

4 EXISTING CONDITIONS

The Grant Road study area has many assets including independent businesses, ethnic diversity, a range of non-profit and community organizations, specialized retail and services, popular restaurants and bars, a unique diversity of housing, walking, bicycling, and transit ridership. However, the current physical environment of the road and some of the uses along it impede the ability of Grant Road to be a great street passing through a set of urban places. Inconsistent pedestrian and bicycling conditions, a lack of comfortable public spaces and amenities, a lack of community identity in much of the built environment, bad connectivity and challenging conditions for those driving along Grant Road, an often confusing or haphazard land use pattern, not taking advantage of ecological processes, inefficient parking management, and a host of other factors inhibit Grant Road from achieving its potential as a great street in a great place.



This chapter summarizes existing conditions that were documented in seven technical assessments prepared during the data collection and analysis phase (Phase 1) of the project. The technical assessments were prepared for the Grant Road study area to document study area assets, needs, and opportunities for making positive change and strengthening existing assets.

This chapter is organized to provide key findings in three categories (listed below) from each technical assessment. Additional detail is provided in the seven technical assessment reports. The technical assessments

that were used to create this summary are listed in the following table.

Technical Assessment Category	Technical Assessment
Land Use, Urban Form, and Real Estate	<ul style="list-style-type: none"> Land Use and Urban Form Assessment Real Estate Market Assessment
Environmental	<ul style="list-style-type: none"> Environmental Overview
Transportation and Infrastructure	<ul style="list-style-type: none"> Roadway/Right of Way Assessment Traffic and Safety Assessment Alternate Modes (pedestrian, bicycle, and transit) Assessment Drainage and Utilities Assessment

To supplement the technical assessments, TDOT conducted a historical assessment study which produced the report, *Historic Properties Assessment for Grant Road* and completed State of Arizona Historic Property Inventory Forms for structures located on Grant Road and on seven major north-south cross streets between Oracle Road and Swan Road. In addition, TDOT conducted the *Relocation Red Flag Analysis, Grant Road: Oracle Rd. to Swan Rd., An Outline of Anticipated Relocation Issues, Actions, and Recommendations for Certain Business Types Located within the Project Limits* (dated November 2007). These reports are not summarized in this chapter.



4.1 Land Use, Urban Form, and Real Estate

Two technical assessments were developed to describe current land use, urban form, and real estate market conditions.

4.2 Land Use

In reviewing land use characteristics within the study area, the project team considered both existing development and existing policy. The study area contains significant commercial areas and residential neighborhoods, as well as smaller areas of industrial use, scattered open spaces, and public and social service uses.

Key findings from the land use assessment are listed below:

- Existing land use policies support neighborhood preservation and enhancement, the potential for mixed use infill, and revitalization of commercial areas.
- The 2001 City of Tucson General Plan supports the study area's general existing patterns of residential neighborhoods and commercial corridors, while encouraging residential infill as part of mixed use projects, revitalization of commercial areas, and the meeting of residents' needs for goods and services. The plan encourages focusing new development in the existing urbanized area and uses

that support transit and pedestrian activity. Residential uses within the study area fall primarily under “suburban character” (less than 6 units per acre) and “mid-urban character” (up to 14 units per acre),



with a few small areas designated as “urban character” (15 units per acre and above). Commercial uses fall under “mixed use character,” as there are no “Activity Centers” designated in the study area.

- At a broad level, the city’s zoning for the study area follows current land use patterns and supports the General Plan. Some commercial designations (including C-2 and C-3) could allow for mixed use development including residential, while others (including C-1) do not allow residential uses. The distribution of commercial designations along Grant Road is inconsistent. The only industrially

zoned portion of the study area, near Stone Avenue, roughly matches existing uses. In addition, two areas have different designations in the general plan and zoning, Balboa Heights is designated urban character residential in the General Plan while it is zoned for office, and the area northwest of the intersection of Alvernon Way and Grant Road is designated mixed-use character in the General Plan while it is zoned for office.

