

MEMORANDUM

DATE February 11, 2016
TO Sophia Pagoulatos
City of Fresno
FROM Bruce Brubaker, PlaceWorks
SUBJECT **Southwest Fresno Specific Plan Alternatives Analysis**

This memorandum summarizes three draft development alternatives proposed for the Southwest Fresno Specific Plan Area and the surrounding Sphere of Influence (SOI) areas. The SOI are land areas currently in the County of Fresno, but are anticipated to be annexed into the City in the future. For planning purposes, the SOI areas are included in the alternatives analysis to consider the overall long-term projections for the larger Southwest Fresno area. However, the Southwest Fresno Specific Plan and Environmental Impact Review (EIR) will focus only on land within the Specific Plan Area, which does not include SOI or County land.

The three alternatives are characterized as: (1) Corridors and Neighborhoods, (2) Many Smaller Neighborhoods, and (3) Neighborhoods around Magnet Uses. Each alternative includes locations for regional retail and/or neighborhood retail centers, where there would be a mix of commercial businesses within each retail center. The main characteristics of each alternative, including land use and transportation improvements, are summarized on the following pages. The alternatives are also described in more detail in the attached matrix, conceptual diagrams, and maps.

The alternatives analysis also includes “buffer areas” between the County land and the SOI and/or Plan Area to limit the impacts from future development in the County, which the City does not have jurisdiction over. These buffer areas could potentially accommodate the proposed Greenbelt Trails located along the periphery between the City and SOI, as described in the Fresno General Plan’s Parks and Open Space Element. Analysis of utilities infrastructure is provided as an appendix to this memo.

These draft alternatives were identified by the Steering Committee at their Steering Committee meeting in November 2015 using input from the seven Topic Groups that met at the start of the planning process. The alternatives are intended to help community members think about how development can occur in Southwest Fresno; community members will provide input on them at the next community workshop in February. Taking community input into account, the Steering Committee will select a Preferred Alternative and make recommendations to the City of Fresno Planning Commission and City Council in Spring 2016. The Preferred Alternative may include a mix of elements from the three alternatives.

Members of the Specific Plan’s Jobs and Economic Development Topic Group expressed the types of businesses they would like to see at different retail centers. Their ideas included a large anchor, such as a

supermarket, at each retail center surrounded by various services, retail, and entertainment options, such as clothing stores, buffet-style restaurants, fast food restaurants, dry cleaners, doctors' offices, a drug store, a gym, and a movie theater. It should be noted that the Specific Plan can dictate the zoning to allow for these types of uses and set a vision for development, but it does not determine the specific businesses that will eventually locate to the area.

Several parcels within the Plan Area, especially near Whites Bridge Avenue, may be located within the Airport Influence Area and Safety Compatibility Zones of the nearby Fresno Chandler Executive Airport. Proposed development projects within these areas would be subject to the policy criteria as described in the Fresno Chandler Executive Airport Land Use Compatibility Plan. New development that results regardless of the alternatives may also require new road width capacity and will be assessed in the Specific Plan.

Table 1 compares the three alternatives' conceptual buildout programs. The development assumed for commercial, employment, and parks in each of the three alternatives is equal to or less than that assumed for eventual long-term buildout in the Fresno General Plan. Compared to the Fresno General Plan, the alternatives do not allocate as much developable land to employment and commercial uses. Instead, they allocate more land to new housing. The park acreages are proportionate to the number of dwelling units for each alternative to provide a minimum of three acres of park per thousand new residents, and are intended to show relative differences between alternatives only. The General Plan has a goal of increasing parkland to five acres per thousand residents. The location, size, and type of parks will be refined during future discussions with the community and Steering Committee, and wherever possible they should be located in close proximity to schools.

Table 1 Development Program Comparison Chart

		HOUSING (DWELLING UNITS)	COMMERCIAL (BUILDING SQUARE FEET)	EMPLOYMENT (BUILDING SQUARE FEET)	PARKS (ACRES)
Alternative 1: Corridors & Neighborhoods	Total	16,900			
	SF	10,400	2,000,000	6,000,000	200
	MF	6,500			
Alternative 2: Many Smaller Neighborhoods	Total	13,300			
	SF	10,400	1,000,000	2,000,000	165
	MF	2,900			
Alternative 3: Neighborhoods around Magnet Uses	Total	15,000			
	SF	10,400	1,800,000	3,600,000	185
	MF	4,600			

Note: SF = single-family housing; MF = multi-family housing

Alternative 1: Corridors and Neighborhoods

OVERALL CONCEPT

The Corridors and Neighborhoods Alternative is made up of three neighborhoods complete with housing, retail, parks, and employment areas. These large neighborhoods are linked by well-defined corridors lined with higher, more intensive development, and multimodal transportation improvements.

