

September 21, 2015


Dear reader:

This document summarizes: 1) significant issues that are insufficiently addressed in the revised Environmental Assessment for the proposed Sunport Boulevard extension and 2) relevant key findings from a Health Impact Assessment (HIA) of the proposed extension.

Human Impact Partners conducted the HIA with residents of the San Jose neighborhood, local advocacy organizations, and the New Mexico Department of Health, from June to November 2013. The draft HIA analyzed Bernalillo County's first publicly available Environmental Assessment for the Sunport Boulevard extension project, which was released in September 2011, in anticipation of an expected public comment period. However, the comment period was postponed, and nearly two years later in July 2015, the county released a revised Environmental Assessment (REA). After a review of the REA, the HIA report was finalized in September 2015. Although updated data for measures gathered in 2013 for the HIA may be available, the data presented in the HIA remains valid and supports the findings described in this summary. The full HIA follows this summary.

Please contact Sara Satinsky at 510-452-9442, ext. 104 should you have any questions.

Sincerely,

A handwritten signature in black ink that reads 'Sara Satinsky'.

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SUMMARY OF SIGNIFICANT ISSUES

The Bernalillo County Public Works Division is proposing to extend Sunport Boulevard from its current end at Interstate 25 to the intersection of Broadway Boulevard and Woodward Road. However, residents of the San Jose neighborhood are concerned that the project, planned as a four-lane divided highway connecting to roads that go through the neighborhood, will increase traffic, harming their health and well-being.

The neighborhood of about 4,000 people in south Albuquerque already bears a disproportionate environmental burden, from past hazardous chemicals and other materials that contaminated soil and water, and air pollution from traffic and industry. San Jose is racially and ethnically diverse, younger, with lower income and higher unemployment than the county as a whole, and meets the U.S. Environmental Protection Agency's criteria for an environmental justice neighborhood. The neighborhood is in an area that has among the highest death rates in the county from several health conditions, including cancer, diabetes, and conditions related to heart disease.

Findings

The summary table below lists significant issues with the revised Environmental Assessment (REA) that are described in this document.

Summary Table: Significant Issues with the Revised Environmental Assessment (REA)	
Traffic congestion	<ul style="list-style-type: none"> - Evidence does not support or is insufficient to support the stated purpose and need for the extension to relieve congestion - Data generally demonstrates traffic volumes have stayed the same or decreased in recent years - The REA recommends building the extension even though data it provides suggests benefits if the extension is not built compared to if Alternative A is built. These benefits include: 1) greater reduction in vehicles for roadways predicted to have poor Level of Service in 2035 and 2) less traffic in 2035 for a segment of 2nd Street south of Woodward Rd – an important segment where increased volumes could contribute to new congestion, which the REA does not discuss - Data is inconsistent or absent; for example: 1) using different roadway segments in tables that model 2035 data for the No Build Alternative and Alternative A and 2) providing projected 2018 traffic volumes only for Alternative A, but not other alternatives - Fails to provide substantive data on how improved access to economic centers will further contribute to vehicle traffic
Air quality	<ul style="list-style-type: none"> - Fails to provide data on the amount or type of emissions permitted for sources in the neighborhood today, where a Health Impact Assessment found residents who make up less than one percent of the city’s population bear much greater shares – from six to 11% – of permitted levels for seven pollutants that affect health - Fails to provide monitoring or modeling data on pollutants associated with vehicle traffic, such as particulate matter, ozone, and nitrogen dioxide - Fails to predict future emissions for areas impacted by the project, including future industrial air emissions
Cumulative impacts	<ul style="list-style-type: none"> - Fails to consider cumulative impacts as defined in the spirit of the EPA definition for the NEPA process - Fails to describe cumulative impacts to each subject area in the REA or the additive effect from combining these individual cumulative impacts - Fails to consider negative cumulative impacts from Alternative A or positive cumulative impacts from other alternatives - States that a Design Overlay Plan will mitigate negative impacts of the extension. However, the Plan is proposed – not adopted – and has not been made available to the public prior to the comment period for the REA
Multi-Modal Access	<ul style="list-style-type: none"> - Fails to consider negative impacts of Alternative A on multi-modal accessibility from increased vehicle traffic - Does not achieve a stated aim of the project to improve pedestrian and bicycle connectivity by not including sidewalks for the entire length of the extension
Transparency of Data	<ul style="list-style-type: none"> - Does not provide important data, including: <ul style="list-style-type: none"> o Impacts to congestion from increased traffic on 2nd Street after the preferred alternative is implemented o Parallel data to compare traffic on Alternative A and other alternatives in 2018 o Data to compare 2035 traffic projections for the same roadway segments under Alternative A and No Build o Air quality monitoring – with the exception of carbon monoxide – or modeling o Data to compare cumulative impacts between Alternative A and other alternatives o Data to compare impacts in multi-modal access for the alternatives o Impacts of the extension to the health and well-being of neighbors living adjacent to the extension, including those it mentions are in six single-family homes located 550 feet north of Alternative A
Alternative Routes Considered	<ul style="list-style-type: none"> - Insufficiently demonstrates that Alternative A should be the preferred option (<i>see issues in this table</i>) - Fails to provide transparent justification for eliminating the TSM/TDM Alternative

Based on findings from our Health Impact Assessment (HIA) conducted on the first Environmental Assessment released in September 2011, as well as an analysis of the revised Environmental Assessment, Human Impact Partners concludes that the county's proposed project and revised Environmental Assessment of the project is lacking in key areas. Not only does the San Jose neighborhood *not appear* to suffer from the traffic congestion used to justify the extension, but the extension could harm public health, through increased air emissions and unsafe streets. Additionally, despite requirements from the Council on Environmental Quality that cumulative impacts be considered in an environmental assessment, the revised Environmental Assessment fails to undertake meaningful cumulative impacts analyses in each of the subject areas it covers, nor does it discuss the additive effect of these individual impacts.

Congestion and Stated Need for the Extension

The REA identifies congestion relief as one major reason for the extension (page 1, paragraph 5). However, the evidence presented does not support this stated need and is insufficient in at least three ways.

First, the REA states that over the past few years, traffic volumes have decreased due to the economic recession and a significant drop in air travel through the Sunport airport (page 18, paragraph 1). With the exception of the Rio Bravo Boulevard road segment, data provided in the REA generally demonstrates a historical trend of traffic volumes that have either stayed the same or have decreased over time from 2008 to 2011 (page 18, table 2-2).¹ Recent construction on Rio Bravo Boulevard in 2011 and 2012 (page 25, paragraph 2) has likely improved volume-to-capacity ratios for this roadway segment, though the REA does not provide current traffic volume data for Rio Bravo Boulevard after the construction.

Second, data in the REA for future traffic volumes suggests greater reduction in vehicles – an estimated 397 vehicles total during peak hours and for roadways having a Level of Service (LOS) of D, E, or F for 2035 – if the extension is not built compared to if the preferred version (Alternative A) is built, based on data provided.² Further data cited by the REA suggests the 2nd Street road segment south of Woodward Road will have less traffic in 2035 under the No Build Alternative compared to if the preferred version of the extension were built (tables 2-1 and 3-2).³ Increased volumes on this particular segment of 2nd Street could contribute to new congestion by increasing traffic backups in two ways: while more vehicles wait at Woodward Road and William Street for railcar changes at the nearby BNSF intermodal rail, or while more vehicles wait to begin to navigate the Rio Grande bridge crossing near 2nd Street and Rio Bravo Boulevard. The REA fails to discuss either of these potential impacts. It simply states, “The No Build Alternative would not meet the purpose and need for connectivity, improving the transportation system continuity or easing area traffic congestion” (page 25, paragraph 3).

¹ Comparing 2008 with 2011 data, average weekday traffic volumes have increased only for the Rio Bravo Boulevard roadway segment, between Broadway Boulevard and I-25, from 30,820 vehicles per day in 2008 to 32,345 vehicles per day in 2011.

² The preferred alternative will reduce congestion (as measured by 2035 projected traffic volumes and poor Level of Service) for Broadway Boulevard, north of Woodward Road and for Rio Bravo Boulevard, Broadway Boulevard to I-25, while the No Build Alternative will reduce congestion for Broadway Boulevard, south of Woodward Road; Woodward Road, east of 2nd Street; and 2nd Street, from Rio Bravo Boulevard to Woodward Road.

³ As noted in this summary, the REA is not systematic in how it refers to the same road segments under different alternatives. In the absence of data in different years for the same road segments, this statement must assume that where Table 2-1 refers to “2nd Street, Rio Bravo to Woodward” and Table 3-2 refers to “2nd Street, south of Woodward” it refers to the same segment of road.

Third, traffic data is sometimes absent and when provided is inconsistent. A comparison of the preferred alternative (Alternative A) with the No Build Alternative is modeled for 2035, but the REA uses different roadway segments for both 2nd Street and Woodward Road, making it impossible to compare projected traffic volumes under the two alternatives for each of these roadways without assuming they refer to the same segment of road, which they may not. For 2nd Street, table 2-1 refers to the segment from Rio Bravo Boulevard to Woodward Road but table 3-2 refers to the segment south of Woodward Road. For Woodward Road, table 2-1 refers to the segments from 2nd Street to Broadway Boulevard but table 3-2 refers to the segment east of 2nd Street. Further, the REA only provides projected 2018 traffic volumes for Alternative A and does not provide projected 2018 traffic volumes for the No Build Alternative or for other alternatives.

The REA also fails to provide substantive data on whether and how improved access to area economic centers, which could encourage more development, may add to traffic congestion.

Air Quality

The REA acknowledges air emissions sources in the area today – including industry, an airport, and Air Force base – but does not provide data on the amount or type of emissions permitted for each source. It also fails to provide monitoring or modeling data on pollutants associated with vehicle traffic, such as particulate matter, ozone, and nitrogen dioxide. Absent monitoring or modeling data for these pollutants, it is difficult to evaluate the air quality impacts from the combination of existing sources, future traffic, and emissions related to development.

Indeed, the REA fails to predict future emissions for the neighborhood adjacent to the extension or the wider area impacted by the project. Instead, it generally states that the extension meets the federal National Ambient Air Quality Standards for carbon monoxide (page 46), and “the proposed Sunport Extension project is included in the MRCOG FY 2014 to FY 2019 TIP. The TIP conforms to the current State Implementation Plan for Air Quality developed by the Albuquerque – Bernalillo County Air Quality Control Board as required by the CAA.” (page 46, paragraph 2). It further states that modeling of air emissions associated with future industrial air emissions was considered outside the scope of the REA (page 88), discounting the necessity of considering cumulative impacts for air quality.

Based on data provided by Human Impact Partners, the resident panel involved in the HIA came to the conclusion that the proposed project was likely to harm the health of San Jose residents – particularly children, older people and other sensitive populations – in a place that already permitted high levels of air pollution and has other contaminants. The table below highlights that *while San Jose residents make up less than one percent of the City of Albuquerque’s population, the community bears a much greater share of permitted pollution for seven important types of pollutants.* The REA also does not address how the proposed project may contribute to this existing disparity.

Total tons of emissions allowed in San Jose and percent for City of Albuquerque, by pollutant, 2012						
Hazardous Air Pollutants (HAPS)	Sulfur Oxides (SOx)	Particulate Matter 2.5 (PM2.5)	Carbon Monoxide (CO)	Nitrogen Oxides (NOx)	Particulate Matter 10 (PM10)	Volatile organic compounds (VOCs)
76.8 (11%)	76.8 (11%)	57.0 (11%)	734.4 (10%)	571.3 (7%)	65.0 (7%)	295.3 (6%)

Source: City of Albuquerque Environmental Health Department, July 2012.

It is imperative, said one resident, to “protect the health, safety, (and) lifestyle of the people that live in the community,” and the extension is an opportunity to illustrate how future development can protect and improve spaces where residents gather.

Cumulative Impacts

The county's REA consistently fails to consider the *cumulative* impacts of adding more traffic and pollution to existing conditions. It fails to describe impacts to each of the subject areas that it covers – such as air quality, noise, socioeconomics and environmental justice that include public health and safety – as well as the additive effect from combining these individual cumulative impacts. Cumulative is defined here in the spirit of the Environmental Protection Agency definition for the NEPA process, as *incremental environmental impacts of an individual project combined with the environmental impacts caused by past projects, the environmental impacts caused by other current projects and the environmental impacts caused by reasonably foreseeable future projects*.

In assessing cumulative impacts, the REA states that the extension will result in positive cumulative impacts from increased economic development, without providing data to support the statement (page 79, paragraphs 2 and 5). It fails to consider possible negative cumulative impacts, stating, “The County has prepared the San Jose/Mountain View Design Overlay plan, which when adopted could mitigate impacts from future new development” (page 79, paragraph 2). Details of the Design Overlay Plan and how it may mitigate impacts are absent.

Without changes to the underlying zoning designation, it is unlikely the Design Overlay Plan will mitigate environmental pollutants from future businesses locating along Woodward Road. Design overlay only addresses the visual aesthetics of design, rather than operational elements of businesses. In fact, the REA states, “Although adherence to adopted design overlay requirements would not be a voluntary process, the presence of the design overlay does not erode property rights of landowners within existing zoning controls” (page 55, paragraph 4).

The REA states that the County’s proposed – but not adopted – Design Overlay Plan will also mitigate negative impacts of Alternative A. The Design Overlay Plan was not completed and made available to the public for review or input prior to the comment period for the REA. The not yet adopted document remains an idea but not a definite plan until it is approved. Further, the REA states that Alternative A is in close proximity – approximately 550 feet – to six single-family homes located east of Broadway Boulevard on the north side of Wesmeco Drive (page 62, paragraph 3).

Multi-Modal Access

Through the HIA process, residents found that the proposed extension would make streets less safe for pedestrians and bicyclists through increased traffic. The REA fails to consider negative impacts of Alternative A to multi-modal accessibility from increased vehicular traffic. Additionally, by not providing sidewalks for the entire length of the extension – only 700 feet of it – the REA misses an opportunity to realize a stated aim of the project to improve pedestrian and bicycle facilities and connectivity (page 9, paragraph 3). The REA cites lack of demand for accessing businesses on the east side of Interstate 25 as the reason without providing information to support the statement (page 27, paragraph 2).

Alternative Routes Considered

The REA does not sufficiently demonstrate that Alternative A should be the preferred route for the extension. According to projections provided in the REA, when compared to the No Build Alternative, total vehicles per hour during peak hours would increase under Alternative A

along roadways having a Level of Service of D, E, or F. The REA also does not provide transparent justification for eliminating an alternative for Transportation System Management/Transportation Demand Management (TSM/TDM). Of the TDM, the REA states that no large employers are actively sponsoring TDM initiatives in the study area and of the TSM, it says the alternative would provide “modest and localized improvements” in the operations of the overall existing transportation system, without providing data to substantiate the statement or to compare the TSM alternative with other alternatives (page 23, paragraphs 4 and 5). The REA also fails to consider the negative cumulative impacts that might result from Alternative A and the positive cumulative impacts that might result from the selection of alternatives D or H, both located further from residential areas, a TSM/TDM Alternative, or No Build Alternative.

Transparency of Data

The REA does not provide the data needed to substantiate a number of statements made in the report. The REA does not include data to assess: 1) impacts to congestion from increased traffic along 2nd Street as a consequence of implementing the preferred alternative; 2) parallel traffic comparisons between Alternative A and other alternatives for 2018; 3) 2035 traffic projections under Alternative A compared to the No Build Alternative for the same roadway segments; 4) air quality monitoring – with the exception of carbon monoxide – or modeling; 5) a comparison of cumulative impacts between Alternative A and other alternatives; 6) a comparison of projected improvements, or detractions, in multi-modal access for Alternative A and other alternatives; and 7) impacts of the extension to the health and well-being of neighbors living adjacent to it - residents living in six single family homes 550 feet north of Alternative A.

RECOMMENDATIONS*

The recommendations below come from a variety of sources. Fourteen were developed by the HIA resident panel in response to their analysis of the impacts of the first environmental assessment released in September 2011. They are included here because they continue to be relevant to the significant issues that remain in the REA (as described in this document).

In making these recommendations, we take a broad perspective that includes both the half-mile extension itself and the future economic development that will follow. As such, many recommendations would be implemented after the proposed extension is built, and with an emphasis on preventing future environmental hazards.

Overall

1. The county should more thoroughly and transparently reconsider Alternatives D and H, not only Alternative A, and mitigations.
2. The city and county should improve public information-sharing about the proposed extension and related planning. Specific actions include:
 - a. Publicly share plans to meaningfully involve the San Jose neighborhood in ongoing planning for the Sunport Boulevard Extension, to ensure that resident perspectives help shape future development.
 - b. Increase communication between city and county, as well as directly to residents, including but not only through the San Jose Neighborhood Association, and ensure communication is in culturally appropriate methods and languages. Publicly and immediately share formal and informal plans for the extension and development in the surrounding area. Specifically, share information on whether there is a vision – and what it is – for promotion of commercial and industrial development along the

extension, such as zoning documents or plans ranging from the short-term to long-term (e.g., five-year plans, thirty-year plans, and so forth).