- Area and neighborhood plans cover most of the study area. Like the General Plan, they largely call for neighborhood preservation, with measures for the incorporation of infill housing and commercial or mixed use development whose scale and character complement that of the existing area. These plans also call for more public amenities serving the neighborhoods.
- Between Oracle Road and Fontana Avenue, residential uses exist next to industrial, retail, organizations, and services in a fine-grained mix of uses, lot by lot, particularly within the lots south of Grant Road.
- The Grant Road study area has clusters of professional offices, consisting of financial and real estate services and design offices. The industrial/warehouse industry has the largest number of jobs in the study area for any business group, at 813. Approximately three-fourths of these jobs are in the construction contractor sector and are concentrated largely in the western segment of the study area.
- The shopping centers along Grant Road vary in terms of their mix of uses; some are experiencing a transition to office and service uses, in addition to their more traditional retail uses. It is typical for some shopping centers to become “grey field” sites for redevelopment as their existing buildings age and as some uses become less viable. Because of their large lots and location, shopping centers along Grant Road provide long range opportunities for possible redevelopment into higher-density mixed use development and open space.
- The study area as a whole lacks traditional public amenities such as parks, plazas, and community services, such as libraries and community recreational facilities. There are no strong connections to

existing open spaces such as the Rillito River. The only public park that fronts onto Grant Road, the triangular park west of Campbell Avenue, is poorly designed and appears to be underutilized. However, opportunities exist to leverage the presence of organizations and educational institutions mentioned above, such as the Tucson Symphony Orchestra, Doolen Middle School, and to enhance the public realm.

- The study area has about 108 separate retailers in the general merchandise and grocery categories, with about 1,100 jobs and \$244 million in annual sales. The bulk of this activity is anchored by several national chains such as Fry’s Food Stores and Wal-Mart. A variety of other retail categories, though smaller in scale, do provide a diverse and more “funky” environment with the potential to attract citywide patronage.
- At the western end of the of study area, near Oracle Road, there is an auto-oriented business cluster with a number of automobile repair shops and motor vehicle sales shops. Moving toward the central segment, there is a home furnishings cluster consisting of furniture, appliance, and lighting stores. Auto businesses are also clustered in the eastern end of the study area. Additionally, between Tucson Boulevard and Alvernon Way there are a number of antique stores. The eastern segment has more traditional strip commercial with national retailers, such as Radio Shack and Blockbuster Video.
- The study area contains numerous quasi-public uses such as social service/non-profit organizations, schools, and religious facilities. Some specific examples include: the Tucson Symphony Orchestra, Tucson Botanical Gardens, Southern Arizona Association for the Visually Impaired (SAAVI), Pima Medical Institute, Doolen Middle School, and Tucson International Alliance of Refugee Communities (TIARC) Center.



- Vacant parcels are numerous in the western end of the study area as well as at key nodes in the eastern part of the study area. There are also a number of parcels that have land values that are higher than the value of the buildings on them, per County assessor’s data.
- The study area contains areas with more multifamily housing than typically found in Tucson. Almost two-thirds of the study area’s 8,074 housing units are multifamily or single family attached. This provides a high level of housing

choice and, in some places, a relatively high population density. However, it should be noted that the vast majority of non-single family housing is not owner-occupied, reducing choice in regard to tenancy. The study area’s overall housing density is roughly 5 units per gross acre, which is within the range of medium density single family detached housing. Currently, about 60 percent of study area residents are renters, double the countywide rate.

- The type and scale of commercial activity on Campbell Avenue, Tucson Boulevard, and Alvernon Way strongly influences the type and viability of retail development on Grant Road adjacent to these

crossing streets. This is also related to the importance of these north-south streets in bringing traffic to Grant Road from the foothills and linking Grant Road to Downtown, the University of Arizona, and other important regional uses to the south and north.