LAND USE

Commercial

- This alternative has the highest amount of commercial development among the three alternatives.
- Commercial businesses along corridors would be supported by surrounding higher-density uses, including higher-density housing along corridors.
- The Regional Retail Corridor along Whites Bridge Avenue could become a premiere local and regional shopping destination since it is located off Highway 180 and surrounded by housing.
- New supermarkets would be located near the Marks Avenue/Highway 180 and Jensen Avenue/Highway 41 freeway intersections and on opposite sides of the Plan Area, which provides regional access to food for two large neighborhoods.



Regional retail establishments along a corridor



Mixed-use higher-density housing along a corridor

Housing

- This alternative has the highest number of dwelling units among the three alternatives.
- Single-family housing would be located outside the corridors, except along the Historic Corridor. The Historic Corridor would encourage single-family houses compatible with a historic character.
- Higher-density housing would be located along and around corridors, consistent with the particular type of corridor. For example, the Mixed Use Corridor would include multi-family housing above ground-floor retail.



Large single-family housing consistent with the character of the Historic Corridor

- Higher-density housing around transportation corridors could help attract development of retail and services.

Employment

- This alternative has the highest employment development among the three alternatives (including office, business park, and industrial uses).
- Existing industrial uses would not be completely rezoned within the Plan Area. Those that have harmful impacts would be rezoned to allow for “clean” industrial uses only.
- The Jobs Corridor along Jensen Avenue would provide a connection from Highway 41 and extend west toward business and industrial uses near the Wastewater Treatment Plant, allowing development of local and regional professional offices from east to west through the Plan Area.
- Small-scale services would be allowed in buildings consistent with the character of nearby housing and located within residential communities, especially along the Historic Corridor.

Schools

- New or existing schools would be dispersed to support population growth within the Plan Area.

Parks

- This alternative has the highest park acreage among the three alternatives because it has the highest number of dwelling units.
- In this concept, parks are fewer in number, but larger in size, which means some residents would live further away from a park. Larger parks could provide opportunities for more and larger facilities (e.g., playgrounds, sports fields, and courts).



Hair studio located within a residential neighborhood



Large office building along a corridor



Park with playground facilities

TRANSPORTATION

For this alternative, transportation improvements are generally consistent with the planned transportation improvements as identified in the Fresno General Plan Master Environmental Impact Report (GP MEIR), with a few potential exceptions noted below. Multimodal facilities are focused along major corridors (e.g., California Avenue – Mixed Use Corridor, Elm Avenue – Clean Industrial Corridor, etc.).

Pedestrian

- Wider sidewalks should be provided where higher pedestrian activity is expected. For example, wider sidewalks could be provided along the Mixed Use Corridor (California Avenue) and/or the Jobs Corridor (Jensen Avenue).
- There is a lack of existing sidewalks along the proposed major corridors (Whites Bridge Avenue, California Avenue to the west of West Avenue, and Jensen Avenue), notably in areas that are undeveloped.



Wide sidewalks provide more space for pedestrians and streetscape amenities like lighting and trees

Bicycle

- Separated bikeways (i.e. Class I Bike Path, Class II Buffered Bike Lane, or Class IV Cycle Track) would provide more attractive and safer facilities for the greater population, and would be particularly beneficial along major corridors where traffic volume are anticipated to be greatest. Adequate right-of-way will be required.
- Minor connecting routes with lower traffic volumes could provide less intensive bicycle facilities (i.e. Class II Bike Lanes, Class III Bike Routes) and utilize Bicycle Boulevards, a type of neighborhood bikeway on low volume neighborhood streets designed to be ideal for bicycle travel, to run parallel to high traffic volume arterials. Bicycle Boulevards can be denoted with stencils on the roadway, lower speeds, and/or signage noting they are shared spaces for cars and bikes.



