the portions of the building effort to those functions that it felt Barstow workers would be qualified to perform and/or that would be undertaken in or near to the city. Given these changes, this left 12,911 jobs that could still be performed by city residents. Since the city area had 2,139 workers employed in affiliated blue collar sectors in 2008, and assuming city workers had a higher likelihood of capturing jobs on a nearby major project, it was argued that for 1,600 of the DesertXpress's construction jobs to end up in Barstow, as estimated in the Husing Study, was still reasonable.

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Response to Barstow Analyst's Review of December 18, 2010 Report: Potential Economic Impact of DesertXpress On the City of Barstow

John E. Husing, Ph.D.

May 28, 2011

On May 2, 2011, Ronald Barbieri, Ph.D., CPA, a real estate economist working for the City of Barstow, released a commentary (*Barbieri Commentary*)¹ reviewing the economic impact on Barstow of the proposed DesertXpress high speed rail line between Victorville and Las Vegas authored by this analyst (*Husing Study*).² Earlier, he had authored his own report on the economic impact of the DesertXpress on Barstow (*Barbieri Report*).³

In summary, the Barbieri Commentary purports to show where the Husing Study was correct and where it was flawed in its analysis of the proposed high speed rail line on Barstow. Below is a response to that document explaining in some depth why, in fact, that the Husing Study remains valid. It also presents updated information confirming the validity of its key results.

Does the Husing Study understate total Traveler Spending in Barstow? No.

In the Husing Study, a detailed analysis is made of the sectors in which travelers overwhelming are likely to spend money in Barstow's retail sectors. The city's total retail sales in 2009 of \$523,102,000 were shown to include \$415,655,000 in these traveler-impacted sectors, including service stations, general merchandise, eating & drinking, food and apparel. The retail groups not included were those unlikely to be receiving traveler purchases. They included: vehicle sales, furniture, building materials, other personal services and direct sales by manufacturers and construction firms.

Next, the \$415,655,000 sales figure in traveler related sectors was reduced to the estimated \$286,249,289 in purchases by travelers. To derive that figure, a detailed outline of the process was explained in great depth in the Husing Study.⁴ It relied upon U.S. Census Bureau data on consumption by local residents to show the extent to which they were likely to make purchases in the five relevant sectors. It estimated the share of that spending that residents were likely to make in Barstow. And, it estimated the extent to which service station sales were powered by interstate truckers, not private travelers. Without explanation or disagreement with the Husing Study's methodology or its assumptions, the Barbieri Commentary simply assumes that the

¹ Economic Impact of the DesertXpress Project on the City of Barstow California – Part II Response To Issue Raised By Dr. Jon Husing Impact Study, Ronald Barbieri, Ph.D., CPA, May 2, 2010

² Potential Economic Impact of DesertXpress On the City of Barstow, John Husing, Ph.D., December 18, 2010

³ Economic Impact of the DesertXpress Project on the City of Barstow California, Ronald Barbieri, Ph.D., CPA, October 14, 2010

⁴ Husing Study, Appendix A

Husing Study's work was not as accurate as the Barbieri Report's prior determination of a \$295,600,000 figure. At the least some explanation of why the Barbieri Commentary felt its own methodology was superior should have been offered. Without doing so, the Barbieri Commentary introduces an unsupported \$9,350,711 upward bias into all of its later calculations.

Conclusion: There is no basis offered in the Barbieri Commentary for changing the Husing Study's **\$286,249,289** figure for total sales to travelers moving through Barstow.

Does the Husing Study underestimate Las Vegas traveler spending? No.

Next, the Barbieri Commentary argues that Caltrans "average daily trip counts" figure should not be used in the Husing Study to estimate the travelers going north and south on the I-15 involving a Las Vegas destination. Instead, it contends that higher average trip counts based upon "weekend traffic levels" should be used.⁵ This argument implicitly assumes that the Husing Study used a daily average that did not allow for the higher weekend traffic levels. That is, in fact, untrue as it misses a major definitional point with regards to the Caltrans data analyzed in the Husing Study. The actual measure is *not* average daily trip counts that somehow ignore weekend spiking. On the contrary, the measure is rather the Annual Average Daily Traffic Counts. This is an important distinction as the Caltrans measure provides a measure that includes both weekday and weekend traffic annualized for a year. As Caltrans explains on its website:

"Annual average daily traffic is the total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Very few locations in California are actually counted continuously. Traffic Counting is generally performed by electronic counting instruments moved from location throughout the State in a program of continuous traffic count sampling. **The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present**" (*emphasis added*).⁶

As the Barbieri Commentary states, the author spoke to a Caltrans traffic analyst who clearly understood that there were higher weekend than weekday traffic counts moving along the I-15 freeway.⁷ One must therefore assume that the "compensating seasonal influence and weekly variation" were part of the Average Annual Daily Traffic Counts calculations made by the agency. These were used in the Husing Study because the purpose is to measure total annual retail sales by travelers to Las Vegas, not total *weekend* sales. Since Caltrans measures total volume for the year on highways and divides by 365 days to get the averages, reversing their calculation by multiplying the resulting averages by 365 reproduces the total number of annual travelers moving along the I-15, the I-40 and the SR-58 used by the agency.

⁵ Barbieri Commentary, p. 10-11

⁶ Definition: Annual Average Daily Traffic. Traffic and Vehicle Data Systems Unit 2009 All Traffic Volumes on California State Highway System. <http://traffic-counts.dot.ca.gov/2009all/2009TrafficVolumes.htm>

⁷ Barbieri Commentary, p. 10-11

Exhibit 1.-Total Passengers Traversing Barstow on Non-Las Vegas Trips, 2009			
Non-Las Vegas Trips	Total Private Vehicles	Passengers Per Vehicle	Total Diverted Passengers
I-40	928,834	2.20	2,043,434
SR-58	357,900	2.20	787,381
Beyond Las Vegas	1,062,818	2.46	2,614,533
Total	2,349,553		5,445,349

Source: CalTrans Annual Average Daily Traffic Counts, 2009

2.20 from National Household Travel Survey, U.S. Federal Highway Administration, 2009

2.46 from Desert Xpress Updated Ridership and Revenue Study, URS, December 22, 2005

In the Husing Study, the Annual Average Daily Traffic Counts were employed to estimate that there were **17,638,119** total private vehicle passengers a year able to impact Bartow's economy including those moving along I-15, I-40 and SR-58 and bus passengers making the trip to Las Vegas. Based upon the estimated \$286,249,289 in total spending in the city by travelers, the result is an annual per capita traveler expenditure of **\$16.23**.

Using the Caltrans data, it was estimated that **5,445,349** passengers were either:

- Passing through Las Vegas on north-south trips to or from locations to the east
- Passing through Barstow as part of east-west trips along the SR-58 and/or I-40 freeways

Dividing **5,445,349** passengers by 365, an annual average daily passenger count of **14,919** people moving in these ways was derived (*Exhibit 1*). That left 17,638,119 less 5,445,349 or **11,013,344** passengers making private vehicle trips to Las Vegas. That figure times \$16.23 per capita spending in Barstow by private vehicle travelers results in an estimate of **\$197,880,658** in annual Las Vegas traveler spending. The 5,445,349 travelers not involved with a final Las Vegas destination, at \$16.23 each, accounted for \$88,368,632 of traveler spending in Barstow.

The Barbieri Report estimated that total private vehicle traveler sales in Barstow was a minimum of \$275,000,000. The Barbieri Commentary defends that figure based upon using higher figures for Las Vegas travelers based solely on the incorrect assumption that Caltrans data did not allow for both weekend and weekday freeway volumes in their Average Annual Traffic Counts.⁸ If that view was correct, the deduction for travelers not involved in a Las Vegas trip would be \$286,249,289 less \$275,000,000 or \$11,249,289. Dividing that figure by the per capita spending level of \$16.23 would result in only 693,191 annual passengers that were either passing through Las Vegas on trips to/from locations to the north, or passing through Barstow as part of east-west trips along the SR-58 and/or I-40 freeways. That result cannot possibly be accurate. For 365 days, it amounts to an annual average daily passenger count of a minuscule **1,899** passengers in less than half that number of vehicles. No one who has traveled to/from areas beyond Las Vegas or east-west on the I-40 or SR-58 would accept that contention.