4.3 Urban Form

- In some locations, subtle topography opens views to surrounding mountains or cuts off longer views and provides a feeling of enclosure, such as the bowl-like feeling of Tucson Boulevard or the hilltop sense of Fontana Avenue.



- Most of Grant Road lacks physical characteristics to create a unique identity for the businesses, homes, and other uses along it – generally the character of the road is that of many other arterial strips in Tucson and the southwest. Yet, there are unique uses along the road that do begin to create a unique identity for Grant Road.
- Large setbacks and the placing of gas stations, drive-through restaurants and parking lots at major corners heighten the lack of enclosure and dominance of motor vehicles at intersections.
- The study area features significant views to the mountains north of the City as well as the mountains west of the City, and in some places, to downtown.
- The public-private interface on much of Grant Road, with its large setbacks, landscaping, parking, goods display, curb cuts, quasi-public space and stormwater detention creating vague distinctions between public and private realm and with the lack of sidewalks makes for a confusing and in places very uncomfortable pedestrian environment. These conditions invite further inspection for articulation and improvement.
- There is generally a poor relationship

between non-residential lots fronting on Grant Road and residential non-fronting neighborhoods.

- The transition between the traffic and commerce of Grant Road and residential neighborhoods around it is very abrupt or non-existent in many places in the study area.

- While potential revitalization districts in the western end of the study area have good connectivity to surrounding street grids, districts in the eastern end of the study area — and the strips along Grant Road between them — are largely cut off from access to the surrounding neighborhoods and need better connectivity.
- Lot depths typically range between 100 and 300 feet in depth from the existing Grant Road right-of-way; most of the larger shopping centers are 600 feet deep; and some others range from 400 to 600 feet deep.
- The study area contains two neighborhoods on the National Register of Historic Places, Catalina Vista and Blenman Elm, and a third, Jefferson Park, is in the process of petitioning for inclusion on the Register. All three areas lie between 1st Avenue and Country Club Road south of Grant Road.
- The two study area districts on the National Register of Historic Places are almost completely residential (an exception being the Walgreen's/Bookman's building). A 1990 historic building survey of portions of Grant Road deemed six buildings “irreplaceable,” all of them single family residences.
- Development along Grant Road is a product of Tucson, its culture and climate, has several specific urban form typologies, including – the courtyard, the side yard sanctuary, the wall, converted single family homes, one story multifamily, shaded patios, murals, and classic signage. There are other positive precedents in the study area, including the bicycle and streetscape improvements on Mountain Avenue; pedestrian-friendly parking lots, stormwater management provisions, and frontage roads.

4.4 Real Estate and Market Analysis

- Although the Tucson region has been and is expected to continue to be one of the fastest growing regions in the United States, with an almost 50 percent increase in population from 1990 to 2005, most of this growth is occurring in peripheral areas rather than within the city core. Over the long term, however, regional land constraints, such as habitat conservation and limited water for continued urbanization, could increase pressure for infill development in locations such as the Grant Road study area.
- Approximately 55 percent of projected total growth in Pima County between 2006 and 2025 will consist of Young Professionals (ages 20 to 34) and Empty Nesters (ages 55 to 74). These market segments often demand smaller housing units with high amenities such as views, access to transit, retail, recreation, and cultural opportunities.
- Although the Grant Road study area will continue to benefit from a strong regional housing market, it is not likely to attract a significant amount of new condominium development until or unless a higher level of urban amenities is available. Most of the new condo projects located elsewhere in Pima County are still relatively low-scale buildings that are three stories or less.
- A vast majority (85 percent) of Grant Road's retail sector businesses are “headquarters.” In most cases these are the only location for the stores. Most are also small businesses, with an average of 8 employees per establishment. Tucson residents look to Grant Road as unique in this manner. A majority of independent businesses lie on relatively shallow lots, making them more susceptible to the road widening.