If the Sunport Boulevard Extension is built:

Environmental Hazards

3. The city and county should require that future permitting processes for the San Jose neighborhood include the completion of cumulative impact assessments that more accurately consider health impacts. Cumulative is defined in the spirit of the Environmental Protection Agency definition for the NEPA process, as *incremental environmental impacts of an individual project combined with the environmental impacts caused by past projects, the environmental impacts caused by other current projects and the environmental impacts caused by reasonably foreseeable future projects.*
4. The City of Albuquerque Air Quality Division should improve air quality monitoring and enforcement of existing air quality regulations in the San Jose neighborhood as follows:
 - a. Collect baseline information throughout the neighborhood on actual air quality emissions. If the information is collected by City or County agencies, it should be validated by outside organizations.
 - b. After the extension is completed, regularly monitor air quality at sensitive sites such as schools and community centers. Commit to retrofitting these facilities (e.g., provide upgrades to building thermal performance and ventilation systems) to keep indoor air pollutant levels below applicable state and federal standards, and mitigate exceedances found at baseline levels, if pollution levels surpass what is harmful to human health.
 - c. Add an air monitor in San Jose where vulnerable populations congregate. The monitor should measure the six criteria pollutants (ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead), as well as volatile organic compounds.
5. The city and county should ensure compliance with and enforcement of existing noise standards. To do so, the city and county should collect baseline noise measurements in the community of San Jose to ensure standards are not being exceeded.
6. The city and county should consider revising noise control ordinances to set the standard for traffic-related noise, at 65 dBA or less for daytime and 55 dBA or less for nighttime.

Safety from Injuries and Collisions

7. The city should prohibit heavy trucks on residential streets in San Jose neighborhood.
8. The city and county should implement appropriate traffic calming features to slow trucks on roads that will see increased traffic from the Sunport Boulevard Extension.
 - a. Examples of traffic calming to consider are reduced speed limits, rumble strips, and landscaping.
 - b. Example locations for reduced speed limits are Broadway Boulevard traveling down the hill by Bethel Avenue and San Jose Avenue.
9. The city and county should create facilities to protect and encourage pedestrians and bicyclists on roads near the Sunport Boulevard Extension that will experience increased traffic during and after its construction. Actions include:
 - a. Building sidewalks with storm drainage. Example locations are Broadway Boulevard headed to Woodward Road, on Wesmeco Drive, on Arno Street, and John Street.
 - b. Extending the bike lane on Broadway further into the San Jose neighborhood.

- c. Adding traffic lights at the intersections of William Street and Woodward Road, as well as Second Street and Woodward Road.
10. The City of Albuquerque Transit Department should ensure that the 16/18 bus route is maintained during and after construction of the Sunport Boulevard Extension. Also, the city should build bus shelters where the bus is used but there are not currently shelters to protect riders – for example, on William Street, Woodward Road, and Broadway Boulevard.

Miscellaneous Recommendations

11. Bernalillo County Public Works should include drainage facilities when building the Sunport Boulevard Extension.
12. To advance the economic prosperity of residents in the San Jose neighborhood, the Bernalillo County Economic Development Department should require businesses locating along Sunport Boulevard Extension to develop plans and commitments for local hiring, job training, and educational programs. For example, the city and county could work with businesses to start a GED program with instructors in the community that is free for low-income residents of the San Jose neighborhood.
13. To ensure San Jose residents are actually able to access workforce development and job training programs as well as access new jobs created in the community, the Bernalillo County Economic Development Department should require that businesses locating along Sunport Boulevard Extension *not ask* about applicants' history of arrest in job applications and interviews.⁴
14. The Bernalillo County Economic Development Department should establish a living wage (e.g., modeled on the living wage ordinance in Santa Fe) and require jobs created by businesses relocating or locating along the Sunport Boulevard Extension to pay such wages. In addition to paying a living wage, all permanent jobs (including part-time and full-time permanent jobs) created by business located near the extension should provide full health benefits.

Additional Recommendations

At the conclusion of the HIA process, the Steering Committee and project partners proposed additional recommendations to supplement those from the resident panel. These recommendations were not vetted in the same way, but are listed here as they provide valuable suggestions for appropriate parties to consider as well.

They include:

- Consider completing an Environmental Impact Statement to more fully assess the environmental impacts of the extension on environmental and human health, including reasonable alternatives (including a No Action alternative) that would avoid or minimize adverse impacts or enhance the quality of the human environment.
- The county, MRCOG, or other appropriate party should do a comprehensive traffic study that includes roadways connected to or near the extension that will be affected by it. The study should assess changes in traffic and how those are expected to affect air

^c Two members of resident panel abstained from this vote

⁴ There was not unanimous agreement on this proposal; however, the majority of residents on the resident panel voted in favor of it.

quality and noise. The study should consider potential short-term and long-term development (e.g., five-year plans, thirty-year plans, and so forth) that will and/or could take place if the extension is built.

- Absent discussion of cumulative impacts in this document, planning agencies and other authorities could consider a moratorium on approving projects that will result in new environmental hazards in the community.
- The city and county should draft relevant plans and commit funding to ensure pedestrian- and bicycle-safety measures and improvements on roadways such as Second Street that connect to the extension and will experience increased traffic or congestion, regardless of the alternative chosen. Plans should redesign these roadways for neighborhood pedestrian, bicycle, and vehicular safety, and to avoid increased cumulative air emissions. This should be done prior to completion of the extension in this environmental justice community.
- A specific way to implement the Steering Committee recommendation about public input is for the county to form and fund a Community Advisory Council that regularly provides input and feedback on plans for the proposed extension.
- Improvements to pedestrian and bicycle facilities on adjacent roadways that the extension will affect, such as Woodward Road, should be put in place when the extension is built.
- The County should consider building sidewalk adjacent to the entire length of the extension, rather than for only 700 feet.
- The appropriate body should provide voluntary relocation of residents living in housing that is the closest to the extension.
- The appropriate body should involve impacted residents in identifying requirements for developments within the boundaries of the Design Overlay Plan.

Shining a Light on Health: How the Sunport Boulevard Extension Project Will Affect Health and Well-Being

September 2015

By Human Impact Partners, with the participation of residents of the San Jose neighborhood

With support from
Bernalillo County PLACE MATTERS
New Mexico Health Equity Partnership–Santa Fe Community Foundation
New Mexico Department of Health
SouthWest Organizing Project



NM HEALTH EQUITY PARTNERSHIP



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I. Introduction

The Bernalillo County Public Works Division is proposing to extend Sunport Boulevard approximately one-half mile from its current end at Interstate 25 to the intersection of Broadway Boulevard and Woodward Road. There it would join Woodward, which eventually ends at Second Street. The Sunport Boulevard Extension (the extension) would be a four-lane divided highway.

The county indicates that the extension will reduce congestion on Rio Bravo Boulevard, Gibson Boulevard and their interchanges with I-25; improve traffic flow by providing another east-west arterial; and continue the development of the street system envisioned in planning documents, which date to the 1980s.

If built, the extension will connect to roads that go through the neighborhood of San Jose in Albuquerque. Over the past two years, neighborhood residents have expressed concerns about the planning processes for the extension, especially the public participation process, and the scope of impacts examined in the county's environmental assessment. San Jose's population is racially and ethnically diverse, younger, lower income, and with higher unemployment than Bernalillo County overall. It has a long history of environmental degradation from industrial and auto pollution, including the designation of two Superfund sites, and meets the criteria of the U.S. Environmental Protection Agency of an environmental justice neighborhood.

San Jose residents approached Human Impact Partners (HIP) about leading a Health Impact Assessment (HIA) of the proposed extension. Residents wanted to understand how the project would impact their health and well-being and to identify recommendations they could submit to the county to mitigate negative health effects or enhance positive effects.

This report summarizes the HIA. It focuses on three key areas: exposure to environmental hazards, safety from injuries and collisions, and social connectedness. Section II gives background information on San Jose, with a focus on the history of environmental issues and current demographics. Section III provides greater detail on the extension, including proposed alternatives, related planning processes, and findings from the county's environmental assessment report. Section IV describes existing conditions and predicts effects if the extension is built as proposed. Section V includes recommendations to decision makers and Section VI concludes the report.

About This HIA

Human Impact Partners led this Health Impact Assessment to understand how the proposed extension will impact the health and well-being of residents of the San Jose neighborhood. According to the National Academies of Sciences, HIA is "a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, plan, or project on the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects." The fundamental purpose of this HIA is to inform decision-makers before they decide on the extension proposal.

· "To be classified as an environmental justice community, residents must be a minority and/or low income group; excluded from the environmental policy setting and/or decision-making process; subject to a disproportionate impact from one or more environmental hazards; and experience a disparate implementation of environmental regulations, requirements, practices and activities in their communities." Source: Environmental Protection Agency, Region 6. Frequently Asked Questions. <http://www.epa.gov/region6/6dra/oejta/ej/ejfaq.htm>

The HIA work was supported with funding from the W.K. Kellogg Foundation. Data was collected from June to November 2013, in anticipation of an environmental assessment public comment period soon after. However, the environmental assessment was revised and released approximately two years later, in July 2015. The HIA report was mainly drafted based on the original environmental assessment; however, it was completed in September 2015 to speak to significant issues identified in the original environmental assessment and still unaddressed or insufficiently addressed in the revised document.

Guiding the HIA process was a steering committee that included Human Impact Partners, a resident of the San Jose neighborhood, Bernalillo County PLACE MATTERS, New Mexico Department of Health, New Mexico Health Equity Partnership–Santa Fe Community Foundation, and the SouthWest Organizing Project. Early in the HIA planning process, the steering committee decided to use a consensus model. This approach seeks to meaningfully engage residents through a participatory research process, particularly when limited resources are available to weigh in on a proposal and a relatively short decision-making timeline is expected. The model is adapted from an approach that originated in Denmark to guide elected officials in science and technology decisions and stimulate public discussion of these issues.

For this HIA, the model included two meetings attended by a panel of residents likely to be affected by the decision (resident), members of the steering committee, and other stakeholders, as well as technical experts on the subjects under assessment (subject experts) who joined one of the meetings. The 10 panel members were all residents of the San Jose neighborhood and were identified and recruited by personal outreach from steering committee members. The HIA timing was initially targeted around an expected release of the EA in late Fall or early Winter 2013. The first meeting of the resident panel was on August 17, 2013. Panel members explored the connectedness between transportation and health, learned about the consensus process and how it could be used for the extension, and came to consensus on priority issues. From input at that meeting, the steering committee finalized the scope of the HIA.

At the second meeting, on September 14, 2013, panel members first examined demographic information about the neighborhood in the three issue areas. Then residents talked with experts in air quality and economic development, who provided a context for how these issues were relevant to the proposed extension. Residents also heard about resources for information on safety from injuries and collisions. Then they worked to reach consensus on likely effects the extension would have on factors that shape health, and came to consensus on recommendations to be included in the HIA.

HIP conducted the research and drafted the report, prepared materials for and helped facilitate the meetings and managed the overall process. Local steering committee members organized the meetings and facilitated portions of the agenda; provided feedback on the HIA's pathways and scope of research, and tracked the extension process. Resident panel members received a stipend of \$100 for their participation at each meeting. At both meetings we provided breakfast and lunch, simultaneous Spanish interpretation, and all materials in English and Spanish. The second meeting also provided child care for participants.

Extensive research recognizes that health is a product of social, environmental and economic conditions that create opportunities for individuals, families and communities to lead healthy lives. We defined health in this broader context, leading the scope of research in the HIA to focus on three key areas: exposure to environmental hazards; safety from injuries and collisions; and social connectedness. See Appendix B for HIA pathway diagrams.

We examined more than 50 indicators and findings were derived through a range of methods. We reviewed the literature on the key areas of interest, conducted limited secondary data analysis and mapping of local data, and gathered statistics from administrative reports and government websites.

About Human Impact Partners

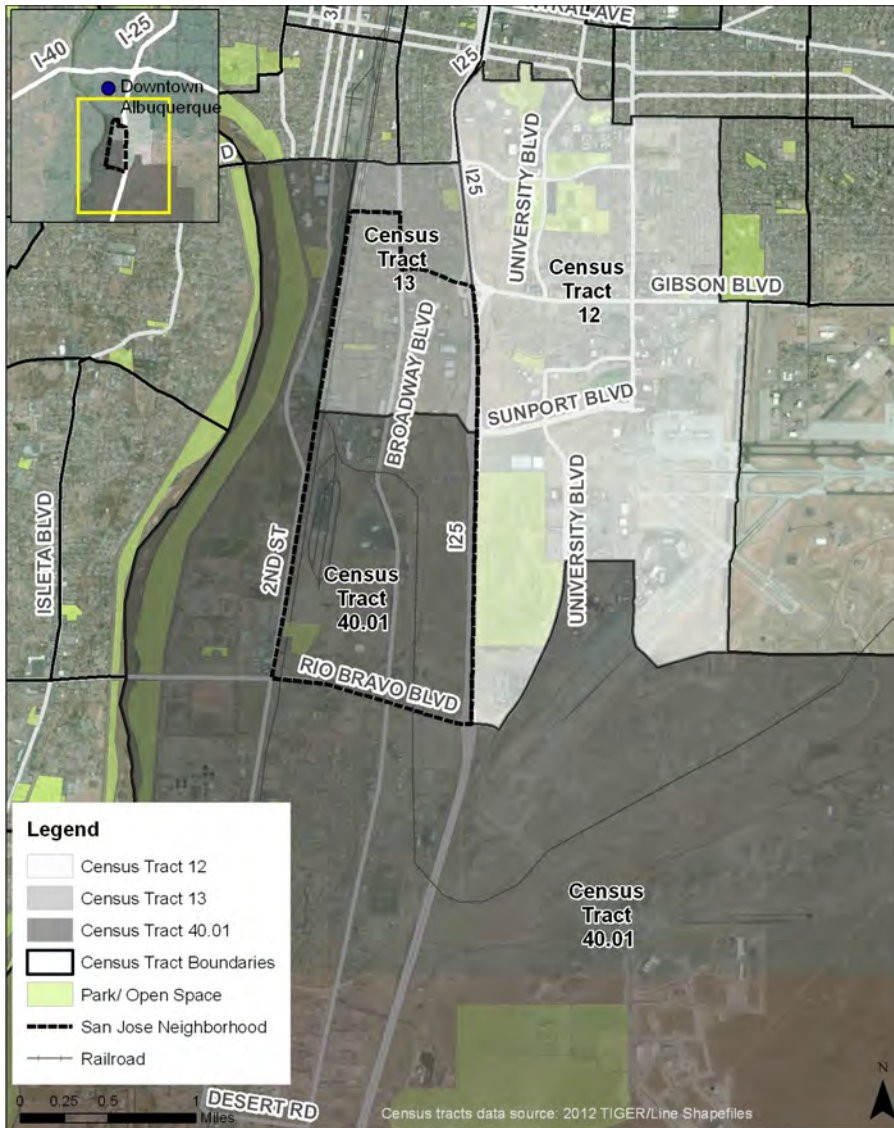
Human Impact Partners is a 501(c)3 organization based in Oakland, Calif. HIP's mission is to transform the policies and places people need to live healthy lives by increasing the consideration of health and equity in decision-making. Through research and advocacy, we help organizations and public agencies use innovative data, processes, and tools that evaluate health impacts and inequities to challenge the inequities that harm the health of our communities. Through training and mentorship we also build the capacity of impacted communities and their advocates, workers, public agencies, and elected officials to conduct health-based analyses and use them to take action.

Our work is guided by the definition of health established by the World Health Organization in 1946: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." We are one of the few organizations in the United States conducting health-based analyses with an explicit focus on uncovering and then addressing the policies and practices that make communities less healthy.

II. Background

The study area for this HIA is the San Jose neighborhood of Albuquerque, as identified by the San Jose Neighborhood Association. This area is bounded on the south by Rio Bravo Boulevard, on the west by the Santa Fe railroad tracks, on the north by Kathryn Avenue, and on the east by Broadway Boulevard, Gibson Boulevard and Interstate 25.

Map 1. San Jose neighborhood



Source: Human Impact Partners, December 2013.

Below we describe a brief history of environmental issues in San Jose and an overview of the neighborhood's demographics.