As a result, the Husing Study's estimate of \$197,880,658 in sales to travelers involved with a Las Vegas destination is based upon a sound analysis of traffic flows. The Barbieri Report and Commentary's estimate of \$275,000,000 is 39.0% higher and cannot be justified. The Barbieri

⁸ Barbieri Commentary, p. 12

Report's estimate of \$275,000,000 in such sales, deducted from the previously defined figure of \$286,249,289 in total traveler spending means 96.1% was by travelers involved with a Las Vegas destination. That leaves only \$11.2 million (3.9%) for those passing through Las Vegas on trips to/from locations to the north, or passing through Barstow as part of east-west trips along the SR-58 and/or I-40 freeways. That is equally improbable. It contrasts with the 30.9% attributable to those trips in the Husing Study.

Note: As indicated earlier, the Barbieri Commentary assumes that total traveler retail sales in Barstow are \$295,600,000, not the \$286,249,289 carefully documented in the Husing Study. If that contention were accurate, the calculation would be \$295,600,000-\$275,000,000 leaving \$20,600,000 in spending by those passing through Las Vegas on trips to/from locations to the north, or passing through Barstow as part of east-west trips along the SR-58 and/or I-40 freeways. Dividing by \$16.23, this would result in 1,269,389 passengers a year making those trips. For 365 days per year, that means an annual daily average of 3,478 passengers and less than half that number of vehicles making those trips. While this is still an unrealistically low estimate, it highlights the risk in the Barbieri Commentary's simply assuming \$295,600,000 is correct without discussion of how the Barbieri Report's methodology would be more accurate than that explained in calculating the Husing Study's \$286,249,289 figure.

Conclusion: Caltrans's work on traffic movements supports the **\$197,880,658** figure that the Husing Study indicates is appropriate for Las Vegas traveler expenditures in Barstow.

Did the Husing Study Rely Upon An Unrealistically Low Estimate of Traveler Capture? No.

Three studies of the capture rate by DesertXpress of the automobile travelers involved with a Las Vegas destination were reviewed as part of the Husing Study. These were:

- Desert Xpress Updated Ridership and Revenue Study by URS, in 2005
- DesertXpress Ridership & Revenue Audit, Steer Davies Gleave in 2007
- DesertXpress Ridership Forecast Review by Cambridge Systematics in 2008. This FRA-directed analysis was a peer review of both the previous studies.

The initial conclusions from URS was that with the system fully operational, the automobile capture rate would 20.3%. Based upon the peer review of this work, the share was lowered to 18.3%. A telling comment in the Cambridge Systematics review of the URS work was that:

“Like all ridership forecasts, the URS forecasts assume that the system *is fully operational* and that all travelers have knowledge of the system” (*italics added*).⁹

The 18.3% market factor was thus used in the Husing Study since that is the anticipated Las Vegas traveler diversion with the DesertXpress system in full operation.

⁹ Desert Xpress Ridership Forecast Review, Cambridge Systematics, February 28, 2008, p. 25

Another report on the DesertXpress was conducted by DMJM Harris/AECOM in 2009. Coming after the traffic diversion reports, this work was aimed at explaining the impact on street and highway facilities if the levels of automotive traveler diversion to DesertXpress occurred. This study conducted no independent analysis of the size of the diversion, rather it relied upon the work by URS as an input to their analysis of how street and freeway facilities would then be affected:

“This report quantifies the potential impact of the DesertXpress project in terms of vehicular traffic on surrounding roadway facilities. The project represents the introduction of a new mode of travel in the Southern California to Las Vegas corridor. As such, the project will have the effect of shifting travelers from one mode to another. The size of these shifts have been forecast in a rail ridership report prepared for DesertXpress Enterprises and peer-reviewed by a firm hired by the FRA’s EIS consultant.”¹⁰

Later, DMJM Harris/AECOM goes on to summarize the diversion work of URS stating that:

“According to the project’s ridership study (see below), the projected travel demand from Southern California to Las Vegas in the year 2012 will be 18.2 million trips. The study found that DesertXpress would potentially capture over 20 percent of the total trips between southern California and Las Vegas in the first full start up year.”¹¹

This is not a statement about DMJM Harris/AECOM’s own research but rather a summary of the URS work. The key term in this statement is the “first full start up year.” It is important since the Barbieri Commentary and Report contend that this refers to the first year of the project when it is anticipated to only be 60% operational. The Barbieri Commentary and Report then contend that a 20% Las Vegas tourist capture rate at 60% of operational levels would equal a 33.33% capture rate when it is scaled up to 100%. In fact, the documentation shows that the URS work was based upon when the system is in full or 100% operation, so no scaling up is appropriate. In fact, given the belief by the peer reviewers that the 20.3% rate should be lowered by 10%, or to 18.3%, only that is the appropriate capture rate.

In the review of the Husing Study, the Barbieri Commentary defends moving up to 33.33% capture rate in the manner discussed above stating that:

“It is assumed the DMJM Harris-AECOM Traffic Study represents the *most objective* of the capture rates for the DesertXpress” (*italics added*).¹²

That is an inappropriate assumption given that DMJM Harris-AECOM conducted no independent analysis of automobile capture rates but rather relied on URS’s research. And, it is incorrect given that that neither the 20.3% rate from URS or the peer reviewed 18.3% rate should be scaled up since they calculated assuming the DesertXpress system would be in full or 100% operation.

¹⁰ Draft Final Report, Traffic Impact Analysis, DMJM Harris/AECOM, 2009, p. 1-3

¹¹ DMJM Harris/AECOM, p. 2-1

¹² Barbieri Commentary, p.13

Conclusion: These factors support the use of the **18.3%** traveler capture rate used in the Husing Study.

Is Direct Impact of DesertXpress on Barstow’s Taxable Retail Sales by the Husing Study Inappropriately Low? No.

In the Husing Study, the following calculations were made:

- An initial total level of traveler spending in Barstow of **\$286,249,289**.
- Deduction from travelers not involved with a Las Vegas trip of \$88,368,632 based upon 5,445,349 travelers involved in north-south travelers involving locations beyond Las Vegas or traveling east-west on the I-40 and SR-58, meant total spending from Las Vegas related travelers of **\$197,800,658**.
- An **18.3%** capture rate for DesertXpress combined with 11,013,344 in private vehicle travelers and \$16.23 per capita spending figure yielded a **\$32,653,534** decline in retail spending in Barstow spending because of losses to the market.
- URS estimated and its peer reviewers agreed there would be 1,180,227 bus travelers with a 22.0% capture rate for DesertXpress. With \$16.23 in per capita spending that would add a loss of **\$4,222,387** in Barstow spending diverted because of bus passenger declines.
- A total decrease in Barstow’s retail spending of **\$36,875,921** from the \$197,800,658 base.

In the Barbieri Commentary, the attempt is made to increase the DesertXpress diversion loss to **\$91,666,667** from Barstow’s retail activity. This is based upon assumptions refuted above:

- \$295,600,000 in total Barstow retail sales to all travelers. The lower \$286,249,289 figure was documented in the Husing Study with no methodological or assumption based rationale for not using it given by the Barbieri Commentary.
- \$275,000,000 in Barstow retail spending by Las Vegas travelers based upon an incorrect understanding in the Barbieri Commentary of Annual Average Daily Traffic counts. That problem led to unreasonably low estimates of travelers driving north-south from/to areas beyond Las Vegas and those moving through Barstow east-west on the I-40 and SR-58. This meant an inappropriately low allowance for travelers from/to those areas and the \$275,000,000 figure. As indicated, the lower \$197,800,658 figure in the Husing Study was shown to be based on an accurate understanding of the Caltrans data, and the deduction of \$88,368,632 in spending by non-Las Vegas travelers from the \$286,249,289 in total traveler spending in Barstow.
- Capture rates of 33.33% not the 18.3% for automobiles and 22.0% for buses appropriately defined by URS and its peer reviewers. This error was based upon the misreading of both the importance of DMJM Harris-AECOM to estimates of diversion and that firm’s statement about when in the ramp up process estimates were made by URS. DMJM Harris-AECOM did not independently create diversion data and thus did not have, as assumed by the Barbieri Commentary, a “most objective” estimate of it than

URS and its peer reviewers. Also, the work of URS and its peer reviewers was based upon the DesertXpress system at 100% operation, not at 60% of capacity. Thus, the capture rates could not be reasonably scaled up as the Barbieri Report and Commentary contended.