- Offices offer a growing and economically viable sector for the study area that can support local business activity and possibly provide local employment opportunities. The Grant Road study area could potentially leverage its position as a well-traveled arterial with proximity to the major medical and research institutions to capture a share of the growing regional office market.
- The study area has a population that tends to have lower incomes than the County as a whole, with a median household income in 1999 of about \$26,000. This may challenge the study area’s buying power to support additional local-serving business. The western end of the study area is a part of a north-south swath through Tucson that has high levels of poverty, under-education, and unemployment. It may require a different approach than the rest of the study area. The area north of Grant Road around Alvernon Way is also lower-income in comparison to the county as a whole; but the Census Data for this area is not as conclusive in terms of income and education related demographics.
- While the study area does not have clear districts with ethnic identities, it has substantial diversity throughout. At the same time, the study area has a higher percentage of non-Hispanic white population than the city as a whole (64 vs. 54 percent). The Hispanic population of the study area is the next most populous group at 24 percent, but this is much lower than for the city as a whole at 36 percent of total population. Unlike many other parts of Tucson, which contain a clear majority of either white or Hispanic residents, the western portion of the study area is a mix of white, Hispanic, Black, Native American and Asian residents. The eastern end of the study area, centering on Alvernon Way, with its multifamily housing, social service organizations and bus connections, has emerged as a center of refugee resettlement in Tucson. The population in central part of the study area is predominantly non-Hispanic white and less diverse.
- The study area contains several “clusters” of similar business types which collectively may bring customers and clients from throughout Pima County. While many motor vehicle businesses are located on the study area’s west end, several businesses selling antiques and other home furnishings such as appliances and building materials lie in the central and eastern areas. These clustered businesses can help each other by complementing each other’s services and could help develop an identity for districts along Grant Road.

4.5 Environmental

The Environmental Overview Technical Assessment described current environmental conditions in the study area. Key findings from this technical assessment are listed below.

- The urbanization of the study area has removed most native plant and animal communities, as well as prime farmland. Remaining environmental regulatory constraints include one potential “waters of the U.S.,” as defined by the Army Corps of Engineers, in Wilson Wash; the inclusion of the study area in a “maintenance area” for CO₂, as defined by US EPA; the potential for noxious weeds; and leaking underground storage tanks. As the Grant Road Improvement Plan moves forward through more detailed design and ultimately construction further environmental assessments will be prepared as needed to verify the current understanding of environmental constraints.
- Of the 31 recorded underground storage tanks located on Grant Road, 20 are documented as leaking underground storage tanks. One Hazardous Waste Treatment, Storage, and Disposal Facility is documented on Grant Road.

- Field observations in the study area revealed that the native Sonoran Desertscrub Biotic Community has been displaced as a result of urban development resulting in a landscape that is dominated by non-native and ornamental plant species.
- Areas between Campbell Avenue and Country Club (Wilson Avenue Wash), near Alvernon Way (Alvernon Wash), and between Alvernon Way and Swan Road (Midway Wash and Columbus Wash) lie within the 100-year floodplain designated by the Federal Emergency Management Agency (FEMA) and are flood prone areas that when flooded adversely impact property owners and users of Grant Road.
- The Sonoran Desertscrub community is centered at the head of the Gulf of California and encompasses the western half of the state of Sonora, Mexico, as well as large areas in southeastern California, southwestern Arizona. Common plant species include blue palo verde, yellow palo verde, desert ironwood, mesquites, cat-claw acacia, crucifixion thorn, cholla, saguaro cactus, pincushion cacti, and barrel cacti.
- The western three-fifths of the Grant Road study area drain westward into the Santa Cruz River watershed, while the eastern two-fifths drain northward into the Rillito River watershed.
- Sun, wind, and other factors create micro-climates within Tucson’s urban desert environment.
- Existing noise levels on Grant Road and increasing traffic noise will increase traffic volumes are design and land use planning issues. A range of solutions should be considered to reduce noise, including: speed management to reduce braking and acceleration of traffic, using street fronting development to buffer neighborhoods behind, selective use of well-landscaped walls, and special pavement treatments.