Bikeway on a connecting corridor

Transit

- Transit routes would be focused on major corridors, connecting streets between major corridors, and activity centers such as supermarkets, commercial areas, and employment areas.
- Additional transit service on Whites Bridge Avenue (Regional Retail Corridor), California Avenue (Mixed Use Corridor), and Jensen Avenue (Jobs Corridor) could be beneficial to provide better access between existing and new residential areas to employment, retail, and commercial uses.
- There could be potential for a local transit circulator connecting areas of higher density within Southwest Fresno, in addition to the existing transit service that connects Southwest Fresno with Downtown Fresno.
- Expansion of transit service would more likely become feasible after a critical mass of buildout has occurred. Any new service proposed would also be subject to funding availability.



Transit along a corridor

Vehicle

- The number of lanes required along the major corridors appear consistent with the planned number of lanes identified in the Fresno GP MEIR, with the following exceptions below.
- Additional roadway lanes may be required on Whites Bridge Avenue (Regional Retail Corridor) than the planned number of lanes identified in the Fresno GP MEIR. The Fresno GP MEIR shows a planned two-lane roadway (one lane each direction) on Whites Bridge Avenue, and instead, more lanes could be needed depending on the intensity of the regional retail.
- A more “Complete Streets” approach could be considered for the Mixed Use Corridor (California Avenue). It is currently planned as a four-lane facility east of West Avenue, and could instead be reduced to two lanes if additional capacity is provided on parallel facilities (e.g., Church Avenue).

Trucks

- Many of the existing truck routes would remain.
- The truck route on California Avenue should be reconsidered to provide a more pedestrian-, bicycle-, and transit-friendly environment along the Mixed Use Corridor.
- The truck route along Church Avenue could possibly be eliminated/rerouted depending on if there are parallel truck routes available on California Avenue or Jensen Avenue.
- The truck route on North Avenue could possibly be eliminated/rerouted if industrial land use along the corridor is shifted to Elm Avenue.
- A new or rerouted truck route along Marks Avenue could be considered given its connection to Highway 180, and is planned to have four lanes of travel.
- Any elimination/rerouting of truck routes would need to be vetted with the City’s Public Works Department.