- Using these incorrect assumptions, Barbieri Commentary estimated a loss of 33.33% from \$275,000,000 in sales by Las Vegas bound travelers or **\$91,666,667**. That figure is 2.48 times the losses of **\$36,875,921** more accurately measured and documented in the Husing Study.

Conclusion: Based upon these factors, the Husing Study’s estimate of Barstow’s retail sales losses of **\$36,875,921** a year due to DesertXpress’s diversion of travelers involved with a Las Vegas destination remains as the most probable estimate, given the strength of the information on which it is based.

Are the Husing Study’s Direct, Indirect & Induced Impacts of Lost Retail Activity Too Low? No.

Once the estimate of **\$36,875,921** in Barstow’s potential lost retail sales is made, the economic impact is simply a matter of feeding that information into models to see what the impact would be on various measures of economic activity in the city or its market area. The standardized model used by nearly every economist working on economic impact reports is the IMPLAN model based upon input-output data from the U.S. Bureau of Economic Analysis. Recently, data for lower levels of disaggregation of information have become available which have allowed IMPLAN to offer modeling down to the zip code level.¹³ It is therefore used with the input of \$36,875,921 in lost Barstow sales. Contrast is made to the Barbieri Commentary’s conclusions using the inappropriate input of an estimated \$91,666,667 in lost sales.

Exhibit 2-Diversion By Sector & Direct Job Impact Barstow, 2009				
Sector	Diversion	Shares	Direct Job Losses	Old Model Job Losses
Apparel	\$8,321,041	22.6%	152	126
General Merchandise	\$4,382,372	11.9%	69	71
Food Stores	\$1,081,978	2.9%	16	16
Eating & Drinking	\$6,360,482	17.2%	106	111
Service Stations	\$16,730,048	45.4%	167	170
Total Diversion	\$36,875,921	100.0%	510	501

Sources: Diversion shares from Exhibit 15, Husing initial study; Job Losses from Old & New Implan modeling for Barstow Area

Dividing the \$36,875,921 in lost Barstow sales between the traveler based sectors according to the overall importance of each sector to the city, and inputting that information into the revised IMPLAN model leads to estimates that there would be 510 direct job losses in the retail sectors, not the 501 estimated in the initial Husing study (*Exhibit 2*). In the new calculations, the following zip codes were aggregated to create the Barstow Area: 92310 (*Fort Irwin*), 92311-

¹³ Impacts for PLANning (*IMPLAN*), Minnesota IMPLAN Group, Inc. v. 3.0.5.2, 2010

92312 (*Barstow & environs*), 92327 (*Daggett*), 92342 (*Helendale, Silver Lakes*), 92365 (*Newberry Springs*), 92398 (*Yermo*).

Exhibit 3.-Full Economic Impact on Barstow Area, 2009						
Type of Impact	Full Economic Activity		Full Jobs Impact		Labor/Proprietorship Income	
	New Model	Old Model	New Model	Old Model	New Model	Old Model
Direct:	511	501	\$36,225,639	\$36,875,921	\$17,626,673	\$13,473,747
Indirect	22		\$3,124,422		\$959,488	
Induced	67		\$8,134,843		\$2,657,247	
County Secondary	90	41	\$11,259,265	\$4,737,938	\$3,616,735	\$1,819,674
City Total Impact	600	542	\$47,484,904	\$41,613,859	\$21,243,408	\$15,293,421

Source: Full Economic Impact and Job Losses from Old & New Implan modeling for Barstow Area

New lost jobs calculations raise the impact on the Barstow market from 542 to **600** of the 10,463 jobs that existed in the area in 2009, using ES 202 data on firms in the area from the CA Employment Development Department (*EDD*). That represents a change from 5.2% to 5.7%. This contrasts with the **1,981** job losses estimated by the Barbieri Commentary.

Note: The Barbieri Commentary and Report rely on data from Claritas, a private firm. They put total employment in the market area at 15,039 civilians. The Husing Study and this commentary rely on official data provided by EDD at the company and agency level. The EDD data are by address and come from the unemployment insurance payment filings of each employer in a zip code. It estimated Barstow Area employment at 10,463.

If the loss of 600 total jobs is compared to the total 15,933 employment base used by Barbieri, the share would be 3.8%. On that job base, the Barbieri Commentary calculated a 12.4% job loss. The difference is due to Barbieri Commentary's inappropriately high input of lost spending to the Barstow market, as discussed earlier.

Using the revised IMPLAN model, the level of economic activity lost to the Barstow area goes from \$41,613,859 to \$47,484,904. That is from an IMPLAN reported level of gross product in the Barstow market of \$1,191,500,569. This is a change from a loss of 3.5% to 4.0% of the economic activity in the market.

Using the revised model, pay levels lost to workers in the Barstow market increase from \$15,293,421 in the old modeling to \$21,243,408 in the new. This is from a total EDD reported payroll of \$359,599,088 in 2009. That is a change from 4.3% to 5.9%.

While the operation of DesertXpress would have some adverse impact on the Barstow market's economy, it will not be of the dimensions referred to in the Barbieri Report or Commentary. This is the case due to that documents reliance upon faulty assumptions. Specifically:

- There would be a loss of roughly 600 jobs, not the 1,981 predicted in the Barbieri Commentary. This would be a decline of 5.7% in the job base (*3.8% using the Barbieri base*) not 12.4%.
- Economic activity would decline 4.0%.

- Payroll would decline 5.9%

Conclusion: While the 600 job decline would be harmful, it is not of the order of magnitude of the 1,981 job losses discussed in the Barbieri Commentary.

What are the sales tax revenue losses due to the loss of retail sales from DesertXpress?

Exhibit 4.-Sales Tax Loses, 2009			
Activity	Direct	Secondary	Total
Secondary Sales Tax loss	\$36,875,921	\$9,431,549	\$46,307,470
City Tax Rate	1.0%	1.0%	1.0%
Loss of Sales Taxes	\$368,759	\$94,315	\$463,075
Total 2009 Sales Tax Revenue			\$5,231,016
Share Lost			-8.9%

A direct loss of -\$36,875,92 in retail spending in Barstow, at the city’s 1% tax rate, would directly reduce sales tax revenue by \$368,759. Based the decline of 600 jobs in the Barstow Market, the secondary loss to sales taxes is estimated at \$9,431,549. At 1.0% that would mean a loss of another \$94,315 in sales tax revenue to the city. The total loss to the city would be \$463,075. Together, the operation of DesertXpress would lower the city’s sales tax revenues by **8.9%** of the \$5,231,016 in 2009. By contrast, using the Barbieri Commentary’s inordinately high input of lost sales, the degree of diversion to DesertXpress was estimated at \$1,177,693 or 22.5% of the city’s sales tax revenue.

Conclusion: The Barbieri Commentary’s error in calculating the level of sales lost to the Barstow market leads to an inappropriately extreme 22.5% estimate of the share of sales tax losses to the city.

Will the operation of DesertXpress cause Barstow to be headed for a long term decline? No.