4.6 Transportation and Infrastructure

Four technical assessments were prepared that describe current transportation and infrastructure conditions in the study area. These are:

- Roadway/Right of Way Assessment
- Traffic and Safety Assessment
- Roadway/Right of Way Assessment
- Alternate Modes Assessment
- Drainage Assessment
- Utilities Assessment

Each of these is described below.

4.7 Roadway and Right of Way

- The voter-approved half-cent sales tax called for six travel lanes on Grant Road between Oracle Road and Swan Road, where five exist today. It also called for enhanced multi-modal travel opportunities, which includes sidewalk and transit facilities. It did not prescribe the exact design of the new Grant Road cross-section, which will emerge from the planning process. Grant Road

improvements will also include streetscape and infrastructure improvements and adjacent property redevelopment and revitalization strategies.



- Grant Road is one of several cross-town arterials that serve regional trips in the Tucson metropolitan area. Grant Road also intersects with important north-south arterials serving trips to and from downtown Tucson, the University of Arizona, Tucson International Airport, and I-10. A mature arterial grid system provides flexibility in route selection and opportunities for route diversion to avoid the adverse effects of congestion and incidents.
- Today, Grant Road is on 80 feet of right-of-way from Oracle Road to Park Avenue and from Campbell Avenue to Alvernon Way. Between Park Avenue and Campbell Avenue and between Alvernon Way and Swan Road, Grant Road is on 90 feet of right-of-way. Typically, Tucson arterial streets require at least 120 feet of right-of-way and up to 150 feet at major intersections.
- A study conducted by the Tucson Transportation Department in the mid-1980s recommended that properties on the north side of Grant Road be acquired for future widening of Grant Road between Campbell Avenue and 1st Avenue. Direction received from the City at the outset of the Grant Road Improvement Plan was to

consider other feasible alignment alternatives (in addition to the north alternative) for widening Grant Road between Campbell Avenue and 1st Avenue.

- Roadway alignment decisions should take into consideration vacant or undeveloped properties as well as properties with set-backs that allow for partial property takes to minimize impacts to structures along Grant Road. These properties also provide opportunities for other Grant Road improvements such as alternative mode amenities, open space, buffers, and new development.

- Where partial property takes affect parking supply in front of businesses, opportunities exist to convert adjacent property, especially vacant properties, to shared off-street parking to off-set the loss of parking.

4.8 Traffic and Safety

- Grant Road provides direct access to 415 residential units and 429 businesses fronting on Grant Road. Within the study area, Grant Road provides indirect access for nearly 8,075 residents and over 800 businesses.



- Traffic performance is rated unacceptable at 9 of 13 signalized intersections, based on current traffic performance criteria. Daily traffic volumes in 2007 ranged from 39,000 to 42,000 vehicles per day. The capacity of 5-lane arterial is approximately 40,000 vehicles per day.
- A total of 1,746 crashes were reported on Grant Road for the period 2003 - 2005. Rear-end crashes were the predominant type of non-intersection crashes (accounting for 64 percent of all non-intersection crashes) and at intersections (accounting for 50 percent of all intersection crashes). A principal

contributing cause to rear-end accidents occurring at non-intersection locations is the approximately 300 driveways that exist today on Grant Road between Oracle Road and Swan Road. A principal contributing cause to rear-end accidents at intersections is the congestion and delays that occurs during the commuter period.