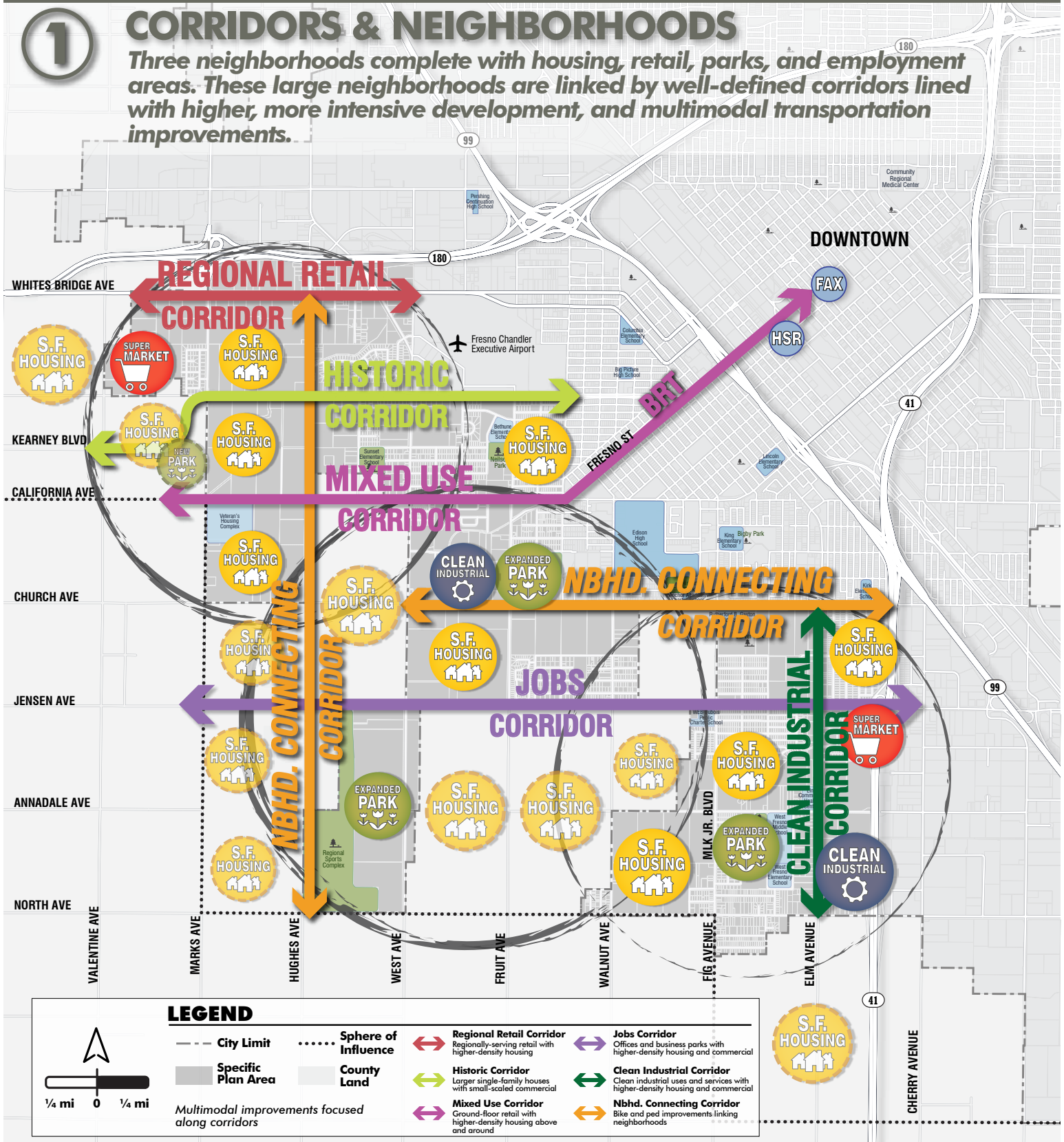


SOUTHWEST FRESNO SPECIFIC PLAN

1

CORRIDORS & NEIGHBORHOODS

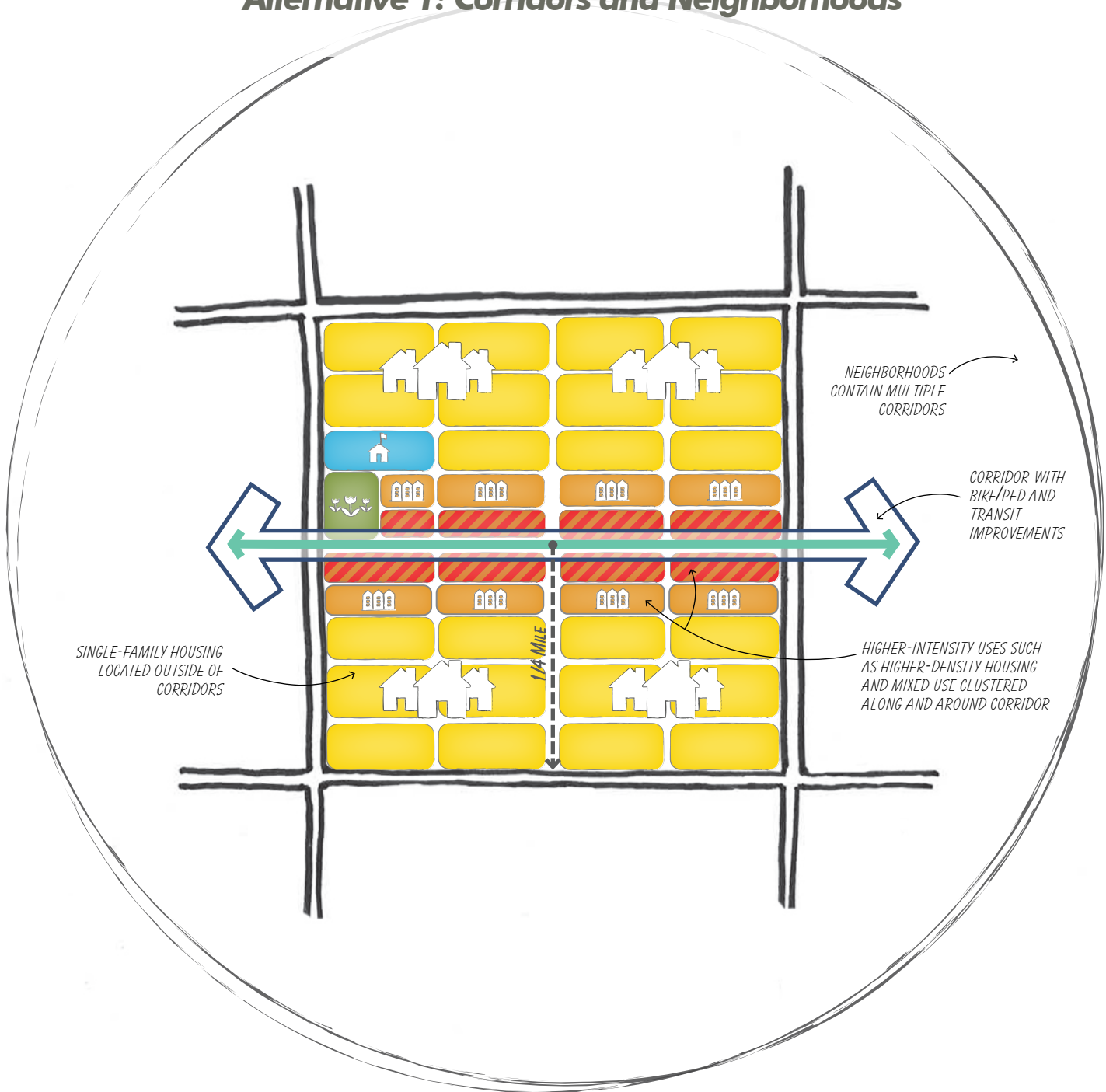
Three neighborhoods complete with housing, retail, parks, and employment areas. These large neighborhoods are linked by well-defined corridors lined with higher, more intensive development, and multimodal transportation improvements.