The discussion of the impact of DesertXpress on the potential for a long term decline for Barstow must start with whether or not the city is a self-contained economy. The Barbieri Commentary clearly states that belief:

“. . .the Greater Barstow area and the City of Barstow has its own employment base that is very isolated from the rest of the High Desert. It is not a bedroom community for the Los Angeles Basin or the other High Desert cities of Victorville, Apple Valley or Hesperia. In order for Barstow to experience growth in employment and therefore an increase in population and households over the next couple of decades it will be necessary for the Barstow area to realize a growth in Base Employment that would lead to an expansion of Secondary Employment” (*emphasis added*).¹⁴

In fact, Barstow is just 32 miles from the center of Victorville, the main employment hub of San Bernardino County’s High Desert. For Californians, that is a relatively short 27 minutes drive on desert freeways at the posted 70 miles per hour speed limit. A significant share of Barstow’s

¹⁴ Barbieri Commentary, p. 6-7

workers already take advantage of this fact. Thus, the 2007-2009 American Community Survey found that 3,313 workers or **31%** of city's working labor force commuted 30 minutes or more to work putting them either in the Victor Valley (*south*), Fort Irwin (*north*) or farther away (*Exhibit 5*). In addition, of the 50 cities in the Inland Empire (*San Bernardino & Riverside counties, California*), workers in 22 cities were more isolated from their jobs, with all workers in those cities averaging one-way commute times of over 30 minutes.

Looking back to the 2000 Census, the data show that even a decade ago, there were 2,290 workers driving 30 or more minutes to their jobs. They represented 30% of Barstow's working residents. Though the city has grown slowly in the intervening years, the number of commuters working outside of it has gone faster, increasing by 1,023 or 44.7%.

Conclusion: This commuting pattern means that Barstow's economic health is not self-contained but rather has become increasingly tied to the economic health of the balance of the High Desert, including Victorville, where one terminal for DesertXpress is proposed to be located. There is no reason to believe that long term job creation in the Victor Valley will not support residents in Barstow, if local job opportunities become an issue.

Exhibit 5.-One Way Driving Time To Work Barstow, 2007-2009 v. 2000		
	2009	2000
Less than 5 minutes	1,130	521
5 to 9 minutes	2,323	1,706
10 to 14 minutes	1,606	1,602
15 to 19 minutes	1,250	1,016
20 to 24 minutes	740	492
25 to 29 minutes	144	95
30 to 34 minutes	245	275
35 to 39 minutes	120	208
40 to 44 minutes	361	252
45 to 59 minutes	1,298	1,023
60 to 89 minutes	833	362
90 or more minutes	312	170
Total:	10,362	7,722
30 Minutes or More	3,169	2,290
Share leave City Area	32%	30%

Source: Table B08303, American Community Survey, 2007-2009, 2000 Census

A second factor with reference to the dependence of households in Barstow on jobs within its immediate vicinity is the share of households on retirement income. Here, the 2007-2009 American Community Survey found that the city had a large retirement community with over **one in four** households (26%) receiving retirement income through social security. The share was 25% in 2000 indicating that this has been a stable phenomenon. It is also above average for the Inland Empire. Of the area's 50 cities, 29 have a smaller percent of households on social

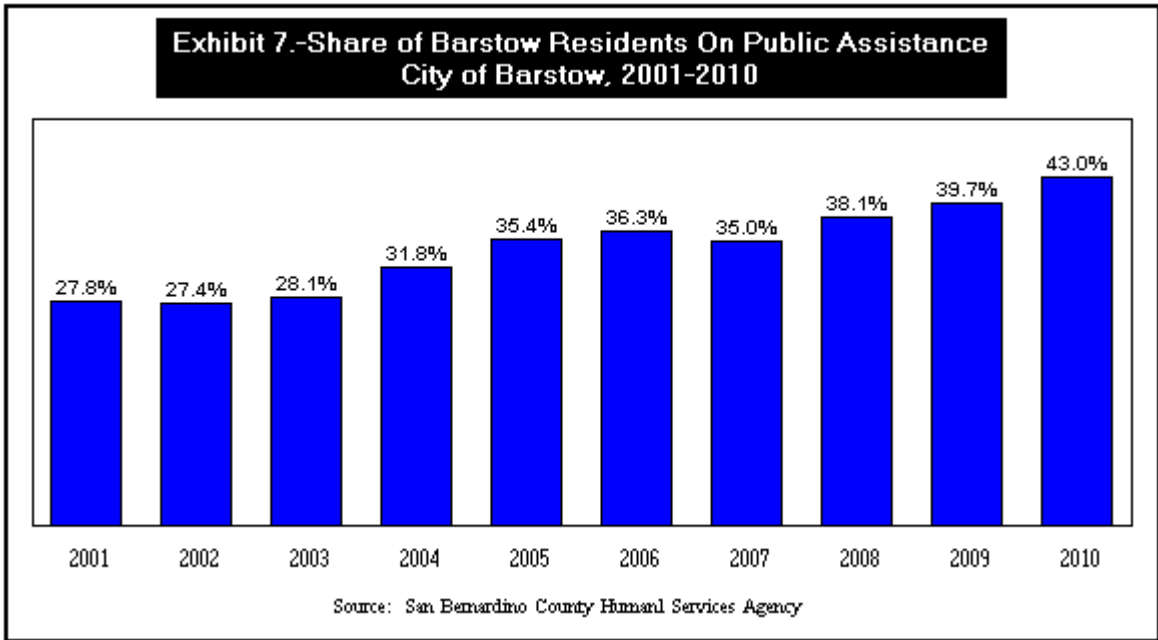
Exhibit 6.-Share of Households On Social Security Barstow 2007-2009 & 2000		
	2007-2009	2000
Total Households	8,180	7,670
HH with Social Security	2,126	1,907
Share	26%	25%

Source: American Community Survey, 2007-2009 & U.S. Census 2000

security. The flow of funds to these retired households in Barstow will occur regardless of the status of the Barstow economy.

A third factor is that historically, Barstow has always had a very large share of its population on some form of public assistance. In 2010, the share is unusually high at 43.0% of the population. However, even during the 2005-2007 boom period, the share represented over 35% of city residents (*Exhibit 7*). This situation has perpetuated itself likely because the city's rents and home prices have been well below San Bernardino County general levels, attracting this population.

Conclusion: In the last decade, when the Barstow economy was booming and when it was not, its population included a large share of residents on social security income or public assistance. Neither of these flows of funds are generated by its local employment.



Does the operation of DesertXpress condemn Barstow to a future with a declining population and permanent housing difficulties and related physical and social blight? No.

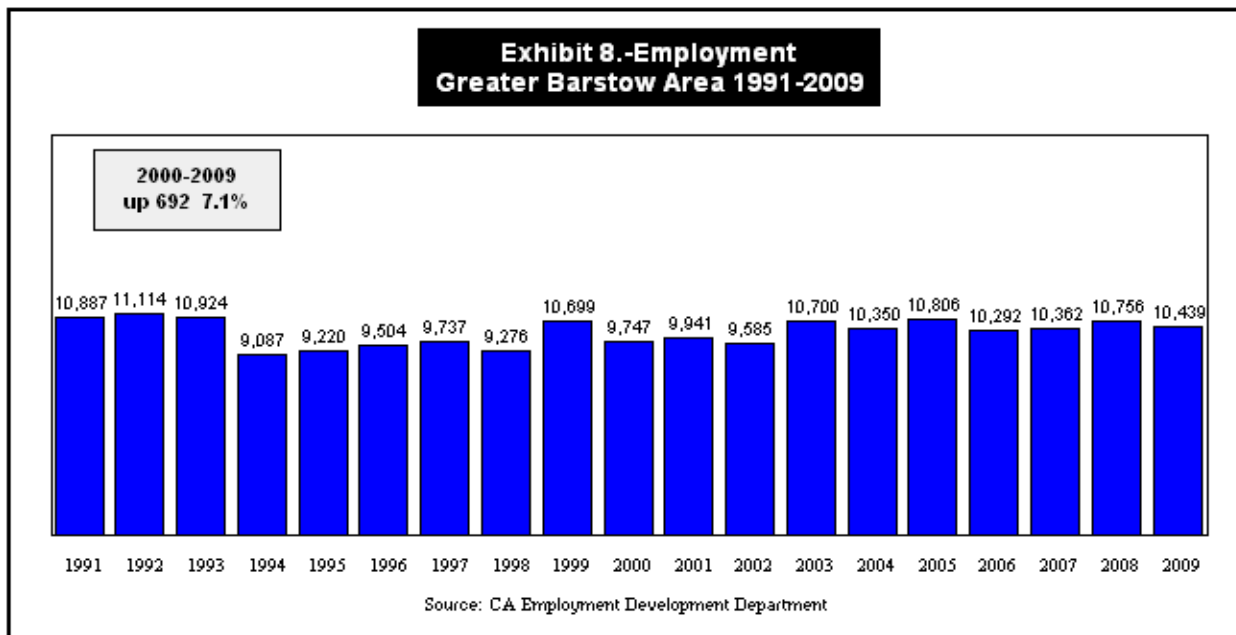
In the Barbieri Commentary, a good deal of discussion is developed aimed at showing that the advent of DesertXpress will not just lower the city's retail sales, but also dramatically reduce its employment, and because it is a self-contained economy, this will inevitably lead to the city losing population and undergoing significant physical and social blight. However, it has been