IIA. History of Environmental Issues in San Jose

San Jose has been next door to industrial and commercial operations for over a century. The neighborhood began as a primarily agricultural area in the early 1800s, became an industrial area with the arrival of the Atchison, Topeka and Santa Fe Railroad in 1880, and entered a period of decline in the mid-20th century. Today, land use policies continue to reflect this legacy by permitting rail lines and industry close to homes.¹

The Environmental Protection Agency lists two Superfund sites in San Jose, both considered national cleanup priorities. The South Valley site is a one-mile radius around a public well being treated for groundwater contamination. In 1978 testing was done in response to resident complaints and detected chemicals called volatile organic compounds, which can be toxic to humans. The contamination was attributed to historic industrial and commercial operations, in particular the byproducts of decades of chemical and manufacturing activities by Univar and General Electric.² In the 1980s, 20 private wells and two municipal wells were taken offline and in 1994 two municipal wells were plugged and permanently abandoned.^{2,3,4} There have also been efforts to clean up underground aquifers that were contaminated. In 2009, a five-year review found signs of contaminants and recommended that treatment continue. Residences are in close proximity to the site – at least one is within the site’s borders and additional residences are adjacent to the site.²

A second Superfund site in the neighborhood is the Atchison, Topeka & Santa Fe (AT&SF) site. It has been undergoing cleanup of groundwater and soil since 1990 to correct contamination to it and is due for review in 2013, but is not now approved for reuse. The AT&SF site is the former home to a plant where the railway used chemicals such as creosote, which is harmful to human health.^{2,5}

In 1972 the plant was demolished and contaminated debris from the structure was unsafely dumped into a nearby wastewater reservoir. The resulting contamination threatened groundwater and the soil. A hazardous liquid that dissolves in groundwater and slowly seeps towards the underlying bedrock was released. Additional risks were posed by zinc in the soil and toxic concentrations of air pollutants known as polynuclear aromatic hydrocarbons (PAH). The company, renamed BNSF, was ordered to remove the debris from the reservoir in 1990. Corrective actions have included soil and water treatment, removing or capping contaminated soil and sludge, and replacing groundwater. Under an agreement between BNSF, EPA, and the New Mexico Environment Department, the site is restricted to future industrial and commercial activities as a tradeoff for relaxed on-site capping standards.⁶

There is a strong tradition in the South Valley and in San Jose of community involvement in identifying potential environmental hazards, including efforts led by organizing groups, a local church, and residents alike.

In the 1960s, two local political organizations, the Black Berets and Brown Berets, sought to address a foul-smelling sewage treatment plant affecting residences in San Jose, organizing a neighborhood tour for officials.⁷ More recently, active groups have included the SouthWest Organizing Project, a national pioneer of the environmental justice movement that continues in the South Valley today.^{8,9}

Separately, a local church played a key role in a lawsuit filed by the New Mexico Attorney General that resulted in a multi-million dollar settlement with Chevron-Texaco.^{10,11} Similarly, in 2004, South Valley residents and Amigos Bravos, a statewide conservation organization, pushed for important revisions to the Water Quality Control Commission’s surface water

quality standards.¹² As recently as 2008, South Valley residents were involved in an effort urging the Bernalillo County Air Quality Control Board to adopt an environmental justice resolution and consider cumulative impacts of pollution.¹³

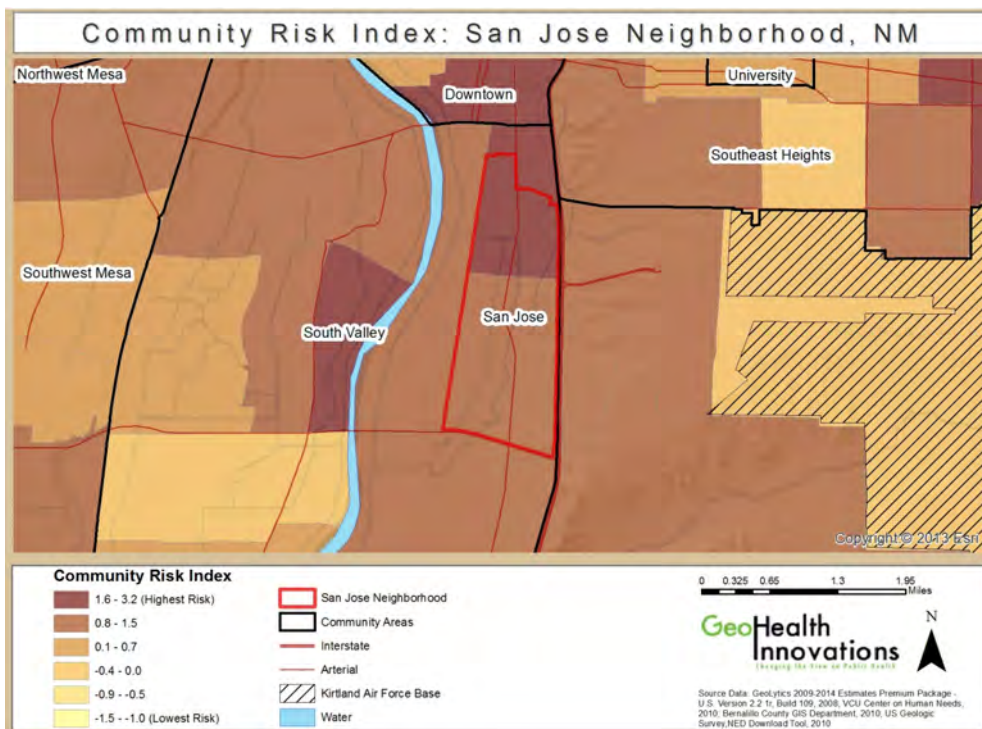
In the 1990s and 2000s, the now-defunct Albuquerque San Jose Community Awareness Council played an instrumental role in advocating for the environmental concerns of the community.¹⁴ Growing from volunteers based in a neighborhood church to a state-funded environmental educational program, the council has been credited with many successes.^{15,16} The record of public comment on the AT&SF plan shows that the council provided a strong, professionally informed presence on behalf of San Jose residents in the decision-making arena.¹⁷

More recently San Jose residents have urged consideration of the potential health effects of proposed projects such as an indoor dirty material recovery facility and a newly acquired Vecenergy bulk gasoline terminal.¹⁸ Residents also have participated in a community-operated air-quality monitoring project in partnership with the SouthWest Organizing Project and Global Community Monitor.^{18,19,20}

IIB. San Jose Today

A picture is worth a thousand words. The map of San Jose below depicts the neighborhood's *community risk index*, among the highest in Bernalillo County. Risk is defined here as a single measure that is created by combining several economic, educational, and social factors such as unemployment, education, and crime.¹

Map 2. Community risk index by census tract, San Jose neighborhood, Albuquerque, 2010



¹ For the full list of factors included in the index, see: <http://www.societyhealth.vcu.edu/Page.aspx?nav=214>

Table 2 describes demographics in the neighborhood. (Data often are not available for this exact area, and in those cases we use the closest approximations available.) Overall, San Jose makes up less than one percent of the county population. However, compared to Bernalillo County it is a younger neighborhood, with a larger portion of the population under age 18, and one with a much higher proportion of non-whites (it is predominantly Hispanic/Latino).

Nearly 1 in 4 families in San Jose lives in poverty; the median income is 60 percent that of Bernalillo County overall. Less than half of residents have a high school diploma or equivalent, in a county where jobs often require the equivalent of a high school degree or higher (see Table 1). Unemployment is nearly one-third higher in the neighborhood than within the county overall.

Table 1. Example of minimum education level required for jobs in Bernalillo County, October 2, 2013

Minimum Education Level	Percentages for Bernalillo County
Not Specified	N/A
High School Diploma or Equivalent	50 %
Vocational School Certificate	3%
Associate's Degree	11%
Bachelor's Degree	30%
Master's Degree	5%
Doctorate Degree	1%
<i>Source: New Mexico Department of Workforce Solutions, October 2, 2013.</i>	

San Jose residents spend less time, on average, getting to work than county residents overall. More residents take public transportation to work when compared to the county, and a larger portion does not have access to a car.

Table 2. Demographics of San Jose neighborhood and Bernalillo County, NM

Indicator	San Jose neighborhood	Bernalillo County
Population ^a	4,301	655, 306
Age ²¹	33%	24%
Non-white population ²¹	97%	58%
Hispanic / Latino population ²¹	94%	48%
Median household income (in 2011 dollars) ^a	\$28,507	\$48,231
Income below poverty in the past 12 months ²²	13%	24%
Less than a high school diploma or equivalent ^a	53%	13%

^a For health data, from the New Mexico Department of Health, and per the recommendation of staff at that agency, the report uses Small Area 7. For demographics and environmental hazards, we use census tract 13. For crime data, we use the San Jose Neighborhood Association boundary and report information only from the Albuquerque Police Department; this excludes the portion of the neighborhood in the Bernalillo County Sheriff Office's jurisdiction.

Table 2 (continued)

Indicator	San Jose neighborhood	Bernalillo County
Unemployment ^{22,24}	10.9%: 2007-2011 estimate 6.2%: 2006-2010 estimate	7.3%: 2007-2011 estimate 4.2%: 2006-2010 estimate
Time spent traveling to work ²²	19 minutes	22 minutes
Public transportation to commute ²²	6%	2%
Access to a motor vehicle ²²	8%	6%
<i>Sources: American Community Survey, 2006-2010 and 2007-2011.</i>		

High crime rates have decreased over time both in the San Jose neighborhood and Albuquerque overall, but remain an area of focus today. Recent rates for reported violent crimes are lower, but property crime rates are higher in San Jose than in the city overall.

Reported violent crimes in the neighborhood are an estimated 3 per 1,000 people compared to an estimated 8 per 1,000 people in the city overall; however are likely an undercount in the neighborhood.[§] Reported property crimes are an estimated 21 per 1,000 people in the neighborhood compared to an estimated 5 per 1,000 people in the city overall.[§]

In both Albuquerque and Bernalillo County, gross receipts dipped during the national recession in 2008, though the city experienced a larger dip than the county (see table 3).⁻

Table 3. Tax revenues for City of Albuquerque and Bernalillo County, FY2007-2011

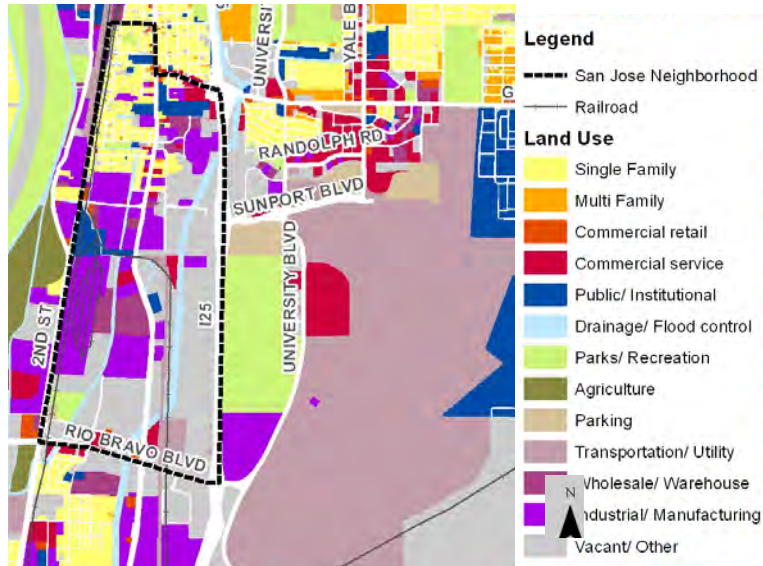
Municipally Imposed Gross Receipts Tax Revenues, City of Albuquerque and Bernalillo County, Fiscal Years 2007 to 2011 (in millions of dollars)					
	2007	2008	2009	2010	2011
City of Albuquerque ²⁶	\$188.6	\$177.9	\$154.2	\$132.0	\$ 144.5
Bernalillo County ²⁷	\$100.1	\$95.8	\$91.7	\$89.1	\$89.7
<i>Sources: City of Albuquerque, 2012 and Bernalillo County, 2008 to 2011.</i>					

Zoning in San Jose allows various residential uses in the northern part of the neighborhood, and various types of industrial and heavy manufacturing uses in the southern part. In terms of how land is actually used, it is primarily a mix of vacant properties or other uses, industry, and homes (39% vacant or other, 29% industrial, 10% residential). There is some commercial land use (4%), but overall there are few commercial or retail opportunities for residents, either for jobs or as consumers (see map 3).[§]

[§] For San Jose neighborhood estimated crime rates are derived from crime frequencies provided by the Albuquerque Police Department (APD) and population estimates from the U.S. Census. These numbers are likely an undercount. They include reported crimes in the APD jurisdiction, which does not include areas of San Jose that are in the jurisdiction of the Bernalillo County Sheriff's Department. Also, they include only reported crimes. Many crimes may go unreported. A limitation is that the estimates approximate the population of the area served by Albuquerque Police Department, using U.S. Census information. Estimates of crime rates for the City of Albuquerque are reported from the FBI's Uniform Crime Reporting system.

⁻ Sales tax revenue is a major source of revenue for local, state, and federal governments. In New Mexico, sales tax revenue is measured in gross receipts revenue. Gross receipts revenues are not readily available at the level of the San Jose neighborhood; however, they are available for the city and county overall.

Map 3. Land use in and around San Jose neighborhood



Source: Human Impact Partners, December 2013.

Snapshot of health in San Jose

A recent study in the *American Journal of Public Health* that focused on women, summarized the importance of social conditions in thinking about demographics and health outcomes:

"... Higher rates of both poor health outcomes and higher risk behaviors in women of color and low-SES women should be seen as reflective of adverse social circumstances rather than individual failing. In a similar way, data on lower rates of adverse health outcomes and risk behaviors in White and more affluent women should be seen as reflective of the privileges and advantages that accompany membership in a dominant social group."

- Dehlendorf et al. *AJPH*, October 2013, vol 103, no 10

From that perspective, we summarize current health conditions in San Jose and related costs.

San Jose's health area has among the highest rates in the county of deaths from several health conditions. It ranks first in deaths from cancer as well as conditions related to hardened arteries and high blood pressure, second in deaths from diabetes as well as respiratory diseases related to flu and pneumonia, and sixth in deaths from heart disease.²⁹

Living with these conditions has costs for residents, and a large proportion of neighborhood residents do not have health insurance. The average cost of cancer treatment is \$150,000.³⁰ One-year costs for patients with atherosclerosis, or hardened arteries, average approximately \$13,000.³¹ Costs associated with stroke average \$15,000 per person, and the American Diabetes Association estimates around \$8,000 in annual cost for a person with diabetes is.^{32,33} For a person who experiences heart failure, costs to cover medication and hospital are an estimated \$8,500.³⁴ Approximately one-fourth (24.3%) of residents in the neighborhood do not have health insurance; a higher proportion than for the county overall (19.8%).³⁵

²⁹ Based on death rates – meaning deaths per 100,000 people – that have been adjusted for age during the period 1999-2011 across small areas in Bernalillo County.

III. About The Sunport Boulevard Extension Project

This section describes in detail the proposed Sunport Boulevard Extension, lists planning documents apart from this project that explicitly reference the proposed extension, and describes findings from the county's initial environmental assessment.

III.A. The Proposed Extension in Detail

At-A-Glance (based on 2011 Environmental Assessment)

Justification: Lengthen Sunport Boulevard so it connects to Woodward Road and eventually ends at Second Street, instead of its current endpoint at the I-25 interchange

Length: Approximately half a mile

Design: 4 lanes

Cost: \$17 million-plus

Funder: Federal and state transportation agencies, county public works

Location: TBD; county prefers Woodward Road option (called "Alternative A")

The county is considering three routes for the extension, all of which seek to extend Sunport Boulevard from its current end at I-25. Of the three options under consideration, the county prefers the Woodward Road option.

- Woodward Road option (Alternative A): Lengthen Sunport Boulevard to the intersection of Broadway Boulevard and Woodward Road. There it would join Woodward, which ends at Second Street.
- Stock Drive option (Alternative D): Lengthen Sunport Boulevard to the intersection of Broadway Boulevard and Stock Drive, south of the Chevron bulk fuels terminal.
- Unnamed street option (Alternative H): Lengthen Sunport Boulevard to the intersection of Broadway Boulevard and an unnamed 400-foot-long long dead-end street that is just north of an equipment yard for the New Mexico Department of Transportation.

Map 4. Alternatives under consideration, Sunport Boulevard Extension³⁶



Source: URS Corporation, September 2011.

The proposed extension would include:

- A median divider
- Bridges over the Albuquerque Metropolitan Arroyo Flood Control Authority South Diversion Channel and over Edmunds Street
- A combination of retaining walls and fill sloping to grade

The extension also crosses the South Valley Superfund site, described above.