SOUTHWEST FRESNO SPECIFIC PLAN

Conceptual Diagram of Potential Development in Alternative 1: Corridors and Neighborhoods



This conceptual diagram shows potential land uses and transportation improvements along the Mixed Use Corridor in Alternative 1. Higher-intensity uses would be allowed along the Mixed Use Corridor, including higher-density housing and mixed use (ground-floor retail with higher-density housing located above). Single-family housing would be located behind the corridor, within a walkable quarter-mile distance.



Bicycle, pedestrian, and transit improvements would be focused along the corridor to provide local and regional connections.

Alternative 2: Many Smaller Neighborhoods

OVERALL CONCEPT

The Many Smaller Neighborhoods Alternative is made up of roughly one-square-mile neighborhoods that include housing and community-serving uses, such as a small neighborhood park, school, and local retail. Multimodal transportation improvements are dispersed along the existing grid of arterial roadways throughout Southwest Fresno. This alternative is lower in density and has more single-family residential development than the other two alternatives.

LAND USE

Commercial

- This alternative has the lowest amount of commercial development among the three alternatives.
- There is less potential for regional (big-box) retail establishments due to a smaller number of dwelling units within the Plan Area to support these businesses.
- Supermarkets would be located near freeway access at Marks Avenue/Highway 180 and Jensen Avenue/Highway 41.
- Commercial establishments would be smaller in scale, larger in number, and dispersed throughout the Plan Area, which provide convenience and walkable access, but may be limited in goods and services since it is not a large retail establishment.

Housing

- This alternative has the lowest number of dwelling units among the three alternatives, but has the highest ratio of single-family housing to higher-density housing.
- Higher-density housing would be mostly located near services in each neighborhood.



Supermarkets provide local and regional access to a broad variety of foods and goods



Neighborhood retail at the corner of a street



New single-family housing as a part of a large housing development

- New housing would be located within walking distance of community-serving uses.
- Infill housing in existing residential neighborhoods would supplement the new neighborhoods.

Employment

- This alternative has the least amount of employment (including office, business park, and industrial uses) development among the three alternatives.
- Employment areas would be located near freeway intersections, which is desirable for regional employment.
- Industrial uses would be encouraged to relocate to the area south of North Avenue, creating more separation from residential neighborhoods. The mechanism to achieve this will need to be explored.
- New employment could also potentially locate in the business area to the east of Highway 41 or near the Wastewater Treatment Plant to the west.