shown above that the level of retail sales losses, the number of job losses and the reduction in retail sales revenue to the local government will not approach the levels used in the Barbieri Commentary due to flaws in its analysis discussed earlier in great detail.

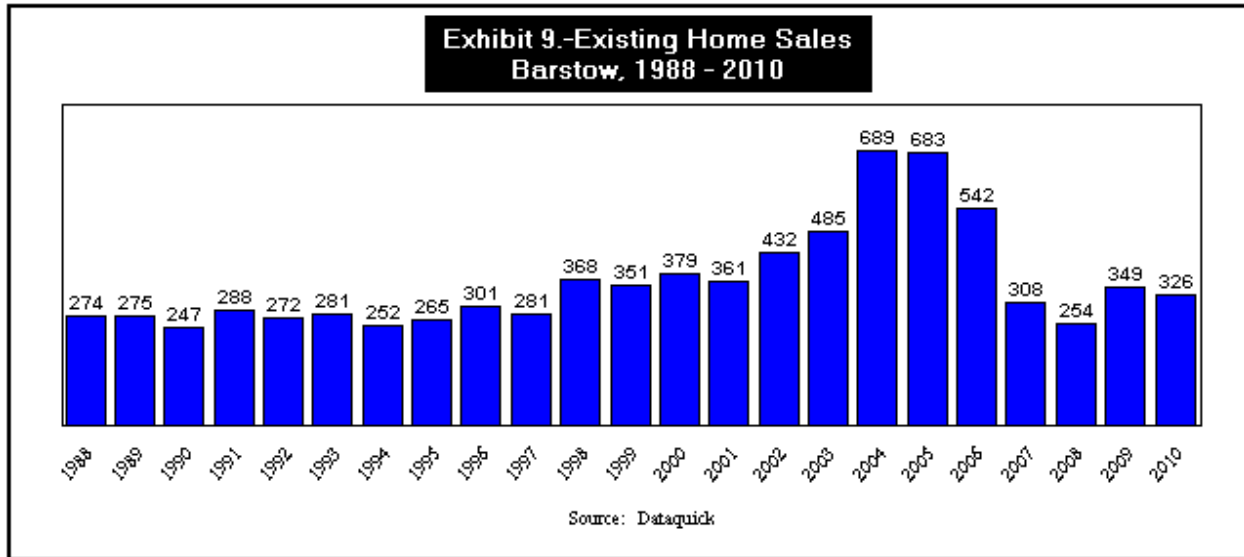
Beyond those facts, the Barbieri Commentary's idea that employment fluctuations will necessarily lead to serious problems in Barstow housing stock is dependent upon the assumption that the city's economy is entirely self-contained and must expand its internal job base to maintain or expand its population and secure its housing market. The fact that the city is close to the Victor Valley and has long had a significant number and share of commuters to that area means that this assumption is demonstrably untrue. There is no reason job fluctuations in the Barstow market should not lead to somewhat high commuting to nearby employment centers, providing they have jobs to offer. If they do not, that cannot be attributable to the operation of DesertXpress which will create jobs in the Victor Valley. Beyond that, the flows of money into over one-quarter of Barstow's households is from retirement income. And, somewhere between one-quarter and one-third of the city's residents have long been on some form of public assistance. They add stability into the city's population levels.

Conclusion. There is no necessary relationship between the level of population in Barstow and the potential operation of DesertXpress since the city's economy is and has been tied into the High Desert economy by commuters. It has also been inordinately and historically propped up by retirees and people on public assistance.

Meanwhile, the data show that Barstow's housing market shows a strong relationship to trends in the High Desert as a whole, not those in its internal job market. Employment data from EDD reveal that the Barstow area's employment base has been essentially flat since at least 1991. In particular, through the boom (2003-2007) and bust (2008-2009) period of the housing market, employment in the city area market remained remarkably stable, fluctuating from a high of 10,806 jobs in 2005, to a low of 10,292 in 2006 (Exhibit 8).

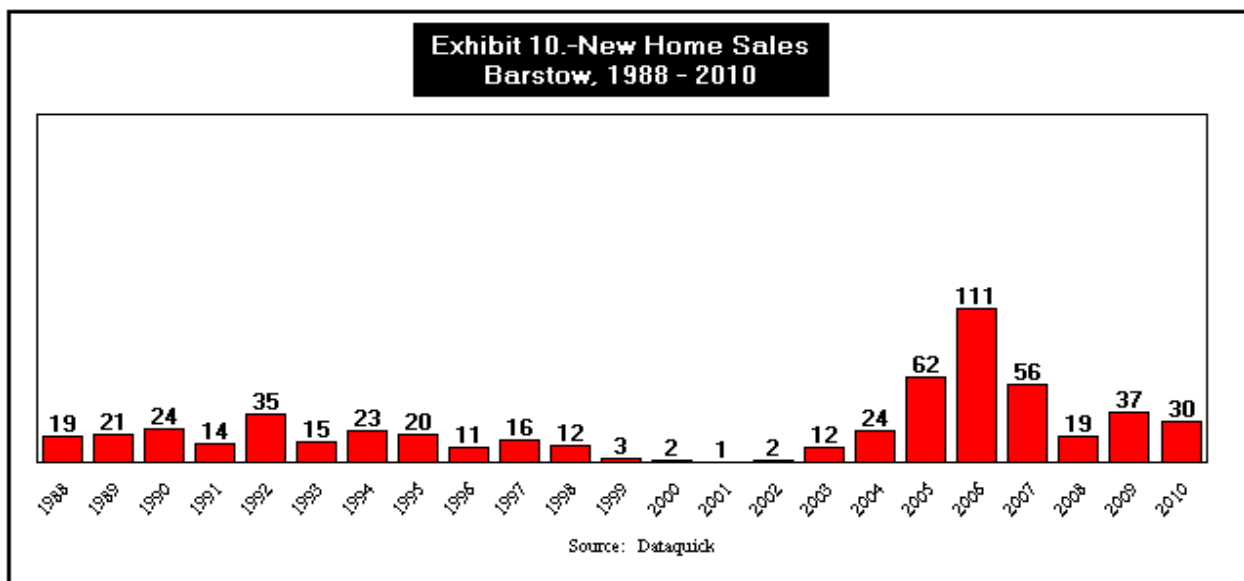


Despite the stability of the Bartow market’s employment base, there have been significant fluctuations in its housing market. Existing home volume began rising in the late 1990s, ultimately reaching highs of 689 and 683 sales in 2004 and 2005. Volume then retreated to as low as 254 in 2008 before foreclosure sales brought it back to 349 in 2009 and 326 in 2010 (*Exhibit 9*).