The county is undertaking the proposed extension in cooperation with the New Mexico Department of Transportation and the Federal Highway Administration. The estimated cost is between \$17.1 million and \$17.9 million. Not included in the cost are proposed, but unfunded, improvements for Woodward Road, which connects to the Sunport Boulevard Extension.

Currently the project is undergoing environmental assessment. Funds have been allocated but the assessment must be completed before the county can complete design and construction by the projected fall 2017 completion date.

III.B. The Proposed Extension in Context

Over time, various planning processes for the city, county and region have shaped the San Jose neighborhood. Below are several key plans that mention the proposed extension. In these documents, the project is considered a “committed improvement,” one that has dedicated funding and is expected to be built.³⁷

Mid-Region Council of Governments (MRCOG) 2035 Metropolitan Transportation Plan, approved in June 2011. The Metropolitan Transportation Plan is a long-range planning document, updated every four years and projecting 20 years in the future. It identifies transportation needs, goals, and a framework to meet these needs.

MRCOG FY 2012 to FY 2017 Transportation Improvement Program. The Transportation Improvement Program is a plan for implementing needs identified in the Metropolitan Transportation Plan. It is updated twice a year and covers projects intended to begin six years into the future. It also lists anticipated federal, state, and local money for the projects.³⁸ For the proposed extension, the plan estimates the cost at nearly \$18 million.

New Mexico Statewide Transportation Improvement Program. The state has its own version of the Transportation Improvement Program, since federal funds go through the state to regional agencies like MRCOG. The state plan, current as of September 2013, includes the proposed extension, listing state sources of funding to contribute to the nearly \$18 million estimated cost.

Additional plans that touch on the San Jose neighborhood include the comprehensive plan, and various area and sector plans. See Appendix A for a summary.

About Environmental Assessments and Environmental Impact Statements^{39, 40, 41, 42}

Environmental Assessment is a brief public document that agencies use when the magnitude of impacts from a project are uncertain. It has three purposes: to provide sufficient evidence and analysis for agencies to determine whether to prepare a more in-depth report, known as an Environmental Impact Statement; to help an agency identify alternatives and mitigation measures if a more in-depth Environmental Impact Statement is not needed; and to help an agency prepare an Environmental Impact Statement, if one is needed. An Environmental

Assessment is made publicly available, and after public comments are received and considered, a final decision is made to either: 1) prepare a more in-depth Environmental Impact Statement because the Environmental Assessment showed that the project will have significant impacts, or 2) make a Finding of No Significant Impacts, known as a FONSI, meaning the project proceeds without preparing an Environmental Impact Statement. The Sunport extension project is currently in the environmental assessment phase.

Environmental Impact Statement is a detailed analysis that a federal agency must prepare if it is proposing a major federal action that will significantly affect the quality of the prospective, meaning future, human environment. The statement is prepared after an Environmental Assessment finds that the project will have significant impacts, or if an agency decides to skip an EA entirely because it considers a project environmentally controversial and goes directly to preparing the Environmental Impact Statement. The statement should discuss significant environmental impacts and reasonable alternatives (including a No Action alternative), which would avoid or minimize adverse impacts or enhance the quality of the human environment. The regulatory requirements for an Environmental Impact Statement are more detailed than the requirements for an Environmental Assessment.

Sources: Council on Environmental Quality, 2013; US Department of Transportation, 2013; US Environmental Protection Agency, 2013.

III.C. The Proposed Extension: Environmental Assessment Background and Findings

In September 2011, Bernalillo County Public Works released an environmental assessment for the Sunport Boulevard extension project. Prepared by the URS Corp., the document primarily describes the project's history, purpose and need; design alternatives for the extension; and the affected environment, projected effects and proposed mitigations. In July 2015, the county released a revised environmental assessment report for the same project.

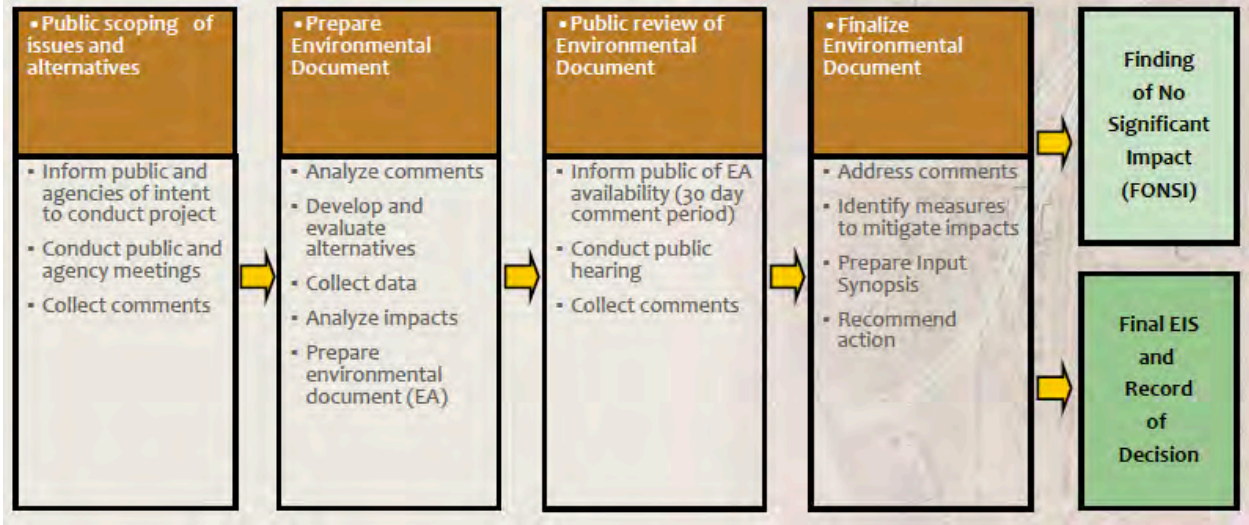
According to the 2011 assessment, the need for and purpose of the Sunport Boulevard Extension are to:

- Reduce traffic congestion on the adjacent arterial streets of Rio Bravo Boulevard, Gibson Boulevard and their interchanges with I-25.
- Connect elements of the area's transportation network by providing another east-west arterial roadway connecting Broadway Boulevard and I-25.
- Continue the development of the planned transportation system and incorporate Sunport Boulevard between Broadway Boulevard, I-25 and Albuquerque International Sunport Airport as envisioned in previous planning documents dating to the 1980s.

Draft environmental assessment findings that are particularly relevant to the HIA are described in Table 4. They include findings for traffic congestion, air quality, noise, bike lane access, bus access, economic development, monitoring of remediation on Superfund land, communities and land use, socioeconomics and environmental justice, and cumulative impacts.

The graphic below, from the county's Public Works Division, describes key points in the environmental assessment process for the extension.⁴⁵ In September 2011, the county released the first draft of the assessment. The revised assessment was made publicly available in mid-July 2015, with a subsequent public comment period ending in September 2015. The county intends to submit the report to relevant federal and state agencies for final approval with a request for a Finding of No Significant Impact (FONSI), unless significant impacts are identified during the public comment period. If a FONSI is requested, an Environmental

Impact Statement will not be required, meaning the county will be able to access allocated funds to begin design in 2014-2015 and construction in 2016-2017.



Source: Bernalillo County Public Works, (n.d.).

Table 4. Summary of Key Findings from Sunport Boulevard Extension Environmental Assessment	
Topic	Future effects under Alternative A
Traffic congestion	<ul style="list-style-type: none"> - More traffic by 2030 or 2035. - Extension will help decrease overall congestion and reduce traffic on Broadway Boulevard to the north of Sunport Boulevard and Woodward Road. Traffic volumes on Broadway Boulevard to the south of Sunport Boulevard and Woodward Road will increase.
Air quality	<ul style="list-style-type: none"> - Extension will not raise carbon monoxide emissions above the federal threshold criteria. - Extension is not expected to seriously affect overall air quality. - A dust control plan will be in place during construction.
Noise	<ul style="list-style-type: none"> - No anticipated noise impacts, so no plans to reduce noise impacts.
Bike lane access	<ul style="list-style-type: none"> - The half-mile extension will include five foot bike lanes on each side, to eventually connect Broadway Boulevard with University Boulevard - The bike lanes will be part of a future connectedness to the Riverside Trail.
Bus access	<ul style="list-style-type: none"> - Will look into making it easier to transition from one transportation type to another. - Will consider different forms of transportation, including how to get people to the airport.
Economic development	<ul style="list-style-type: none"> - New access to land for potential businesses will spur industrial redevelopment and the cumulative impact will be positive for economic and commercial growth.
Monitoring of remediation on Superfund land	<ul style="list-style-type: none"> - Road option will only impact a portion of the Superfund site and Chevron facility. - If needed, Woodward Road option (Alternative A) will relocate water lines and monitoring wells associated with remediation for the site.
Communities and land use	<ul style="list-style-type: none"> - Land use will not be significantly affected as it is primarily vacant land. - Preferred option is consistent with area planning and will conform to predicted growth of the area. - Extension will provide additional access to the area of the planned industrial corridor. - Preferred option will incorporate bicycle lanes and make provisions for future sidewalks
Socio-economics and environmental justice	<ul style="list-style-type: none"> - Residents will experience changes to traffic volumes (<i>see Traffic Congestion above</i>). Forecasted decreases in traffic volumes north of Woodward Road will result in an overall positive impact to these neighborhoods. - The preferred option is located within areas of Interstate highway right-of-way, vacant land, manufacturing, or special use zoned property, and is unlikely to disproportionately impact the neighborhood. - The project is not expected to impact community cohesion, displace people, or in other ways disproportionately and adversely impact minority or low-income populations.
Cumulative impacts	<ul style="list-style-type: none"> - Cumulative impact will be positive for economic growth (<i>see Economic Development</i>). - A cumulative impact to alternative transportation will result from the preferred option. - No significant cumulative impacts are anticipated from the preferred option.

IV. Findings

The HIA focused on how the proposed extension would affect three key areas:

- Exposure to environmental hazards
- Safety from injuries and collisions
- Social connectedness

In this section we describe findings related to each of these areas – how they relate to health, what the environmental assessment says, and resident panel analysis and discussion of potential effects of the proposed extension. Table 5 briefly summarizes our findings about existing conditions.

Table 5. Summary of Existing Conditions

Exposure to Environmental Hazards

Stationary Sources:

- San Jose has numerous facilities producing hazardous environmental emissions and a high density of those facilities compared to other census tracts in the county.
- As of July 2012, the City of Albuquerque had permitted 17 sites in San Jose as stationary sources of air pollution. Data on permitted emissions illustrate that San Jose makes up less than one percent of Albuquerque's total population, yet the neighborhood bears a disproportionate share of permitted emissions for seven of eight pollutants reported.
- In 2012, the South Valley air monitor registered levels of ozone and PM10 that exceeded both primary and secondary health standards.

Mobile Sources:

- Average weekday traffic in the project area is heaviest on the east-west corridor of Rio Bravo Boulevard – about 32,000 vehicles a day– at the southern section of the neighborhood, and south of the proposed project.
- Cars are the majority of vehicles on these roadways but there are a large number of heavy trucks on Broadway Boulevard.
- The project area does not appear to suffer from traffic congestion, with exceptions such as Rio Bravo Boulevard west of I-25.

Noise:

- Despite the presence of many sources of noise, data are not available on baseline noise levels.

Safety from Injuries and Collisions

Collisions:

- Collisions between automobiles and either pedestrians or bicyclists are relatively infrequent in San Jose. Those that do occur tend to cluster in the north edge of the neighborhood.

Facilities for pedestrians and bicyclists:

- Facilities for walking and bicycling in the neighborhood are scarce. The entire project area currently has only three blocks with designated bike lanes.

Social Connectedness

- Gathering places in and near the neighborhood include churches, community centers, homes of friends and family, schools, parks and playgrounds. Residents did not mention gathering at restaurants or other retail areas.

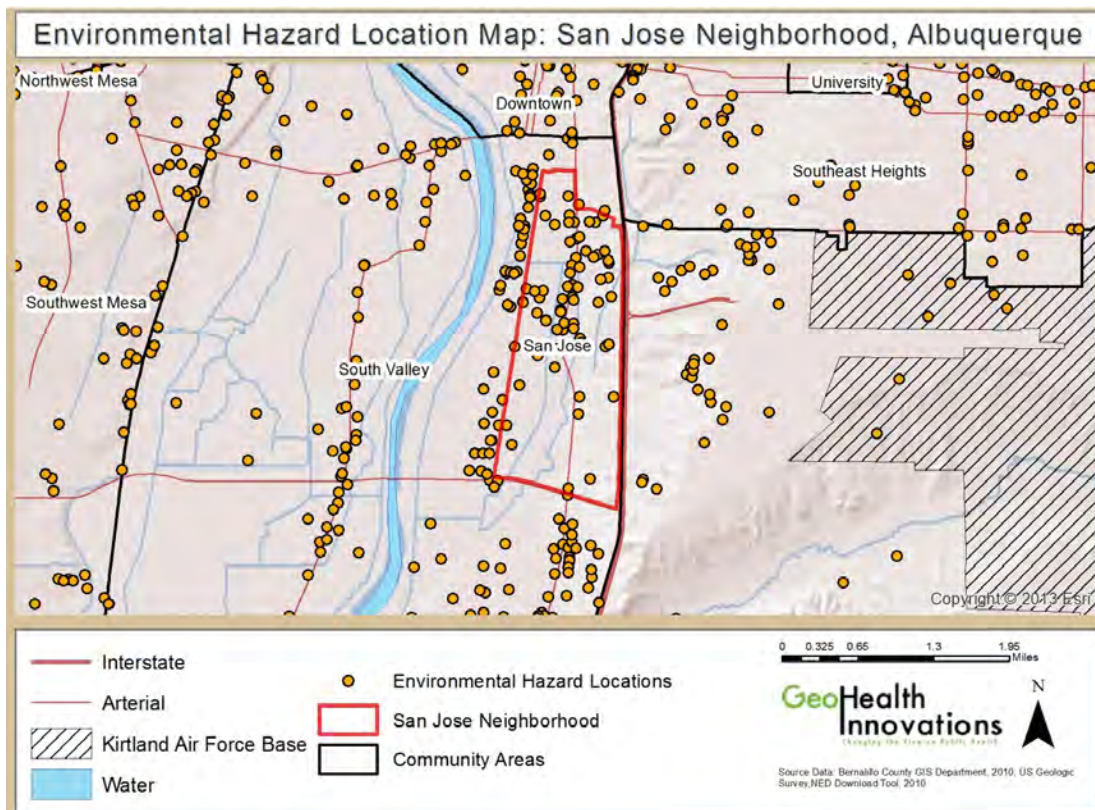
- Residents perceive the neighborhood as less close-knit today than in the past and as a place with a negative reputation owing in part to crime, which has decreased over time but remains relatively high.
- Residents want future development to protect and improve these gathering spaces, including parks and a health facilities and markets, schools and workplaces. They want to preserve and expand the ability to breathe and walk in the environment, safety from traffic and the scenery.

IVA. Exposure to Environmental Hazards

There is a wide range of potential environmental hazards in the neighborhood. Conventional practices in environmental hazards management address risks individually, segregating hazards from different chemical pollutants and from different exposure pathways. But human health depends on the cumulative effect of all exposures. As stated by Alves et al (2012):

In reality, people are exposed to mixtures of pollutants or to the same pollutant through a variety of media, including the air, water, and food. It is now more recognized than before that environmental exposure to pollutants occurs via multiple exposure routes and pathways, including inhalation, ingestion, and dermal absorption.....Consequently, to arrive at a realistic assessment of exposure risks, regulatory authorities arguably should consider cumulative stressors and exposure data derived from cumulative risk assessment.“

Map 5. Environmental hazard locations in San Jose, 2010



Map 5 shows numerous facilities producing hazardous environmental emissions throughout the neighborhood. Facilities include hazardous chemicals dumpsites, locations contaminated by hazardous materials, railroad depots, discharge permit locations, petroleum storage sites, industrial and manufacturing sites, stationary air pollution sources, Superfund sites, and interstates and arterial roads. The density of these facilities relative to the rest of the city and county is high: *San Jose has a greater density of hazards per square mile compared to many other areas of the county.*

San Jose stands to benefit from a more holistic assessment of environmental and social risks. Given the area's many hazardous facilities, it is insufficient to only examine the incremental

contribution of a single project to the neighborhood’s burden of environmental exposure and risk. Local agencies charged with analyzing proposed projects should consider how exposures from multiple sources may act together over time to expose residents to increased health risks.

With cumulative impacts in mind the next section describes conditions for various hazardous exposures in San Jose.