New infill housing in existing older single-family residential neighborhood

Schools

- Schools would be primarily located at primary intersections in the center of neighborhoods near parks and commercial uses.
- Neighborhood schools would be located near parks, which create opportunities for joint-use of a school's facilities for public use.

Parks

- This alternative has the lowest park acreage among the three alternatives because it has the lowest number of dwelling units.
- Every neighborhood would be served by a neighborhood park and the park would be located at an intersection, creating accessibility by walking and/or biking.
- Although parks would be large in number within the Plan Area, they would be small in size (with exception of Regional Sports Complex), and therefore may be limited in facilities.



Neighborhood park with playground and other amenities

TRANSPORTATION

For this alternative, transportation improvements are generally consistent with the planned transportation improvements as identified in the Fresno GP MEIR. There is flexibility as to where multimodal improvements could occur throughout the roadway network due to the less intensive development that is concentrated into smaller neighborhoods and the opportunity for fewer lanes and smaller facilities as planned in the GP MEIR.

Pedestrian

- The construction of sidewalks tied to the buildout of the Southwest Fresno Specific Plan Area would fully connect the pedestrian network, but could remain piecemeal in the interim if development is not concentrated along particular corridors. This may mean more gaps in the pedestrian network between neighborhoods.

Bicycle

- Bicycle improvements would be dispersed throughout Southwest Fresno.
- Separated bicycle facilities (e.g., Class I Bike Path and Class IV Cycle Track) should connect between areas within Southwest Fresno and adjacent neighborhoods along select major north-south and east-west routes that carry more traffic.
- There are more opportunities for less intensive bicycle facilities (e.g., Class II Bike Lanes, Class III Bike Routes – Bicycle Boulevards) compared to Alternative 1 due to lower traffic generation.

Transit

- The expansion of existing transit service would be necessary further west of existing transit routes to serve new development areas.
- Existing transit service routes could remain unchanged depending on development patterns.
- Expansion of transit service would be less feasible due to the lower density and dispersed nature of development.
- Due to fewer regional retail and employment attractors compared to the other alternatives, travel patterns may be more consistent with existing transit routes with higher demand for providing service to Downtown Fresno and lower



Pedestrian facilities for neighborhood commercial and services



Bike lane along a residential street



Bus stop within a residential neighborhood

demand for an internal circulator within Southwest Fresno.

Vehicle

- The number of lanes required along major arterials appear consistent with the planned number of lanes identified in the Fresno GP MEIR.
- Since the land uses for this alternative are less intense than assumed in Fresno General Plan MEIR, there may be opportunities for fewer lanes on roadways than planned in the General Plan:
 - The Fresno GP MEIR shows existing/planned four-lane roadways on Jensen Avenue, California Avenue to the east of West Avenue, and Marks Avenue and Walnut Avenue north of Jensen Avenue. Elm Avenue is planned to remain a four-lane roadway, as is under existing conditions.

Trucks

- Many of the existing truck routes would likely remain the same and would depend on the ultimate locations of industrial and commercial uses.
- The existing truck route on Jensen Avenue would most likely remain and be repaved given its connection to Highway 41, and is planned to have four lanes of travel.
- The truck route on California Avenue or Church Avenue could possibly be eliminated/rerouted depending on the location of industrial land uses and if there is a parallel truck route available on Jensen Avenue.
- Any elimination/rerouting of truck routes would need to be vetted with the City's Public Works Department.