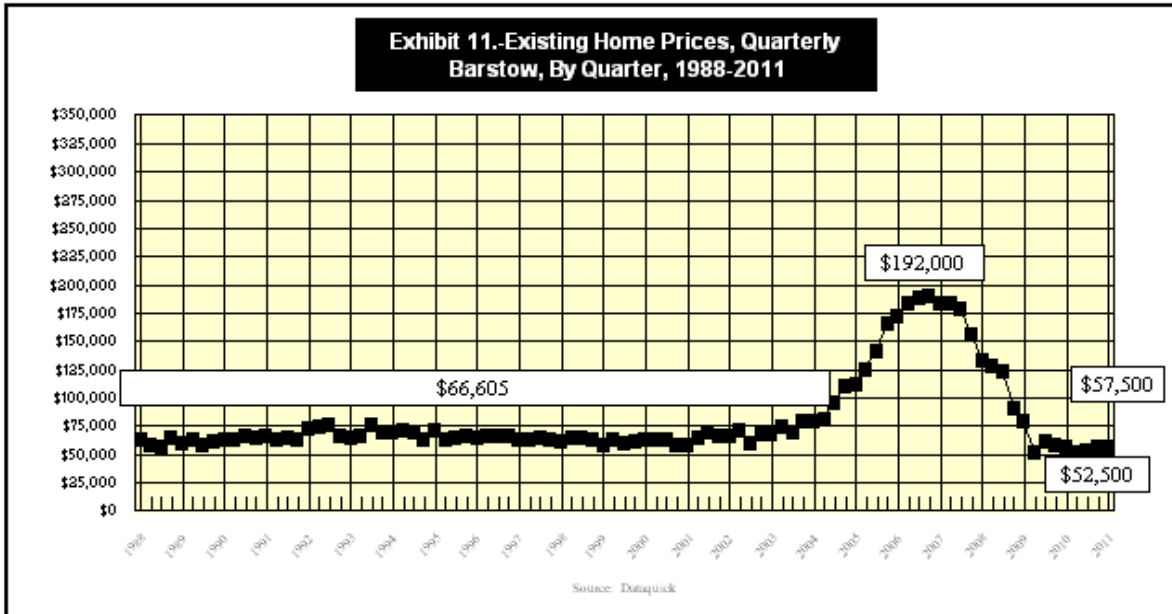


With existing home sales soaring, developers began seeing Barstow as a potential High Desert affordable market alternative for the first time. New home sales, which had never exceeded 35 sales in the proceeding 17 years, moved to 62 in 2005, jumped to 111 in 2006 and were at 56 in 2007, before retreating to 30 in 2010 (*Exhibit 10*).

Barstow’s existing and new home markets thus felt the impact of the same surge in demand for affordable housing demand that migrated into the whole High Desert area in the past decade. It also felt the effect of the bust that occurred when the mortgage crisis hit with full force. However, these movements were not related to its very stable internal employment levels.

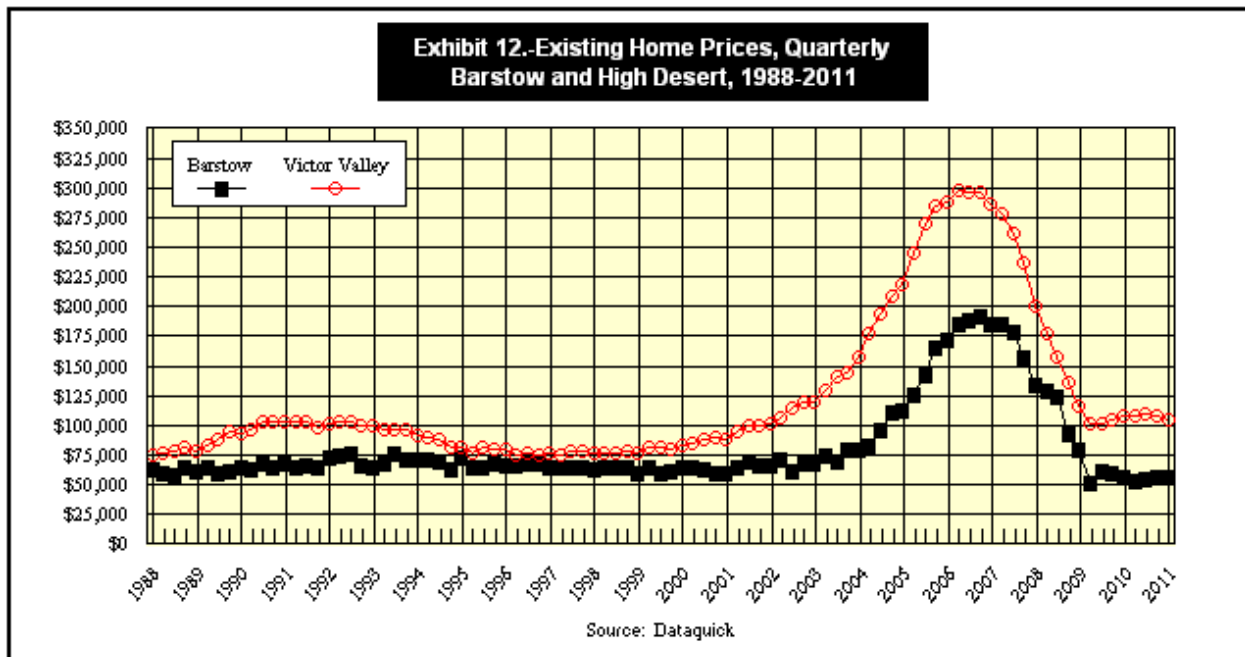


Simultaneously, in the last decade, surging demand for affordable homes caused Barstow's existing home median price to soar from a very stable average of \$66,605 from 1988-2004, up to \$192,000 in 2006, before retreating to the current level at \$57,500 (*Exhibit 11*).



During the period from 2000-2011, these fluctuations, albeit at higher levels, also occurred in the High Desert as a whole in exactly this sequence. In tracking existing home prices in both markets, several lessons emerge (*Exhibit 12*):

- In the past decade, Barstow's existing home prices have acted similarly to those of the overall High Desert, despite the stability of its employment base.



- In the 1990s, Barstow’s existing home prices varied from \$6,300 (4th qtr. 1996) to \$38,000 (2nd qtr. 1991) above those in the High Desert as a whole. At best, it was only a slightly more affordable option for families seeking a better price alternative.
- As the Southern California’s housing prices soared, those communities closer to the Los Angeles urban hub began feeling the force of the need for families looking for affordable housing to migrate to places like Victorville, Hesperia, Apple Valley, Adelanto and even Barstow. This surge in demand caused existing home prices in the overall market to surge to a high of \$298,772 (2nd qtr. 2006).
- While Barstow’s existing home prices surged as well, the differential between it and the overall market expanded dramatically. From 2004 to 2007, homes in Barstow were from \$93,000 to \$127,500 less expensive than those in the High Desert as a whole.
- With prices having fallen dramatically in both the overall High Desert market and Barstow, the city’s prices have remained roughly \$50,000 less expensive.
- In effect, Barstow has become the High Desert’s low cost alternative for families wanting truly affordable homes.

Conclusion. These data strongly suggest that Barstow’s housing market is driven by the same forces affecting the wider High Desert market. They also indicate that it is Barstow’s lower relative prices as well as overall housing market conditions in the High Desert, not the city’s fluctuations in the employment, that have been governing the demand for Barstow’s housing and that there is every reason to assume this will remain the case in the future.