- Daily traffic volumes recorded in 2007 range from 39,000 to 42,000 vehicles per day. There are 13 intersections with traffic signals, 35 unsignalized intersections, and 434 driveways on Grant Road between Oracle Road and Swan Road. Pima Association of Governments estimates that 2030 traffic volumes will range from 47,000 to 70,000 vehicles per day.
- Grant Road is one of several east-west arterials that span the Tucson metropolitan area. In 2007, approximately 15 percent of daily traffic on Grant Road (about 6,000 vehicles per day) is regional or through traffic - traffic that does not originate from, nor is destined for residences and businesses on Grant Road between Oracle Road and Swan Road. In 2030, regional traffic will increase to approximately 20,000 vehicles per day, or approximately 30 percent of 2030 traffic volumes.
- Increasing the number of through lanes from 4 to 6 will increase the capacity of Grant Road and will reduce current levels of congestion and delay. However, traffic volume will continue to increase on Grant Road and steps should be taken to increase the capacity of Grant Road beyond that typically provided by 6-lane arterial streets. Methods are available to increase the capacity of arterials through strategies to manage access, coordinate signal timing using advanced traffic control technologies, and alternative methods of allowing left-turn movements from Grant Road.

- Additional turn lanes and storage at intersections will reduce the level of intersection delay and congestion and increase intersection safety. Intersection improvements should also address the needs of pedestrians, bicyclists, and transit buses.
- Because Grant Road serves regional and local trips, mobility and access must be appropriately balanced. Balancing strategies including frontage roads, multi-lane boulevards, and driveway relocation or consolidation should be considered. These techniques can allow through traffic to pass more smoothly and safely while also making access to adjacent development safer and more efficient.

4.9 Alternate Modes (Transit, Bicycle, Pedestrian)

- The study area has a number of districts with higher transit ridership than the City as a whole, as well as districts with high rates of bicycle commuting. For example, 12 to 14 percent of block groups in the eastern end of the study area north of Grant Road commute to work by transit, according to the 2000 Census, compared to the city's rate of 3 percent. In the central area of the study area south of Grant Road, near the university, up to 15 percent of block groups bicycle to work and 13 percent walk to work, compared to city rates of 2 percent and 3 percent, respectively.



Grant Road improvements should address facilities and amenities for pedestrians, bicyclists, and transit users including continuous ADA-compliant sidewalks, bicycle lanes, improved pedestrian crossings, and pedestrian amenities such as buffered and shaded sidewalks, transit stop amenities, bus pull-outs, and special needs associated with schools and activity centers along Grant Road.

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- Even where Grant Road does have sidewalks, they are often narrow and not buffered from motor vehicle traffic. In addition, the pedestrian realm suffers from constant curb cuts in many places; a lack of landscaping in the right-of-way; interference from cars in parking areas overlapping the pedestrian area; and disconnected ADA facilities.
- By widening Grant Road, opportunities for a safer and more comfortable environment for pedestrians should be created. The character of the cross section, landscaping, lighting, and other streetscape elements can be used to create an identity for Grant Road and for the segments and nodes of activity along it.
- While multi-modal infrastructure and amenities are inconsistent along Grant Road, pedestrians, bicyclists, and transit users use Grant Road for a variety of commuter, recreational and everyday travel needs.

4.10 Drainage and Utilities

- Areas between Campbell Avenue and Country Club (Wilson Avenue Wash), near Alvernon Way (Alvernon Wash), and between Alvernon Way and Swan Road (Midway Wash and Columbus Wash) lie within the 100-year floodplain designated by the Federal Emergency Management Agency (FEMA) and are flood prone areas that when flooded adversely impact property owners and users of Grant Road. Corrective actions to address flooding problems are regional in nature and go far beyond the Grant Road study area. Improvements to local (Grant Road) drainage infrastructure and improved strategies for stormwater management will be included in Grant Road improvements but will not resolve all floodplain issues. Grant Road improvements will also be consistent with Federal and



local regulations that limit impacts to established floodplains.

- Public and private utility providers will be coordinated with as the design of Grant Road improvements progress. Conflicts between existing utilities and Grant Road improvements will be identified and coordination with utility providers and will result in strategies for addressing conflicts including utility betterment and relocation.
- Aging utilities, areas prone to flooding, traffic congestion, inconsistent amenities for alternate modes, and traffic safety issues adversely impact Grant Road users, and the residents and businesses located on and near Grant Road.