Existing Conditions: San Jose has a disproportionate burden of facilities producing hazardous environmental emissions

Air Quality: Exposure to Stationary Sources of Air Pollution

There are two key categories of sources for air pollution: stationary sources and mobile sources. Mobile sources include vehicles, such as cars, trucks or airplanes. Stationary sources are fixed sites such as factories or refineries.⁴⁵

As of July 2012, the City of Albuquerque had approved permits for 17 sites in San Jose that are stationary sources of air pollution. As there is no data available on actual emissions for these sites, Table 6 below shows the total tons of pollutants (by type) permitted in the air quality permits issued for San Jose.

The table also shows what share these permitted emissions in San Jose make up of the city’s overall total. For example, the neighborhood of San Jose has seven percent of the City of Albuquerque’s total permitted emissions for PM10 and 11 percent for PM2.5, two types of airborne fine particles that can penetrate deep into lungs.

These data illustrate that San Jose makes up less than one percent of the City of Albuquerque's population, but bears a much greater share of permitted pollution. The neighborhood bears a disproportionate share of the permitted emissions in the city for seven of eight pollutants reported.

Map 6. Stationary sources of air pollution in San Jose neighborhood, 2010

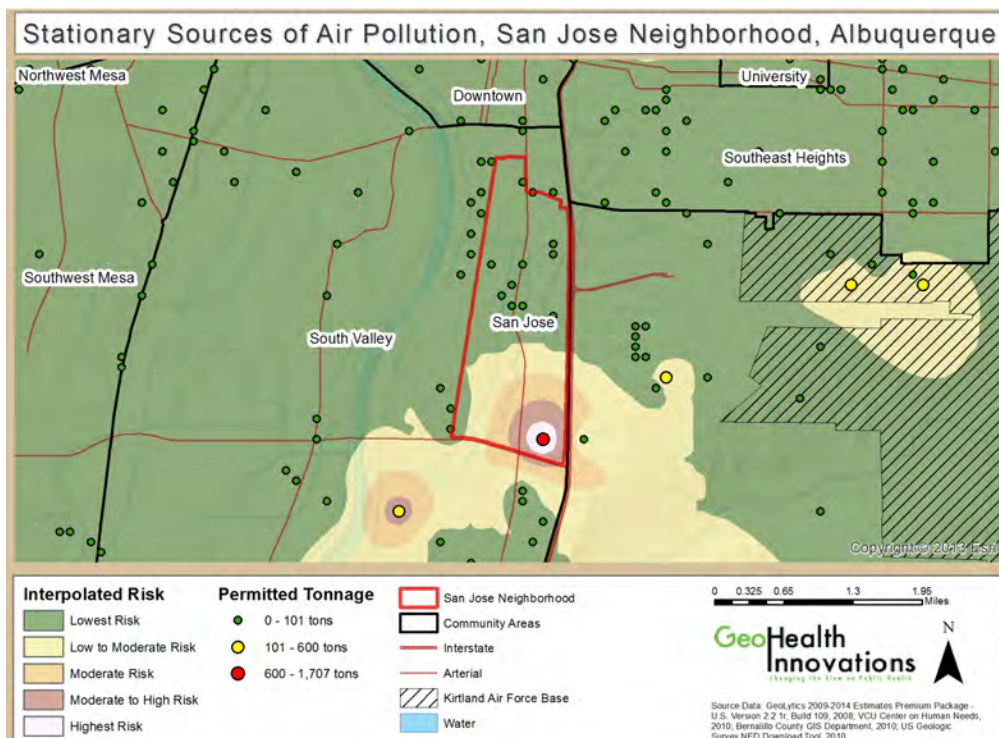


Table 6. Total tons of emissions allowed in San Jose and percent for City of Albuquerque, by pollutant, 2012

Particulate Matter 10 (PM10)	Particulate Matter 2.5 (PM2.5)	Carbon Monoxide (CO)	Nitrogen Oxides (NOx)	Hazardous Air Pollutants (HAPS)	Sulfur Oxides (SOx)	Volatile organic compounds (VOCs)	Lead (Pb)
65.0 (7%)	57.0 (11%)	734.4 (10%)	571.3 (7%)	70.0 (28%)	76.8 (11%)	295.3 (6%)	0.0 (0%)

Source: City of Albuquerque Environmental Health Department, July 2012.

Data from the Prosperity air monitor in the South Valley – the closest monitor to San Jose, about four miles away – show that the neighborhood has recently been subject to outdoor air concentrations close to or exceeding the maximum levels accepted by national air quality standards. In 2012, the South Valley air monitor on some days exceeded both the primary and secondary standards meant to protect public health and welfare for levels of ozone and PM10, respectively.^{46,47} The violations have not been consistent enough for the area to merit the EPA’s official designation of non-attainment for air quality. Nevertheless, the information here suggests attention should be paid to the high levels of these pollutants.

For the last decade, the South Valley monitor has registered ozone levels approaching the national standard for all of the last decade.⁴⁸ Additionally, according to EPA data, a recent spike in PM10 levels in San Jose cannot be explained by exceptional events such as wildfires or weather.^{49,50} This information directly contradicts the environmental assessment’s suggestion that the excessive PM10 levels can be attributed to fires and high winds. In the context of cumulative impacts,⁴ additional development that even marginally exacerbates the ambient levels of these pollutants could exceed safe margins.

There were no violations in 2012 for ambient levels of carbon monoxide (CO), a main point of focus in an Air Quality Review report for the extension.⁴⁹ Bernalillo County had high concentrations of CO in the past, but has been in attainment since 1996. According to the EPA’s national database, no area in the country has been under a non-attainment designation from CO levels since 2010, reflecting advances in emissions controls.⁵¹

Air Quality: Exposure to Mobile Sources of Air Pollution

Nationally, nearly 20 percent of the population lives near high volume roads where daily average traffic is 25,000 vehicles or more, and where the concentration of mobile source air pollutants is typically elevated, posing health concerns.⁵² In the US, minority and low-income households are more likely to live near these high volume roads or in an area with higher traffic density than white or higher income populations.⁵²

The neighborhood of San Jose is adjacent to I-25 and numerous arterial roads with heavy traffic. Data from MRCOG demonstrate that average weekday traffic in the project area is highest on the east-west corridor of Rio Bravo (approximately 27,000 vehicles), which is at the southern section of the neighborhood, and south of the proposed project. Traffic along Broadway Boulevard in the project area is highest north of Gibson Boulevard headed into downtown

* The EPA has proposed reducing the federal standard for PM2.5 to 12 $\mu\text{g}/\text{m}^3$, following guidance from their scientific advisory committee. This is important because historic assessment of air pollution is based on prior standards. Assessment of future projects and conditions should be based on new standards that are coming into practice.

(17,000 vehicles), and is generally greater than traffic on Second Street. Traffic data for local roads are unavailable, and all of the roads between Second and Broadway Boulevard in and around Gibson Boulevard are considered local roads.⁵³

In terms of what types of vehicles are traveling on these roads, MRCOG maintains limited vehicle classification data; only about 30% of traffic volume counts also collect vehicle classification counts. Table 7 reflects the total traffic volume by vehicle type for a very limited number of streets in the project area.

Table 7. Percent of traffic counts by vehicle type⁵⁴

Street segment (year of count)	Auto	Heavy trucks	Pick-up / Bus / 2-axle	Motorcycle
2 nd St, south of Avenida Cesar Chavez (2010)	65%	5%	29%	<1%
2 nd St, south of Woodward (2012)	72%	4%	24%	<1%
Broadway Boulevard, south of Woodward (2011)	59%	11%	30%	<1%
Broadway Boulevard, north of Avenida Cesar Chavez (2009)	64%	8%	27%	<1%
Gibson Boulevard, west of I-25 (2010)	71%	7%	21%	<1%

Source: Mid-Region Council of Governments, 2009-2012.

Most vehicles on these roadways are cars, but there is a large proportion of heavy trucks on Broadway Boulevard. Local residents say the official counts may undercount the trucks actually using these streets.

The environmental assessment listed traffic congestion as a main reason for the proposed extension. But the project area does not appear to suffer from traffic congestion, with a few exceptions, such as Rio Bravo Boulevard west of I-25. The MRCOG report “A Profile in Congestion” indicates:

- West of I-25, Gibson Boulevard has "minor" congestion
- West of I-25, Rio Bravo Boulevard has "severe" congestion to Second Street
- Second Street and Broadway Boulevard have no or minimal congestion

Planners expect Rio Bravo Boulevard will get more congested with future population growth. The level of congestion should be considered relative to the Albuquerque region and reflects conditions across the peak period only.⁵⁵

Noise

Sound is frequently described in terms of peak levels or as an average over varying time periods. The City of Albuquerque Noise Ordinance⁵⁶ sets maximum allowable noise levels for residential areas as 55 A-weighted decibels, or dBA, in the daytime and 50 dBA at night (A-weighted decibels express the relative loudness of sounds. High frequencies, which our ears are more sensitive to, are given more weight.) For industrial areas the maximums are 75 dBA in the daytime and 70 dBA at night. Bernalillo County sets maximum levels for residential areas as 55 dBA in the daytime and 45 dBA at night, with the same higher levels for industrial areas as in the city. The County also has specific regulations for motor vehicles.

No noise data are available for San Jose. The environmental assessment identifies noise sources in the vicinity as traffic on I-25 and Broadway Boulevard, aircraft at the airport and Kirtland Air Force Base, trains on the rail spurs servicing the bulk fuels terminals, and noise associated with industrial and commercial activities of the area. Similarly, the Albuquerque/Bernalillo County

Comprehensive plan found excessive noise levels near several residential areas, specifically in neighborhoods near the airport, adjacent to I-25, by certain arterial streets, as well as industrial areas. However, staff at the city’s planning and environmental health departments were unable to provide the data behind these findings or more recent information, highlighting an opportunity for stronger data collection and publication.

Why It Matters: Exposure to environmental hazards affects health and well-being, particularly for vulnerable populations

Exposure to Air Pollution

The EPA identifies six criteria air pollutants that can be detrimental to human health, and for which the EPA is required by the Clean Air Act to set standards to protect public health and welfare. They are ozone, carbon monoxide, particulate matter, nitrogen dioxide (NO₂), sulfur dioxide, and lead. The EPA also identifies six priority mobile source air toxics but there are no standards for these contaminants, which include benzene, butadiene, formaldehyde, acetaldehyde, acrolein, naphthalene, and diesel exhaust.

Information about current levels of criteria air pollutants comes from a network of air quality monitors across the nation. Exposure to air pollutants at levels below existing standards also may result in health impacts for those with existing health conditions. The EPA regulates both mobile and stationary emissions of these pollutants. A 2013 study reported that that very few monitors used to enforce the priority air pollutant standards are located near populations along high-volume roadways, adding that although “current federal law requires ‘hotspot’ analysis for CO and PM_{2.5} when building new transportation infrastructure in non-attainment areas there is currently no method to enforce possible violations of the NAAQS alongside existing transportation corridors or in attainment areas lacking air quality monitors.”⁵²

Studies on the health effects associated with distance from traffic look at air pollutants as a mixture to examine their cumulative effects.⁵⁷ In 2008 a report by the Health Effects Institute concluded that current evidence is sufficient to say that exposure to traffic-related air pollution exacerbates asthma. The report adds that although evidence is yet sufficient, traffic-related air pollution could cause onset of childhood asthma, non-asthma respiratory symptoms, impaired lung function, and premature death.

Studies link vehicle emissions to lung disease;⁵⁸ asthma symptoms;^{59,60,61} medical visits for asthma;⁶² asthma prevalence and incidence;^{63,64,65,66,67} and heart disease.^{68,69} It’s not yet possible to attribute the cumulative effects of roadway proximity and non-cancer health effects to one or more specific kinds of vehicles or pollutants. Table 8 is a summary of health effects of selected urban air pollutants relevant to the proposed extension.

Table 8. Summary of health effects of selected urban air pollutants relevant to Sunport

Pollutant	Examples of Sources	Health Effects	Maximum Allowed*
<i>Nitrogen Dioxide (NO₂)</i>	Combustion processes in vehicles and industrial operations	Increased risk of acute and chronic respiratory disease; reduced visibility.	100 ppb (1hr) 53 ppb (annual average)

Table 8 (continued)

Pollutant	Examples of Sources	Health Effects	Maximum Allowed*
<i>Particulate Matter (PM_{2.5})</i>	Motor vehicles, fireplaces, cooking stoves, power generation, construction, and industrial activities	Impaired lung function; exacerbation of acute and chronic respiratory ailments including bronchitis and asthma; excess emergency room visits and hospital admissions; premature arteriosclerosis; premature death.	15 ug/m ³ (annual average)
<i>Diesel exhaust</i>	Diesel engines	Probable increased risk of cancers (see: International Agency for Research on Cancer list for Group 2A substances). Health effects associated with particulate matter (see list above) that is emitted in combustion.	N/A

* Under Federal Air Quality Standards

Air quality does not affect everyone the same way, and some groups are more sensitive to adverse health effects. Groups of people that are particularly sensitive to the health effects of air pollutants include the elderly and the young, those with asthma, and groups with other exposures linked to cardiovascular or respiratory diseases.⁷⁰ Poorer populations and people of color tend to live closer to sources of air pollution, and poverty may increase susceptibility to the health effects.⁷¹

Exposure to noise

According to the World Health Organization’s Guidelines for Community Noise,⁷² which reviews a substantial amount of the research on noise and health, long-term exposure to moderate levels of noise can harm sleep, school and work performance, raise blood pressure and increase the chance of cardiovascular disease. A significant body of research in that report and in other public health literature looks at traffic noise. According to the literature:

- *Sleep:* Traffic noise has been linked to poor sleep.⁷³ A lack of sleep may have consequences including fatigue, impaired endocrine and immune system and psychological effects.⁷⁴
- *Annoyance:* Reports of annoyance are the most widely studied noise impact⁷⁵ and the relationship has been quantified.⁷⁶ Annoyance is related to several health effects associated with noise, including elevated blood pressure, circulatory disease, ulcer and colitis.⁷⁵
- *Learning and educational performance:* Chronic road noise can affect cognitive performance of children, including attention span, concentration, memory and reading ability.^{77,78}
- *Hypertension:* Traffic noise and high blood pressure have a dose-response relationship; increased traffic noise increases the likelihood and severity of high blood pressure. ⁷⁹ People who live near chronic road noise (more than 20,000 vehicles a day) are twice as likely to have hypertension – men almost four times as likely.⁸⁰
- *Heart attack:* Increases in neighborhood noise, including traffic, at levels above 50 to 60 dBA increase the risk of heart attack.^{81,82,83,84}

Review of Environmental Assessment: The assessment of impacts Sunport Boulevard Extension will have on air quality, noise and cumulative impacts is incomplete

Air Quality

The environmental assessment and accompanying air quality review state that the EPA designates Bernalillo County as an attainment area for all air pollutants identified in federal standards, and that previously carbon monoxide was the largest pollutant of concern in the county. However, the discussion of traffic-related air quality impacts focuses solely on carbon monoxide notably omitting nitrogen dioxide and PM2.5, which are associated with traffic. These could also be assessed to understand whether overall emissions and exposure levels may change. Focusing attention on a pollutant that is already successfully managed obscures more significant hazardous pollutants that are less well managed, including ozone and particulate matter.

Importantly, federal standards for maximum acceptable levels of both nitrogen dioxide and PM2.5 were recently lowered, reflecting scientific consensus that current standards do not protect health. While the county's modeling methodology for carbon monoxide is acceptable, there are no baseline monitoring data reported for any of these other pollutants, nor are traffic data modeled to show emissions for these pollutants in the future.

The additional discussion about industrial pollution in the air quality review states that industrial pollutants are a potential concern, but then places responsibility on the airport and other sources outside the project sponsor's control. Little data are presented to support this assertion. Also, there is no discussion in the original EA of how extension and associated development will contribute to air pollution. Nor is there discussion of whether the cumulative impact of these hazards will exceed existing standards.

Alleviation of traffic congestion in the region is argued as a main reason for the project. However, the environmental assessment does not provide any data to show existing congestion. The Mid-Region Metropolitan Planning Organization and Mid-Region Council of Governments of New Mexico identify a set of measures and criteria that are used to illustrate current congestion (volume-to-capacity ratio, speed differential, crash rates, daily volume, delay analysis).³⁵ Traffic volumes are the only data the assessment cites to support the assertion of current congestion. Also notable is that the original assessment only identifies congestion outside the project area, though MRCOG makes congestion data available for both Gibson Boulevard and Rio Bravo Boulevard (see above), two places in the project area but not included in the original EA.

Another reason for the extension, according to the environmental assessment, is to increase access to the airport via Sunport Boulevard to "[benefit] the proposed industrial corridor in the area and [provide] incentive for light industrial development."³⁶ The envisioned industrial development would be in the southern portion of the neighborhood, stretching from east of Second Street to west of I-25, and south of Woodward Road, along the neighborhood's more heavily trafficked streets. Any future plans, such as the proposed extension, must balance economic opportunity with protection of health and safety.