In 2011, is Barstow’s housing market having great difficulties that could lead to difficulties with physical blight? Yes. In this respect, it mirrors the difficulties facing the entire Inland Empire, where CoreLogic found 48.9% of homes were underwater in December 2010. By April 2011, the result has been a large overhang of homes in some level of the foreclosure process. The share of the single family housing stock in each community in various stages of the foreclosure process is (*Exhibit 13*):

- 7.5% in Barstow
- 8.6% for the nearby Victor Valley cities (*Adelanto, Apple Valley, Hesperia, Victorville*)
- 6.1% for all of San Bernardino County

Exhibit 13.-Inventory of Homes In Foreclosure Process But Not Yet Sold Barstow & San Bernardino County, April 2011			
Status of Homes	Barstow	Victor Valley	San Bernardino
Notice of Default But Not Notice of Trustee Sale	188	2,369	10,494
Notice of Trustee Sale but Not Yet Taken By Bank	78	1,764	8,812
Bank Taken But Unsold	153	2,573	10,393
Total in Foreclosure Process	419	6,706	29,699
Total Single Family Detached Homes	5,623	77,981	488,422
Percentage of SFR Homes in Foreclosure But Unsold	7.5%	8.6%	6.1%

Source: ForeclosureRadar.com

The current stress being experienced by Barstow's housing stock is in line with the condition of both the county's market and that of the High Desert generally. As such, the city faces the same issues of potential housing degradation brought on by the mortgage crisis as the market generally. The lack of fluctuations in the city market's employment base underscores that the local job market is not the culprit.

Would the loss of 600 jobs in 2017 fundamentally exacerbate this situation? According to recent forecasts by six major economists, the mortgage crisis in the Inland Empire and the recession felt by the region will end in 2015-2016, four to five years from now. Six years from now, when DesertExpress is expected to start full operations, the residential market and the economy are expected to have returned to normal, though with slower growth than in the last decade.¹⁵ Housing markets in Barstow should have absorbed the mortgage difficulties and workers will have access to jobs in the nearby Victor Valley, if not Barstow itself. Given these forecasts, the expected timing of construction-related employment, and the expected timing of full operations, the predicted loss of 600 jobs related to DesertXpress by 2017 would not be expected to cause physical blight.

Conclusion. Barstow's housing is facing pressure brought on by the fluctuations in the housing market in the Inland Empire and the High Desert. In this, it is not unique. These pressures will end when the mortgage crisis is resolved and the market can return to its natural rhythms. In the meantime, the community will be experiencing issues related to physical blight that accompany a housing market that is in trouble.

Looking longer term, the evidence indicates that Barstow's housing market will return to being the affordable housing alternative for the High Desert, once the mortgage crisis is resolved. That is the role it assumed in the last housing cycle and once a Southern California market begins acquiring that rhythm, the forces affecting it will permanently change. Barstow is just one of the most recent cities to undergo this change (*Yucca Valley near the Coachella Valley has undergone the same transition*).

Meanwhile, since Barstow is not an isolated market from a housing or jobs standpoint, employment in it, as affected by DesertXpress or any other single activity, will not be the determining variable as to the long term success of the city's housing market.

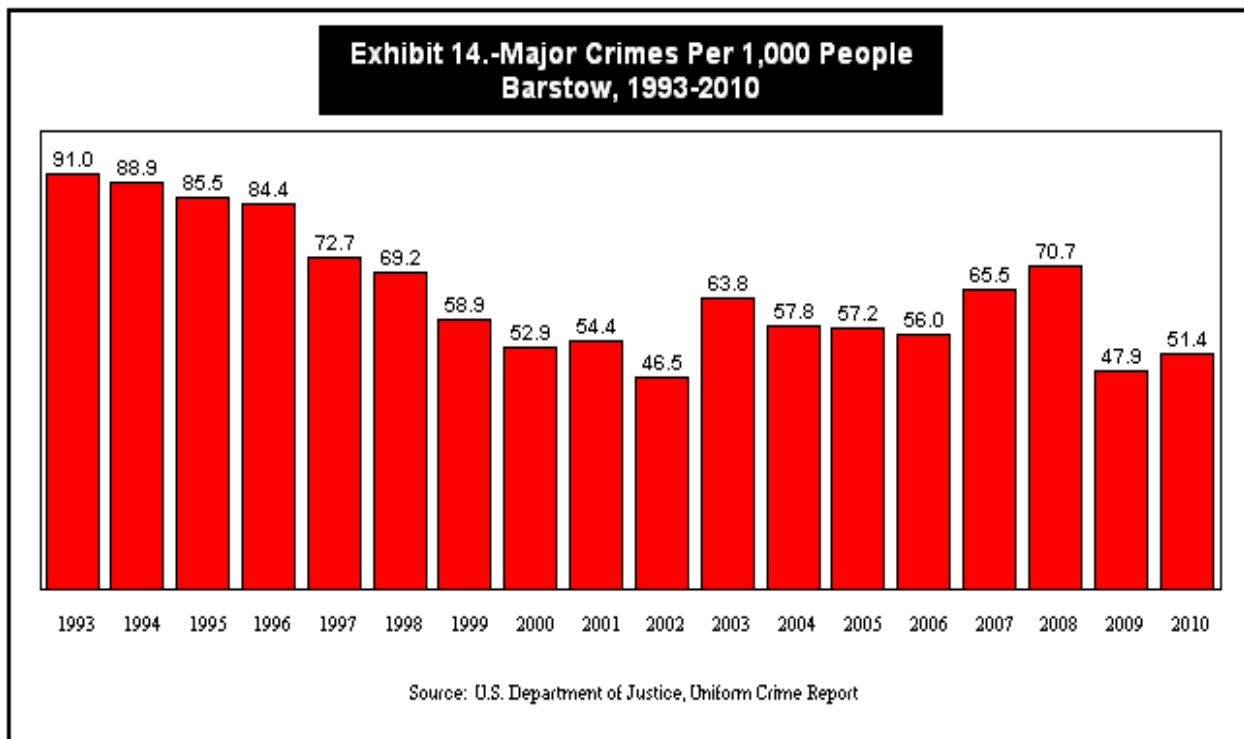
Is there a relationship between crime rates in Barstow and its economic activity? No.

One measure of "blight," is the level of crime that occurs in a community, particularly when its economy is struggling. At least this is the often stated belief among analysts that lack of jobs and crime rates are correlated with one another. With regards to the potential for DesertXpress to create difficulties for Barstow's economy, the Barbieri Commentary thus states that with the slowdown in economic activity:

¹⁵ Forecasts made for the Southern California Economic Development strategy and agreed upon by Dr. Wallace Walrod, Ph.D., economist of Orange County Business Council; Jack Kyser, former economist of Southern California Economic Development Corporation; John Husing, Ph.D. Chief Economist Inland Empire Economic Partnership; Brad Kemp, Beacon Economics; Michael Bracken, Development Management Group.

“It would also cause crime rates that constitute a serious threat to the public safety and welfare.”¹⁶

Interestingly, the Uniform Crime Reports made by Barstow’s police department to the U.S. Department of Justice do not agree with this supposition. Certainly, the worst two years of the recession for the Inland Empire were 2009 and 2010 when the region’s unemployment rate was among the highest in the U.S. at 13.3% and 14.5% respectively. In Barstow, the rates were 16.0% and 17.0%. Despite these facts, the city’s crime rates per 1,000 residents at 47.9 (2009) and 51.4 (2010) were second and third lowest since 1993 when the rate peaked (91.0) (*Exhibit 14*). They were thus below the rates during the economic boom years when they stood at 57.2 (2005), 56.0 (2006) and 65.5 (2007). For whatever reason, economic stress and crime rates in Barstow have become detached. Note: this has been the case for most Inland Empire cities.



Conclusion: Economic difficulty and high crime rates do not correlated in Barstow.

Is there a relationship between economic activity and the age profile of Barstow? No.

Another measure of social blight is the belief that decreases in economic activity will cause younger working age adults to leave a community, leaving behind a non-productive workforce. The Barbieri comments on this for Barstow indicating that:

“A disproportionate share of the city’s population consists of aging baby boomers and retirees while there is an unusually low share of young adults.” “The city of Barstow is an aging, isolated and small city that has not been able to provide jobs for its children.