Noise

There is no analysis of current noise exposure in the environmental assessment, and therefore we are unable to say whether the area will comply with federal or local noise standards once the project is built. Also, as with all analyses in the environmental assessment, there is no discussion of the potential impacts that future development enabled by the extension will have on noise in the adjacent neighborhood.

Cumulative Impacts

Discussion of cumulative impacts of the project focuses on how the project will benefit the neighborhood by alleviating future congestion, improving the transportation network and future pedestrian/bike networks and encouraging economic and commercial growth. However, evidence is insufficient to support these assertions within the San Jose neighborhood.

The assessment also does not examine how changes resulting from the extension could have harmful cumulative impacts. For example, the report says the Sunport will enable economic development by providing access to businesses, but does not discuss how increased traffic, truck emissions, or other hazards might result. The original assessment states only that "No significant cumulative impacts are anticipated from the Preferred Alternative."

Furthermore, in describing recent projects in the area, the discussion only focuses on transportation-related projects and how those have improved the area. There is no recognition in the original EA of how transportation or land use (for example, the 17 permitted stationary sources of air pollution) has contributed to San Jose's status as an environmental justice community. Nor is there recognition of disproportionate environmental burdens that may be made heavier by the extension, or that existing air quality monitors may be insufficient to comply with recent EPA requirements that air monitors be located near highest, instead of average, source of pollution. Finally, there is no discussion of how the project may influence community exposure to multiple pollutants.

In sum, in the environmental assessment there seems to be a limited understanding of how to look at cumulative impacts. Various hypothesized benefits of the project are discussed as "a cumulative impact" in alternative transportation or in economic development. No supporting analysis or data are provided to show how these benefits may accrue.

Resident Analysis: Air quality and cumulative impacts are projected to worsen with the arrival of the Sunport Boulevard Extension

In reviewing the data, literature and analysis of the original environmental assessment, the resident panel reached consensus on the following set of findings for cumulative impacts and air quality. Though noise was important, the panel recognized there was very limited information on which to make judgments about how noise might change as a result of the project.

Consistent with thinking about cumulative impacts, the resident panel believed it was important to consider not only the contribution to environmental hazards of the proposed extension, but also of all the commercial and industrial development that would be enabled by it. To focus only on the effects of the extension itself would perpetuate the short-sighted pattern of failing to consider cumulative effects of environmental hazards.

In this context, the resident panel considered existing qualitative and quantitative information, as well as personal experience, to reach consensus about the impacts of the proposed extension and development spurred by it. Panel analysis includes the following:

- The evidence is *moderate to strong* that cumulative environmental hazards – and hence air quality – will worsen due to the Sunport Extension and all of the associated commercial development that will result from the Sunport being built.
- These increases are *certain*, as the Sunport will open the door to businesses locating in the area, with accompanying increases in trucks and other traffic.

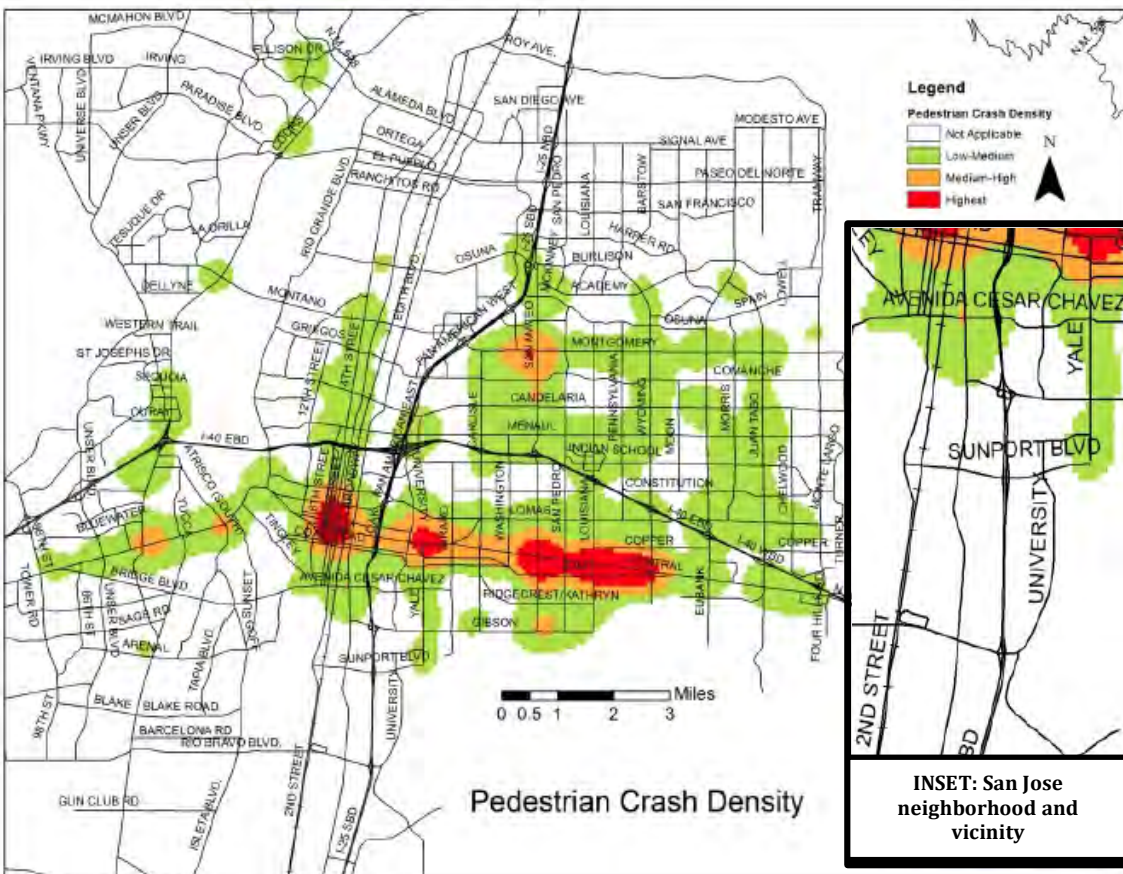
- Using the limited information available about future exposures, any increases in environmental exposures are *likely* to harm the health of residents, particularly those who are low income, the elderly and young, pregnant women and their unborn children, those living closest to the hazards, and those with underlying health conditions.
- Using the limited information available about future exposures, most people in San Jose – more than 70 percent – will be affected by these impacts, and the effects will range from *moderate to severe* depending on existing vulnerabilities.

IV.B. Safety from Injuries and Collisions

Existing Conditions: Pedestrian and bicycle crashes are relatively infrequent in San Jose, and facilities for walking and bicycling are scarce

Traffic-related deaths are slightly higher in the area that includes San Jose, as compared to Bernalillo County – 3.2 pedestrian deaths per 100,000 residents, compared to 2.7 per 100,000 in the county). In absolute numbers, there have been relatively few collisions between vehicles and pedestrians reported in recent years in San Jose. Map 7 shows where crashes involving pedestrians cluster in Albuquerque. In San Jose, the north edge has a low-medium cluster and elsewhere in the neighborhood there are no clusters recorded for crashes involving pedestrians.

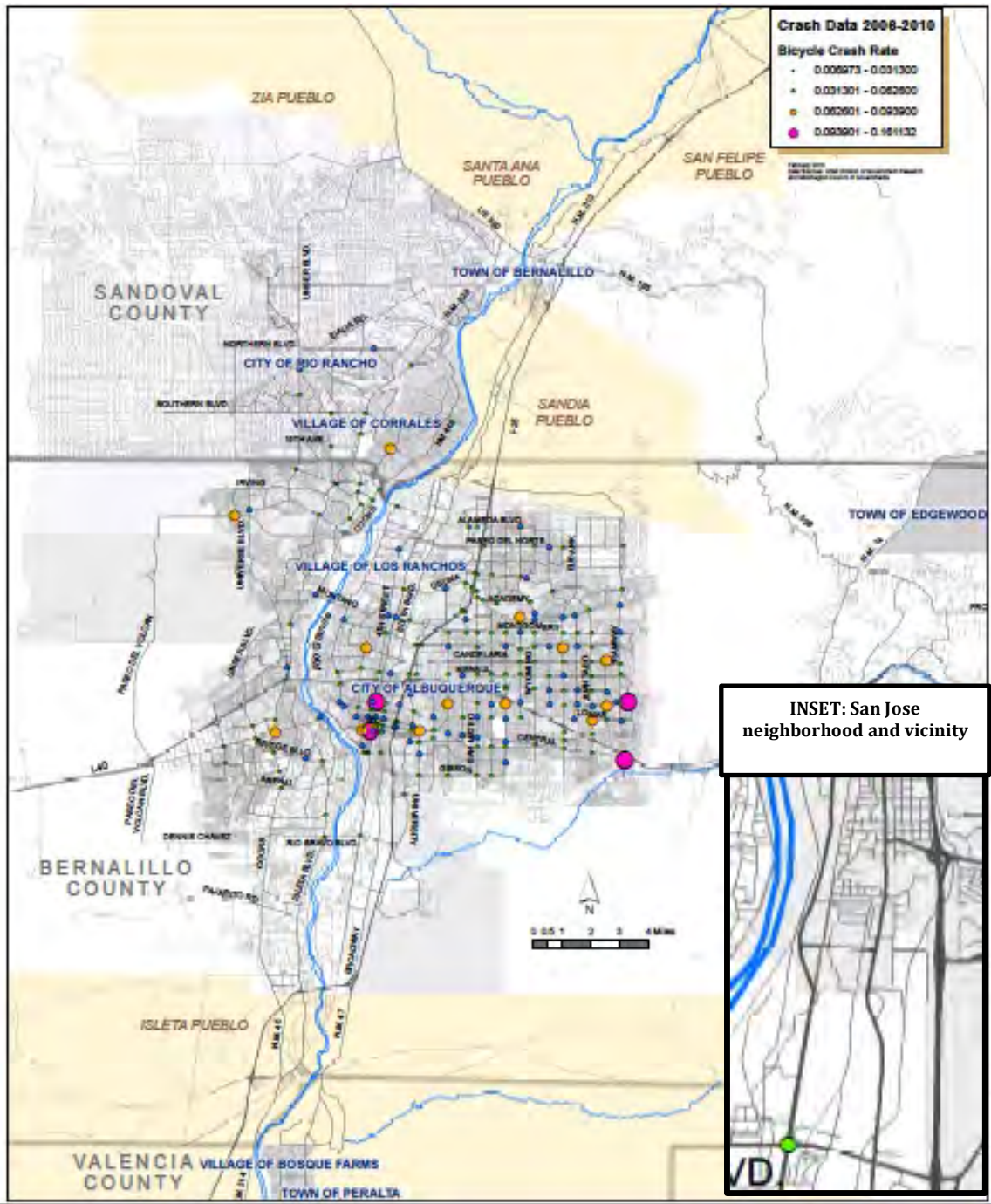
Map 7. Pedestrian crash density, 2000-2010



Source: Adapted from Mid-Region Council of Governments, July 2012.

A relatively low rate of crashes involving bicyclists is reported for San Jose compared to the county. Map 8 shows the intersection of Rio Bravo Boulevard and Second Street, where crashes tend to occur in the project area.

Map 8. Bicycle crash rate, 2006-2010



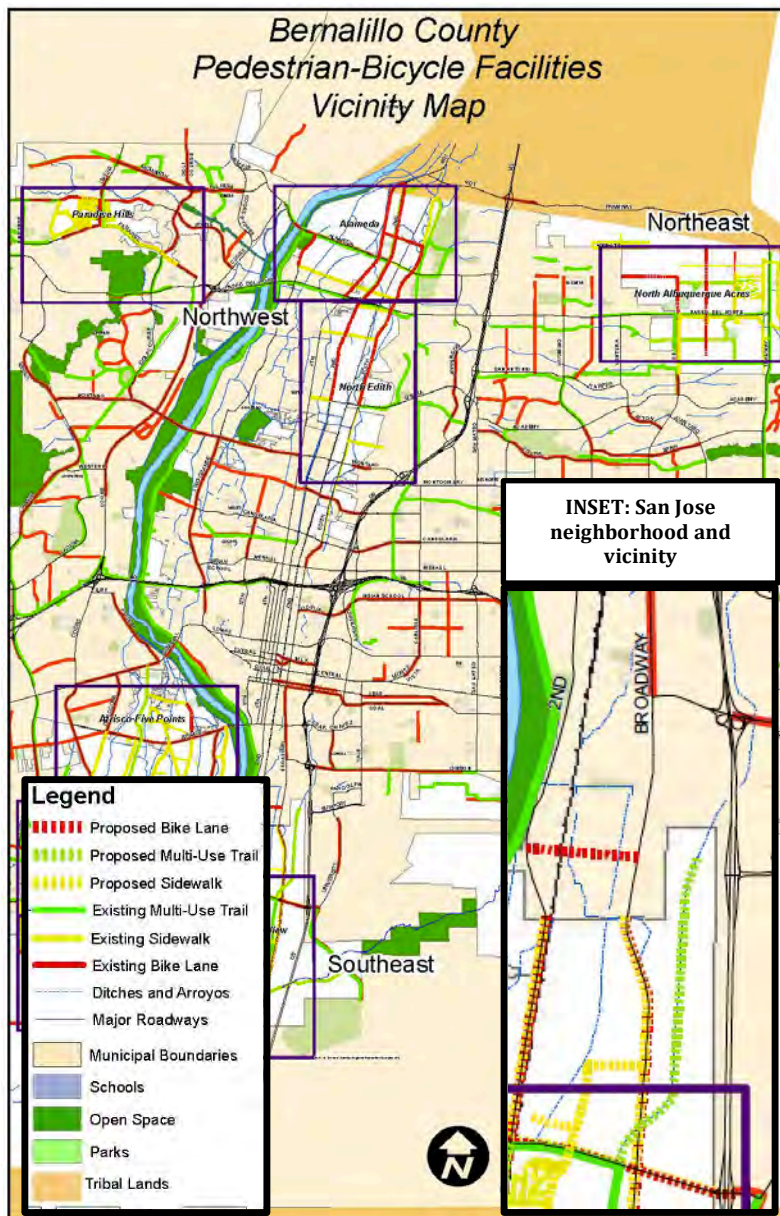
Source: Adapted from UNM Division of Government Research and Mid-Region Council of Governments, February 2013.

A chief cause of crashes is the absence of facilities for pedestrians and bicyclists, such as sidewalks and bicycle lanes. There are few sidewalks or designated bike lanes in the neighborhood, and little connectedness between those that do exist, as illustrated in Map 9. The project area currently has three blocks with designated bike lanes (on Broadway Boulevard from Kathryn Avenue to Gibson Boulevard). There are additional spaces for bicycling, but they

are not designated lanes. In these instances, cyclists are given a wide shoulder (as on Rio Bravo Boulevard), or can ride on what's known as a bike route, designed with the intention that bicyclists and cars share it (as for 3 blocks on Edith Boulevard).

Among facilities that do exist, access is a problem. To get to these spaces, bicyclists who start in the neighborhood ride with cars on streets lacking designated lanes, wide shoulders, or bike routes. Access also is an issue for the multi-use Paseo del Bosque Trail – also called the Riverside Bike Path – adjacent to the Rio Grande. For residents of San Jose, the trail is west of Second Street, so they have to cross the railroad tracks and property and walk or bicycle to an access point, such as the heavily trafficked Rio Bravo Boulevard.

Map 9. Current and proposed future pedestrian and bicycle facilities in Bernalillo County



Source: Adapted from Bernalillo County, 2012.

Why It Matters: Safety affects use and the health benefits from it

People walk or bicycle for various reasons, including recreation, to get to work and school or to run errands, or as part of a journey that also includes trains or buses. For some, particularly those without access to private vehicles, walking, bicycling and/or public transit become important means of transportation. This is the case in San Jose, where approximately one in 12 residents do not have access to a car. One in 16 use public transportation to commute to work – a proportion three times higher than in the county as a whole. Four bus routes serve San Jose, though only one (the 16/18 “B-U-G”) goes downtown every day. The route in the neighborhood follows a loop through the neighborhood that includes more heavily-trafficked streets, such as Woodward Road and Broadway Boulevard, so that users must walk or bike on or across these streets to reach the bus stops.

Map 10. Bus route for Route 16/18 in the San Jose neighborhood



Sources: UNM Information Technologies, 2013 and City of Albuquerque, 2012.

People also walk or bike if there are “trip attractors” – schools, parks, healthcare institutions, restaurants, grocery stores or childcare. According to the Mid-Region Council of Governments, “In general there is a scarcity of restaurants, grocery stores, and other retail that is associated with generating pedestrian activity” in the San Jose neighborhood.⁸⁶

Walking and bicycling are good for public health. Physical activity can help prevent or treat overweight or obesity; reduce risk of chronic diseases, such as cardiovascular disease, type-2 diabetes, and some cancers; improve mental health; and increase chances of living longer.⁸⁷ Walkable neighborhoods are more likely to meet national physical activities guidelines compared to the least walkable neighborhoods.⁸⁸

It is important, then, to understand factors that may promote or threaten safety from injury for pedestrians or bicyclists. Key factors are the speed of traffic, types of vehicles, characteristics of the user, and road design.

A 2004 report by the World Health Organization and World Bank finds “a large amount of evidence of a significant relationship between average speed and crash risk.”⁸⁸ Specifically, for every 1 kilometer per hour (approximately 0.6 mph) increase in traffic speed, there is a four to five percent increase in fatal crashes.⁸⁹ A pedestrian has a 90 percent chance surviving a car crash if the car is traveling 30 kilometers per hour (approximately 18 mph) or less. That pedestrian has a less than a 50-50 chance of surviving if the car is traveling 45 kilometers per hour (approximately 28 mph) or more.⁸⁹

The speed of cars on the extension and adjacent roads are important to collisions and resulting injuries to pedestrians and bicyclists in the neighborhood. On Interstate 25, it is legal to drive 75 mph outside of Albuquerque, and 65 mph inside the city limits. The extension is designed for 45 mph, so drivers will have to quickly reduce speeds upon entering the San Jose neighborhood. Speeds within the neighborhood are further reduced depending on the particular roadway. For example, currently the speed on Broadway Boulevard is 40 mph.

Research finds that the type of vehicle “strongly influences” risk of severe injury and pedestrian death.⁹⁰ The chance of a vehicle-related injury being fatal increases by as much as 370 percent when the vehicle is a truck.⁹¹ Even light trucks (vans, SUVs, pickups, etc.) are associated with three times higher risk of severe injuries for pedestrians than lighter cars, and two times higher mortality rates.³⁶

The pedestrian matters, too – older people and children are particularly vulnerable as car speed increases. Road design also is important. The World Health Organization/World Bank report, “If separation (giving pedestrians protected places to walk) is not possible, road management and vehicle speed management are essential.”⁹²

Good planning now can help prevent future collisions and the injuries that may result from them. The extension and surrounding streets can be designed to manage speed and ensure safety for pedestrians and bicyclists with traffic calming measures such as lower speed limits, more signals, sidewalks, bulbouts, speed bumps, traffic circles or chicanes, landscaped medians and marked pedestrian crosswalks. One expert says sidewalks “are an absolute necessity along all through-streets serving developed areas.”⁹³ He reported that accidents with pedestrians were 2.5 times more likely on streets without sidewalks than streets with them.⁹³ Other important features that can increase a sense of safety include trees on streets and space between streets and sidewalk, as by parked cars.⁹³ For bicyclists, bike lanes and routes reduce injuries or and crashes by half compared to roads without them.⁹⁴

Review of Environmental Assessment: The extension includes short stretches of sidewalks and a bicycle lane that will be isolated from the few existing facilities in adjacent areas, and impacts to bus access are not discussed

Impacts to Pedestrian and Bicycle Facilities

The preferred Woodward Road option would include 700 feet of sidewalks along the half-mile extension that will not connect to existing sidewalks. The same preferred option also includes a five-foot wide bike lane on each side of the extension. The environmental assessment does not say if the bicycle lane will run the entire length of the extension. The bike lanes will connect to

Broadway Boulevard and University Boulevard, but since those stretches of those two streets have no direct connectedness to other bike lanes, they would be isolated.

The assessment does not predict how the extension may change traffic volumes, collisions, or the usability of adjacent streets for pedestrians or bicyclists.

Impacts to Bus Access

There is no mention in the environmental assessment of how the extension would affect resident's access to bus stops and buses.

Resident Analysis: Pedestrian and bicyclist safety on nearby streets will decrease

In reviewing the data, literature and environmental assessment, the resident panel reached consensus on the following findings for safety from injuries and collisions. Overall, the panel seeks to maintain the relatively low number of deaths and to prevent future collisions, and residents agreed that safety from injuries and collisions is already a problem in San Jose. Panel analysis includes the following:

- The evidence is *likely, but more information is needed* that the extension will *decrease* safety on nearby streets. It will be more dangerous for pedestrians and bicyclists if the proposed extension is built as planned.
- Decreases in safety are *likely* to harm the health of residents, particularly those who are low-income, bus users, people lacking access to cars, children who walk or bicycle to school, and bicyclists.
- Most people in San Jose will experience these changes, and the associated health effects will range from *not severe* to *moderate*.

IV.C. Social Connectedness

Existing Conditions: Residents gather in both public and private spaces in the neighborhood and nearby and want to protect and improve these spaces

Social connectedness among residents of a given community is a measure of solidarity and the ability to translate social ties into common good.⁸ Limited information is available on the social fabric of San Jose today. To fill this gap, we used qualitative research methods with a photo and mapping activity to gather input from the resident panel, based on their personal experiences.

Resident panelists had various perspectives about whether social connectedness is an issue today for the San Jose neighborhood. The panel agreed that whether residents feel that social connectedness is lacking depends on one's experiences, age, and where in the neighborhood one lives. Residents perceive that the neighborhood is less close knit now than in the past and that the neighborhood has a negative reputation, owing partly to crime, which remains relatively high although it has decreased over time. Some residents said they felt safe at night; others did not.

All residents on the panel agreed that social connectedness is valuable. They also agreed that future activities that directly or indirectly affect the neighborhood should seek to improve social connectedness.

Answering two sets of questions about San Jose today, residents wrote responses that Human Impact Partners then grouped into themes. We found two main themes. First, residents gather in an array of places in or near the neighborhood, including private spaces like churches or homes of friends and family as well as public spaces like community centers, schools, parks or playgrounds. Second, residents want to protect and improve several aspects of the neighborhood – health facilities, markets, schools, workplaces, the ability to breathe and walk outdoors, safety from traffic, and the scenery.

Asked where residents gather, many named private spaces such as churches or homes, including the San Jose Parish as well as churches outside of San Jose. Churches were described as “the place community gather to worship-pray & grow in their faith,” with others calling them “cultural assets to protect” and special places that represent the community or that “represent my people.” One resident also spoke about access to church, wishing “to be able to drive to the church, but more to be able to walk to the church and not breathing all those chemicals.” Homes of friends and family, again both inside the San Jose neighborhood and elsewhere in the city, are places that residents visit, eat, talk, and celebrate. No residents mentioned gathering socially at sporting events or arts events – two measures used in City of Albuquerque’s Citizen Perception Survey to assess quality of life. Neither did they mention gathering at restaurants or bars.

Public spaces where residents mentioned gathering include the Herman Sanchez Community Center and public parks, though with reservations. Of the community center, one resident said it was a “good source of community” and multiple comments noted that children, in particular, use the center. One observation included, “People take their children to the after/before school program - so their child does not go to an empty house after school.” In describing parks, residents identified them as places to gather for celebrations or for children to play, and expressed concerns about the safety of parks in the San Jose neighborhood. Comments included, “[The parks] do not feel safe. Not clean,” and one resident described going to a park outside of the San Jose neighborhood, saying it is far but that they do so because of problems in San Jose.

Looking at the other main theme about what residents want to protect and improve, physical aspects were mentioned. Residents want to protect health facilities and markets, as well as jobs and schools. Comments included, *“Protect health facilities,”* and *“we need to have an opportunity to excel learn and bloom.”* Of jobs, one resident also said, *“we need to hire even those with a criminal conviction.”* About aspects to improve, they included both daily needs and conditions in the physical environment of the neighborhood. One resident said, *“[Market] is needed.”* Speaking to neighborhood conditions, residents said currently, the trains’ contamination and noise affects the ability to breathe and walk in the area, identifying it as an area for improvement: *“[Improve] Because of the noise. Because the black powder enters the house.”* Two powerful statements from residents capture the sentiment well. They said, *“Our view of the scenery is sacred”* and *“We need to protect the health safety lifestyle of the people that live in the community.”*

Why It Matters: The social fabric of a neighborhood is associated with myriad health-related factors

Social connectedness shapes factors that influence individual health behaviors and ultimately health outcomes. It is a buffer to stress and influences health status itself.

A 1998 study using national data reported that higher levels of social mistrust were associated with higher levels of violent crime involving guns.* The relationship also went the other way: Neighborhoods with higher rates of group membership had lower levels of gun crimes.⁹⁶

Neighborhood social connectedness influences individual behaviors. In a 2008 study of six U.S. communities, less socially cohesive neighborhoods were associated with behaviors like increased depression, smoking, and not walking for exercise. The study adjusted for a bevy of factors like socioeconomic characteristics, neighborhood problems, and race and ethnicity.⁹⁷

Social connectedness or social capital – the benefit gained through cooperation – also influences individual health outcomes. Research has shown that social capital is associated with lower levels of general health and well-being, lower cardiovascular and cancer mortality, lower suicide rates, and lower rates of violent crime.*

This also is reflected in the relationship between social connectedness and overall health. A 2006 journal article found that people who reported a severe lack of social support were more than twice as likely to report fair or poor health than people who said they did not lack social support.⁹⁸ Looking at it another way, people living in communities with high levels of social trust are four times less likely to report fair, bad or very bad health than people living in communities without it.⁹⁸

The effect of social capital on health may vary with income level. A systematic review of literature on the interactions between social capital and socioeconomic inequalities found evidence in a dozen studies that social capital might buffer negative health effects of low socioeconomic status and in five studies that social capital has a stronger positive effect on health for people with a lower socioeconomic status.⁹⁹

Review of Environmental Assessment: There is no analysis of impacts to social cohesion or connectedness

The environmental assessment report says: *“The project is not expected to impact community cohesion . . . ”* It continues by describing topics covered elsewhere in this report, such as impacts to minority or low-income populations, but offers no evidence to support the assertion on cohesion.

Resident Analysis: The extension is unlikely to affect overall social cohesion

Based on personal experiences, residents predicted that social connectedness is likely to stay at the same level of low importance to the neighborhood if the proposed extension is built. One resident suggested that the extension could marginally bring together the neighborhood around efforts to understand and improve the project. However, the group said that it does not anticipate changes to social connectedness from the project. Residents added it is important in any future projects to protect and improve the places where people gather.

V. Recommendations For Sunport HIA:

The recommendations below come from a variety of sources. Fourteen were developed by the HIA resident panel in response to their analysis of the impacts of the first environmental assessment released in September 2011. They are included here because they continue to be relevant to the significant issues that remain in the REA (as described in this document).

In making these recommendations, we take a broad perspective that includes both the half-mile extension itself and the future economic development that will follow. As such, many recommendations would be implemented after the proposed extension is built, and with an emphasis on preventing future environmental hazards.

Overall

1. The county should more thoroughly and transparently reconsider Alternatives D and H, not only Alternative A, and mitigations.
2. The city and county should improve public information-sharing about the proposed extension and related planning. Specific actions include:
 - a. Publicly share plans to meaningfully involve the San Jose neighborhood in ongoing planning for the Sunport Boulevard Extension, to ensure that resident perspectives help shape future development.
 - b. Increase communication between city and county, as well as directly to residents, including but not only through the San Jose Neighborhood Association, and ensure communication is in culturally appropriate methods and languages. Publicly and immediately share formal and informal plans for the extension and development in the surrounding area. Specifically, share information on whether there is a vision – and what it is – for promotion of commercial and industrial development along the extension, such as zoning documents or plans ranging from the short-term to long-term (e.g., five-year plans, thirty-year plans, and so forth).

If the Sunport Boulevard Extension is built:

Environmental Hazards

3. The city and county should require that future permitting processes for the San Jose neighborhood include the completion of cumulative impact assessments that more accurately consider health impacts. Cumulative is defined in the spirit of the Environmental Protection Agency definition for the NEPA process, as *incremental environmental impacts of an individual project combined with the environmental impacts caused by past projects, the environmental impacts caused by other current projects and the environmental impacts caused by reasonably foreseeable future projects.*
4. The City of Albuquerque Air Quality Division should improve air quality monitoring and enforcement of existing air quality regulations in the San Jose neighborhood as follows:
 - a. Collect baseline information throughout the neighborhood on actual air quality emissions. If the information is collected by City or County agencies, it should be validated by outside organizations.
 - b. After the extension is completed, regularly monitor air quality at sensitive sites such as schools and community centers. Commit to retrofitting these facilities (e.g., provide upgrades to building thermal performance and ventilation systems) to keep indoor air pollutant levels below applicable state and federal standards, and mitigate exceedances found at baseline levels, if pollution levels surpass what is harmful to human health.

- c. Add an air monitor in San Jose where vulnerable populations congregate. The monitor should measure the six criteria pollutants (ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead), as well as volatile organic compounds.
- 5. The city and county should ensure compliance with and enforcement of existing noise standards. To do so, the city and county should collect baseline noise measurements in the community of San Jose to ensure standards are not being exceeded.
- 6. The city and county should consider revising noise control ordinances to set the standard for traffic-related noise, at 65 dBA or less for daytime and 55 dBA or less for nighttime.

Safety from Injuries and Collisions

- 7. The city should prohibit heavy trucks on residential streets in San Jose neighborhood.
- 8. The city and county should implement appropriate traffic calming features to slow trucks on roads that will see increased traffic from the Sunport Boulevard Extension.
 - a. Examples of traffic calming to consider are reduced speed limits, rumble strips, and landscaping.
 - b. Example locations for reduced speed limits are Broadway Boulevard traveling down the hill by Bethel Avenue and San Jose Avenue.
- 9. The city and county should create facilities to protect and encourage pedestrians and bicyclists on roads near the Sunport Boulevard Extension that will experience increased traffic during and after its construction. Actions include:
 - a. Building sidewalks with storm drainage. Example locations are Broadway Boulevard headed to Woodward Road, on Wesmeco Drive, on Arno Street, and John Street.
 - b. Extending the bike lane on Broadway further into the San Jose neighborhood.
 - c. Adding traffic lights at the intersections of William Street and Woodward Road, as well as Second Street and Woodward Road.^c
- 10. The City of Albuquerque Transit Department should ensure that the 16/18 bus route is maintained during and after construction of the Sunport Boulevard Extension. Also, the city should build bus shelters where the bus is used but there are not currently shelters to protect riders – for example, on William Street, Woodward Road, and Broadway Boulevard.

Miscellaneous Recommendations

- 11. Bernalillo County Public Works should include drainage facilities when building the Sunport Boulevard Extension.
- 12. To advance the economic prosperity of residents in the San Jose neighborhood, the Bernalillo County Economic Development Department should require businesses locating along Sunport Boulevard Extension to develop plans and commitments for local hiring, job training, and educational programs. For example, the city and county could work with businesses to start a GED program with instructors in the community that is free for low-income residents of the San Jose neighborhood.

^c Two members of resident panel abstained from this vote

13. To ensure San Jose residents are actually able to access workforce development and job training programs as well as access new jobs created in the community, the Bernalillo County Economic Development Department should require that businesses locating along Sunport Boulevard Extension *not ask* about applicants' history of arrest in job applications and interviews.⁴
14. The Bernalillo County Economic Development Department should establish a living wage (e.g., modeled on the living wage ordinance in Santa Fe) and require jobs created by businesses relocating or locating along the Sunport Boulevard Extension to pay such wages. In addition to paying a living wage, all permanent jobs (including part-time and full-time permanent jobs) created by business located near the extension should provide full health benefits.

Additional Recommendations

At the conclusion of the HIA process, the Steering Committee and project partners proposed additional recommendations to supplement those from the resident panel. These recommendations were not vetted in the same way, but are listed here as they provide valuable suggestions for appropriate parties to consider as well.

They include:

- Consider completing an Environmental Impact Statement to more fully assess the environmental impacts of the extension on environmental and human health, including reasonable alternatives (including a No Action alternative) that would avoid or minimize adverse impacts or enhance the quality of the human environment.
- The county, MRCOG, or other appropriate party should do a comprehensive traffic study that includes roadways connected to or near the extension that will be affected by it. The study should assess changes in traffic and how those are expected to affect air quality and noise. The study should consider potential short-term and long-term development (e.g., five-year plans, thirty-year plans, and so forth) that will and/or could take place if the extension is built.
- Absent discussion of cumulative impacts in this document, planning agencies and other authorities could consider a moratorium on approving projects that will result in new environmental hazards in the community.
- The city and county should draft relevant plans and commit funding to ensure pedestrian- and bicycle-safety measures and improvements on roadways such as Second Street that connect to the extension and will experience increased traffic or congestion, regardless of the alternative chosen. Plans should redesign these roadways for neighborhood pedestrian, bicycle, and vehicular safety, and to avoid increased cumulative air emissions. This should be done prior to completion of the extension in this environmental justice community.
- A specific way to implement the Steering Committee recommendation about public input is for the county to form and fund a Community Advisory Council that regularly provides input and feedback on plans for the proposed extension.