¹⁶ Barbieri Commentary, p. 34

The younger, more educated people have relocated to other areas in search of job opportunities.”¹⁷

Exhibit 15.-Age Profile, Barstow 2000 & 2007-2009 and San Bernardino Co., 2009								
Age Group	2000	Share	Group	2007-2009	Share	Group	SB County	Group
0-9	3,682	17.4%		3,596	14.7%		15.9%	
10-19	3,493	16.5%	34%	4,195	17.2%	32%	17.3%	33%
20-24	1,520	7.2%		1,780	7.3%		8.0%	
25-34	2,640	12.5%		3,089	12.7%		13.9%	
35-44	3,149	14.9%	35%	3,815	15.6%	36%	13.6%	35%
45-54	2,502	11.8%		3,289	13.5%		13.6%	
55-64	1,584	7.5%	19%	2,253	9.2%	23%	9.1%	23%
65-74	1,385	6.6%		1,359	5.6%		4.9%	
75 & Up	1,164	5.5%	12%	1,041	4.3%	10%	3.7%	9%
Total	21,119	100.0%	100.0%	24,417	100.0%	100.0%	100.0%	100.0%

Source: U.S. Census, 2000; American Community Survey, 2009

Again, the data do not support this view. In 2000, 35% of the city’s population was 20 to 44. In 2007-2009, the American Community Survey found the share to have risen to 36%. In the wider market, San Bernardino County’s 2009 share was 35%. True, there are more aging baby boomers and retirees: Barstow 2000 (31%), Barstow 2007-2009 (33%) and San Bernardino County (32%). However, the differences are insignificant over time and with respect to the county. The upward movement was with respect to those under 20: Barstow 2000 (34%), Barstow 2007-2009 (32%) and San Bernardino County (33%).

At the same time, the share of Barstow’s population with bachelor’s or higher degrees has never been high. It was 9.1% in 2000; it was at 9.2% in 2007-2009. The share with high school or greater schooling was 77.6% in 2000; it was 81.1% in 2007-2009

Conclusion: There is no evidence that Barstow economic situation has caused its younger educated population to migrate away, leaving the city with an abnormal share of older residents.

Did the Husing Study over-estimate DesertXpress construction employment in Barstow? No.

In looking at the creation of construction employment during the building of DesertXpress, the Husing Study relied heavily on work by Thomas Carroll, Ph.D., a professor of economics at the University of Nevada, Las Vegas. Carroll found that in San Bernardino County, an average of 9,461 direct jobs per year would be created for three years as well as another 8,900 indirect and induced jobs. Altogether, that would represent an annual average of 18,361 jobs per year for three years.

In 2008, the Husing Study found that the city had 2,139 workers in blue collar sectors (*construction, manufacturing, wholesale trade, trucking, warehousing*). It contended that many

¹⁷ Barbieri Commentary, p. 9

of them would likely find work on a nearby project as large as the building of DesertXpress. Also, it should help with the city's unemployment rate which stood at 16.5% in April 2011.

Looking at the average of 18,361 total jobs created by DesertXpress construction activity in San Bernardino County, the Husing Study noted that in 2008 there were 10,463 jobs in the Barstow area out of a total of 600,307 in the county or 1.74%. It had earlier estimated that economic activity in Barstow would be 10 times more likely to create jobs in that city, giving it a share of 17.4%. It applied half that level (*5 times more likely*) or 8.7% to the jobs that would be affiliated with nearby DesertXpress construction. The result was 18,361 x 8.7% or 1,600 jobs.

In looking at these calculations, the Barbieri Commentary first opined that Barstow area workers would only be involved in track work (*\$1,890,041,000 budget*) and the environmental work (*\$242,368,000 budget*), a total of \$2,132,409,000 of the \$3,634,787,000 allocated by Carroll to San Bernardino County or 58.7% of the project spending. That statement was made based on the assumption, without documentation, that Barstow's workers lacked the skills to do other work that would be available on the DesertXpress project. Also, work that would occur at locations remote from the city is deducted.

Next, the Carroll analysis allocated 80% of the track construction costs to labor (*\$1,512,032,800*) and 60% of environmental mitigation costs to labor (*\$145,240,800*), a total of \$1,657,233,600 of the project's estimated payroll of \$2,160,318,000 or 76.7%. The Barbieri Commentary took issue with the 80% factor for labor cost involved with the track function. It did so with the caveat that this might be valid if San Bernardino County workers were involved in making the track and transporting it to the job. In fact, that is likely the case since the largest steel mill in the Western U.S. is California Steel located in Fontana.

Exhibit 16.-Average Annual Jobs Attributable to Track & Environmental Work DesertXpress, Three Year Construction Period				
Job Categories	Year 1	Year 2	Year 3	Total
Direct Jobs				
Civil/Track Jobs	4,090	9,871	5,717	19,678
Environmental Jobs	84	203	118	405
Total Jobs	4,174	10,074	5,835	20,083
Three Year Average: Direct Jobs				6,694
Indirect Jobs				
Civil/Track Jobs	3,847	9,285	5,378	18,510
Environmental Jobs	79	191	111	381
Total Jobs	3,926	9,476	5,489	18,891
Three Year Average: Indirect Jobs				6,297
Three Year Average: Total Jobs				12,991

Source: DesertXpress Predicted Employment & Economic Impact Analysis Summary, 2010, p. 11-12

Even accepting the Barbieri Commentary's concerns about what work could be done by Barstow based workers, and using the Carroll analysis's calculation of the jobs associated with only the track and environmental functions, then 12,991 (71%) of the 18,361 jobs from the project could be undertaken by Barstow's workers (*Exhibit 16*). Assuming the validity of the concern that

workers elsewhere, such as those at California Steel are in this mix, the fact that the Husing Study only allocated 1,600 of the project's jobs to the city was well within this limit.

However, the Barbieri Commentary also questioned the method by which the 1,600 figure was derived. As indicated, the Husing Study calculated that number of jobs by assuming that a construction project near Barstow would be five times more likely to use local workers than the area's 1.74% share of overall county jobs. That meant 8.7% of the 18,361 jobs related to DesertXpress's construction or 1,600 jobs would be undertaken by Barstow area workers. In the Husing Study, a 10 times factor had been used for the share of county jobs landing in Barstow because of economic activity generated by retailing (17.4%). The Barbieri Commentary's criticism seemed to assume that retail data was somehow involved in the 17.4% figure. It was not. It was the Barstow area's 1.74% share of San Bernardino County that was at the base of this calculation with a 10 times factor used to put jobs and activity into the Barstow area. In fact, the analysis for this report showed that this led to an underestimate of the local impact of retailing (*see Exhibit 3 discussion on page 8*).

Another way to come up with a factor is to look at the share of San Bernardino County's personal income that is within the Barstow area. In 2009, it was \$1,716,387,000 of the county's \$59,097,550,000 or 2.9%. If the construction activity was three times more likely to put income into the Barstow area, that would also yield the same 8.7% factor and 1,600 jobs.

In any case, with a major construction project occurring in and near Barstow, it does not seem unreasonable to assume that 1,600 of the 12,911 jobs being created in San Bernardino County in functions for which the Barbieri Commentary found local residents were competent would go to them or 12.3%. This is especially the case given the high unemployment rate and the fact that 2,139 local workers were doing related types of work in 2008.

The Barbieri Commentary raises a last issue in that federal construction projects require union workers for most blue collar functions. Without documentation, the statement is made that, "Barstow does not have a high percentage of union employees."¹⁸ Whether or not this is true, and whether it would inhibit participation in the DesertXpress project is pure speculation as no data appears to exist.

Conclusion. The Husing Study's conclusion that the building of DesertXpress would lead to an annual average of 1,600 construction jobs in the Barstow area over a period of three years, appears to be reasonable. This is the case when allowances are made for the concern in the Barbieri Commentary that local residents are only qualified to undertake work on a limited number of activities that will happen in San Bernardino County, or that those activities would be located at some distance from Barstow.

¹⁸ Barbieri Commentary, p. 36