⁴ There was not unanimous agreement on this proposal; however, the majority of residents on the resident panel voted in favor of it.

- Improvements to pedestrian and bicycle facilities on adjacent roadways that the extension will affect, such as Woodward Road, should be put in place when the extension is built.
- The County should consider building sidewalk adjacent to the entire length of the extension, rather than for only 700 feet.
- The appropriate body should provide voluntary relocation of residents living in housing that is the closest to the extension.
- The appropriate body should involve impacted residents in identifying requirements for developments within the boundaries of the Design Overlay Plan.

VI. Conclusion

This HIA shines a light on numerous environmental and social conditions – including environmental exposures, safety, and social connectedness – in the San Jose neighborhood that could be affected by the proposed extension. In light of these findings and based on their own experiences in the community, residents are definite in their belief that air quality and safety will worsen as a result of the extension and the industrial and commercial development that will follow.

Numerous questions remain for the residents of San Jose: Are the purpose and need for the project transparent and being met? Will the Sunport Extension be further developed to the west of Rio Grande? Will new environmental hazards be introduced? What benefits will residents experience? Will community health and exposures get worse or better? What will the city and county do to protect the most vulnerable?

The community engagement process for the extension and the draft environmental assessment leave these questions unanswered, and have not facilitated trust within the community that such issues will be addressed in the future. Consequently, we suggest a more precautionary approach for the city and county. We propose a set of recommendations to mitigate the potential harms that may result from the extension and the development it will enable, as well as a series of recommendations that create opportunities for improved health and well-being for the residents of San Jose. Over time, we intend to monitor whether these recommendations are adopted and implemented in response to the concerns raised herein.

As project proponents, the City of Albuquerque and Bernalillo County have a duty to consider how residents and neighborhoods will be protected from new harms that result from the development they advocate. With San Jose's long and well-known history of environmental hazards and poor health, now is an opportune time to consider whether a *no new hazards* approach is warranted for the neighborhood. Such an approach would begin the process of reassuring community members that their health and well-being – now and in the future – are valued and prioritized in the community they call home.

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⁹⁵ Echeverría S, Diez-Roux A, Shea S, Borrell LN, Jackson, S. 2008. Associations of neighborhood problems and neighborhood social cohesion with mental health and health behaviors: the multi-ethnic study of atherosclerosis. *Health & Place* 14(4):853-865.

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⁹⁷ Echeverría S, Diez-Roux A, Shea S, Borrell LN, Jackson, S. 2008. Associations of neighborhood problems and neighborhood social cohesion with mental health and health behaviors: the multi-ethnic study of atherosclerosis. *Health & Place* 14(4):853-865.

⁹⁸ Poortinga W. 2006. Social relations or social capital? Individual and community health effects of bonding social capital. *Soc Sci Med* 63:255-270.

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VIII. List of Appendices

- Appendix A. Additional Key Planning Documents that Affect San Jose
- Appendix B. Pathway Diagrams
- Appendix C. Explanation of Terms Used in Resident Predictions
- Appendix D. Overview of Sunport HIA process

Appendix A. Additional Key Planning Documents that Affect San Jose

Area plans: Two area plans, in particular, are of interest. Adopted in 1998 and updated in 2000, the *Southwest Area Plan* sought to guide future development by addressing general land use, transportation, drainage, and public services. The original plan dates back to when the airport was still known as Albuquerque International and before ground was broken on Mesa del Sol. The plan is of particular relevance to the HIA because the environmental assessment cites it as one explanation for the extension. The current version of the plan also mentions a vision for “a major light industrial corridor with office and commercial uses is planned generally east of Second Street, south of Woodward Road, and west of Interstate 25,” modifying a vision expressed in the original 1988 plan.

Also of interest is the *Bernalillo County/International Sunport Station Area Sector Development Plan*, adopted in 2009. The plan lays out a vision for the future for select areas adjacent to the Rail Runner train station on Second Street. This vision includes human scale development, a multiuse area with access to employment and entertainment, and a safe pedestrian and bicycling environment. The southernmost edge of the San Jose neighborhood as defined for the HIA is in the boundary area for the station, meaning it is within a quarter mile of the station, although it is not immediately adjacent to the station and is not a main neighborhood focused on in the plan.

Complete Streets resolution and plan: Adopted in 2011 by the Mid-Region Council of Governments, the *Complete Streets resolution* aims to “safely mov[e] people of all ages and abilities along and across the roadway: pedestrians, bicyclists, motorists, and transit users. Complete Streets make it safe to walk to school, a nearby cafe, a senior center, or cross the street to reach a bus stop. Complete streets are made safe to bicycle to work, a neighborhood park or connecting trail.”^{§§} The Complete Streets resolution applies to the San Jose neighborhood, which is in the MRCOG jurisdiction. Similarly, a recently drafted *South Yale Complete Streets Master Plan* includes areas on Yale Boulevard that are north of Gibson Boulevard on the east side of I-25. It is mentioned here as a plan of interest; although just outside of the project area for this HIA, it provides a glimpse of recent efforts in a nearby neighborhood to improve conditions for all who use the roads.

Comprehensive plan: The comprehensive plan is the main planning document for the City of Albuquerque and unincorporated parts of Bernalillo County. Planning documents are ranked and the comprehensive plan is the top rank, meaning all lower ranking documents must be in accordance with the vision and guidance described in this plan.

Design overlay zone: The HIA project area is not in a design overlay zone; however, the space for the proposed extension is in the *Sunport Boulevard Design Overlay Zone*. The Design Overlay Zone controls signage.

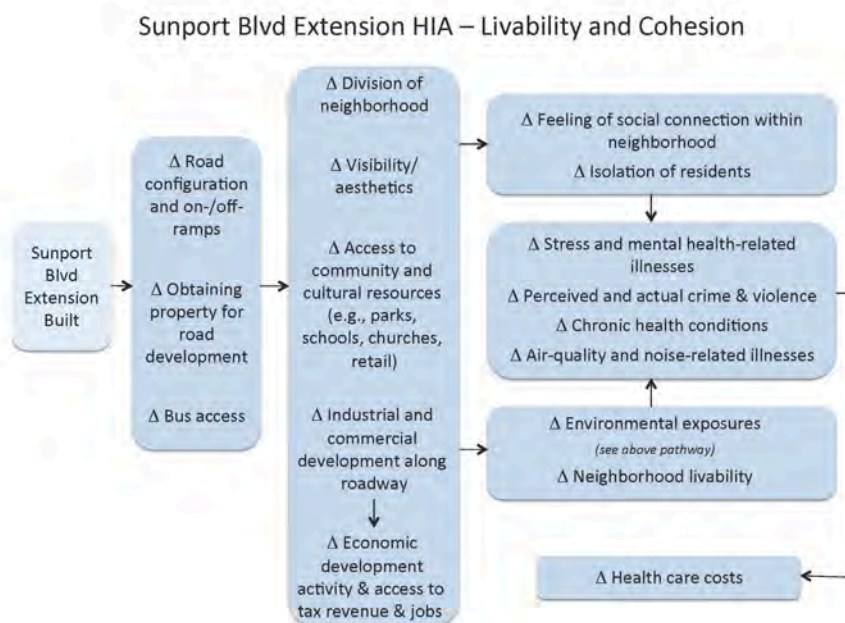
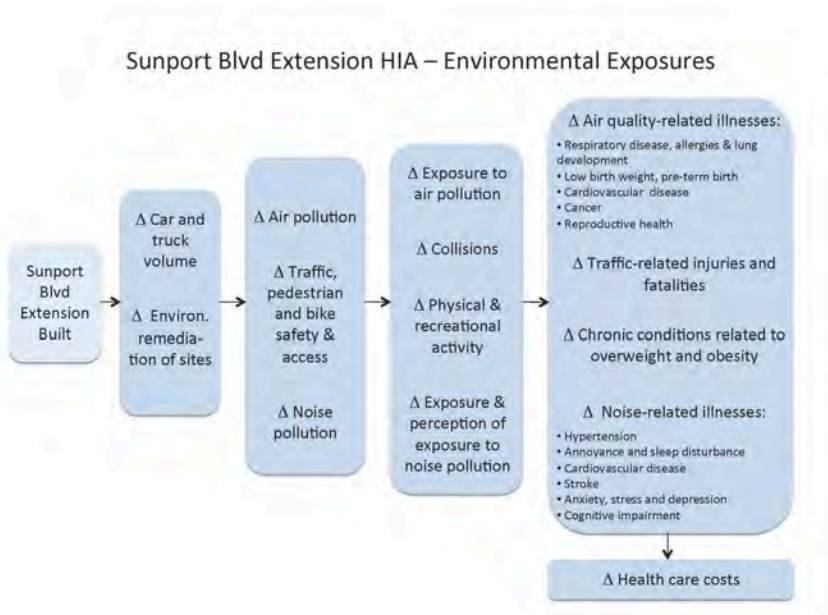
Sector plans: The project area closely aligns with the neighborhood focused on in the *South Broadway Neighborhoods Sector Development Plan*, dating to 1986, and is part of an area today known as the South Broadway Redevelopment Zone. The plan declared the area blighted and set out to promote economic development and redevelopment. It also noted environmental concerns at the time about developing industrial zoned land in the neighborhood for heavy industry. Near the proposed extension, the neighborhood north of Gibson Boulevard SE,

^{§§} Mid-Region Council of Governments. 2012. Bernalillo County Pedestrian and Bicyclist Safety Action Plan. Available at: [www.bernco.gov/upload/images/public_works/pedestrian%20safety%20action%20plan%20\(BCC%20final\).pdf](http://www.bernco.gov/upload/images/public_works/pedestrian%20safety%20action%20plan%20(BCC%20final).pdf). Accessed October 25, 2013.

although not included in the HIA project area but near it, is in the *South Yale Sector Development Plan*, adopted in 2009.

Appendix B. Pathway Diagrams

The diagrams below illustrate the issues brainstormed for this project. Ultimately, residents prioritized the following topics for analysis: exposure to environmental hazards; safety from injuries/collisions; and social connectedness, with additional interest in economic development.



Appendix C. Explanation of Terms Used in Resident Analysis

Likelihood

- Certain = information says the extension definitely will cause changes or stay the same (causal)
- Likely = logically possible and has a lot of supporting information, though some uncertainty
- Possible = logically possible but with limited or uncertain supporting information
- Unlikely = logically not possible and lots of information against it

Severity

- Severely = potentially life-threatening or permanently disabling, or could affect sensitive groups like children
- Moderately = big effects on well-being, livelihood or general functioning
- Not severely = short-term effects that that are reversible or can be managed

Number of People

- Everyone in San Jose = around 4,000 people
- Most in San Jose = 7 out of 10 people in San Jose, or around 3,000 people
- Some in San Jose = half of people in SJ, around 2,000 people
- Few in San Jose = less than 1 in 10 people in SJ – 400 people or fewer

Appendix D. Overview of Sunport HIA Process

Following is a summary of the key steps of the Health Impact Assessment process as they apply to the Sunport Boulevard Extension Project HIA.

Screening: Deciding Whether To Do an HIA

Before the start of the HIA, from approximately September 2011 to January 2013, residents followed the environmental assessment process for the Sunport Boulevard Extension. In September 2011, Bernalillo County released an Environmental Assessment report about the proposed extension, finding that it was expected to have no significant impacts to the environment and health. Approximately six months later, in March 2012, San Jose neighborhood resident Esther Abeyta sent a letter on behalf of the San Jose Neighborhood Association to the Federal Highway Administration. The letter challenged the adequacy of the County Environmental Assessment, in particular around the assessment of environmental justice issues.

Screening for the HIA was primarily from February to April 2013. People and organizations involved in screening included: a resident of the San Jose neighborhood, members of Bernalillo County PLACE MATTERS, SouthWest Organizing Project, the New Mexico Health Equity Partnership–Santa Fe Community Foundation, and Human Impact Partners. In February 2013, Esther Abeyta began conversations with the New Mexico Health Equity Partnership–Santa Fe Community Foundation and Human Impact Partners about the potential value of a Health Impact Assessment on the extension and whether there was an upcoming decision that could benefit from the additional information an HIA could provide. The group started conversations with SouthWest Organizing Project and Bernalillo County PLACE MATTERS. Together, it was decided to move forward with the HIA after two additional letters were received. One was a reply from the Federal Highway Administration to Esther Abeyta in March 2013 saying the issue was being investigated and that the office in Washington, DC alerted both their New Mexico Division office and the New Mexico Department of Transportation about the matter. The other was a letter in April 2013 from the Federal Highway Administration’s New Mexico Division to the New Mexico Department of Transportation that suggested changes to the Environmental Assessment report. From the HIA perspective this suggested a possible decision to inform. After this point, the group reached out to the New Mexico Department of Health while forming a project Steering Committee.

Scoping: Determining the HIA Research Focus

This HIA used a “rapid” approach to maximize community participation in a short timeframe. The approach included assembling a panel of 10 residents who were identified and invited by the Steering Committee as neighborhood residents potentially affected by the project. Panelists offered a sample of perspectives from residents in the neighborhood.

The panel convened two times, first on August 17, 2013 for five hours to learn about HIA, discuss the proposed Sunport Boulevard Extension project, and identify key questions on which the HIA would focus (also known in the HIA process as “Scoping”). The panel also refined diagrams hypothesizing the connections between the proposal and potential health outcomes that were drafted by Human Impact Partners and Steering Committee.

Key topics of focus for the HIA that came out of this first meeting included: exposure to environmental hazards, safety from injuries and collisions, and social connectedness.

The panel included both English- and Spanish-speaking residents and so the meeting included simultaneous English and Spanish interpretation and materials available in both languages. For

this meeting, the Steering Committee designed and helped facilitate a process in which the resident panel could learn, engage, and deliberate.

Assessment and Recommendations: Gathering Information, Making Predictions, and Identifying Strategies for Improvement

After the first meeting, the Steering Committee recruited subject matter experts and a researcher in the key topics of focus for the HIA. The experts included one health economist and assistant professor in family and community medicine from the University of New Mexico, and one retired air quality expert who previously worked also with the university, the Environmental Protection Agency, and the Albuquerque-Bernalillo County Air Quality Control Board. A HIP staff member with background in pedestrian and bicycle planning also spoke about research related to safety.

During a second meeting of the resident panel approximately one month later, on September 14, 2013, and that lasted for approximately eight hours, the subject matter experts and researcher spoke to these topics, and the resident panel reviewed existing conditions data collected by Human Impact Partners during the one month period. Using both sources of information, as well as reflecting on experience, the panel came to consensus on the likely impacts of the development on health, and identified a set of recommendations that could mitigate potentially negative health impacts.

As with the previous meeting, this second meeting was conducted simultaneously in English and Spanish, and the Steering Committee designed and helped facilitate a process in which the resident panel could learn, engage, deliberate, as well as come to consensus and provide data for residents to consider in their decisions.

Reporting: Synthesizing Findings

Human Impact Partners drafted this report based largely on the original environmental assessment and coordinated gathering feedback from experts from whom the Steering Committee invited review and comment. Those reached out to included subject matter experts from the in-person Scoping meeting, former staff of the County public health department, staff at the state public health department, and a representative of a neighboring community. San Jose neighborhood resident and Steering Committee member Esther Abeyta facilitated gathering feedback from the resident panel on the draft report. After the release of the revised Environmental Assessment report, and given a relatively short time period for review and public comment on it, an addendum was drafted to highlight lingering issues raised in this initial draft that seemed unresolved in the revised EA. This document will be submitted as public comment to the revised Environmental Assessment report.

Participation in Steps of HIA

The table below illustrates the capacity in which key stakeholders participated in the Health Impact Assessment process.

Step of HIA Process	Resident Panel	Subject Matter Experts or Researchers	Steering Committee	Human Impact Partners
Screening			L	L
Scoping				
Pathway development	P		P	L
Finalizing of issues to focus on in the HIA	L		P	P
Assessment				
Gathering existing conditions information				L
Review of existing conditions information	P		P	L
Conversation about key research	P	L		P
Literature review				L
Identification of likely impacts	L		P	P
Consensus on likely impacts	L		P	P
Recommendations				
Identification of recommendations	L		P	P
Consensus on recommendations	L		P	P
Identification of supplementary recommendations			L	P
Reporting				
Writing and finalizing				L
Review	P	P	P	
Monitoring / Evaluation (to be done)				

L = lead, P = participant