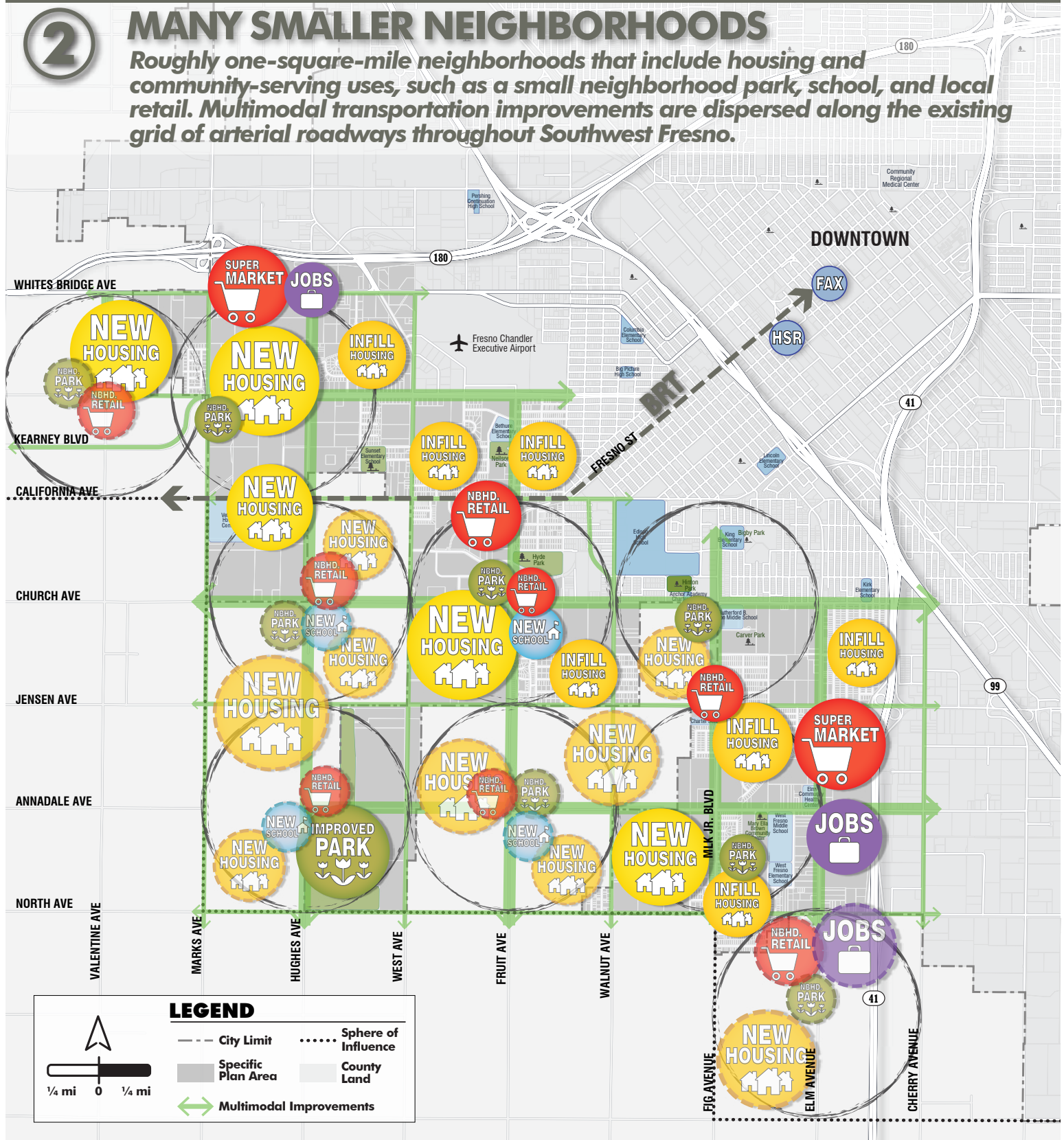


SOUTHWEST FRESNO SPECIFIC PLAN

2

MANY SMALLER NEIGHBORHOODS

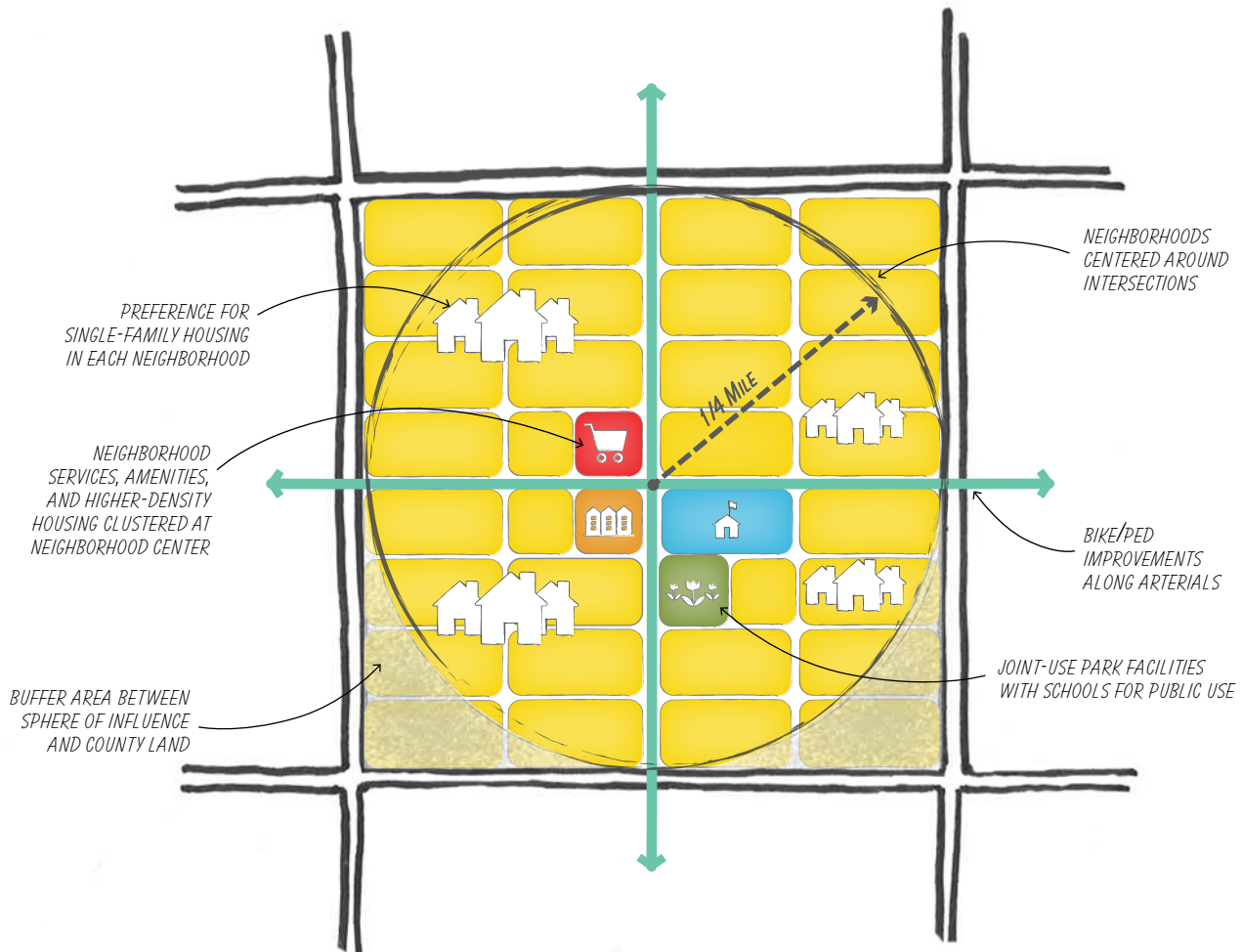
Roughly one-square-mile neighborhoods that include housing and community-serving uses, such as a small neighborhood park, school, and local retail. Multimodal transportation improvements are dispersed along the existing grid of arterial roadways throughout Southwest Fresno.





SOUTHWEST FRESNO SPECIFIC PLAN

Conceptual Diagram of Neighborhood Layout in Alternative 2: Many Smaller Neighborhoods



This conceptual diagram shows potential land uses and transportation improvements in a typical small neighborhood. Each small neighborhood would be roughly one square-mile. Neighborhood-serving retail, higher-density housing, a school, and a park would be located at its center, surrounded by single-family housing. This design would allow residents to live within a walkable quarter-mile distance from community-serving uses.

Bicycle and pedestrian improvements would be focused along arterials that run through the center of each neighborhood and make up a larger grid bike/ped network.



Alternative 3: Neighborhoods around Magnet Uses

OVERALL CONCEPT

The Neighborhoods around Magnet Uses Alternative is made up of three neighborhoods developed around higher intensity cores each with a primary magnet use. The three magnet uses are a new community college activity center, an improved regional sports complex, and a new regional retail center. Each neighborhood core is ringed with housing and/or employment areas that support the core. The neighborhoods are linked with pedestrian and bicycle connections that follow the existing water canals and roadways with less vehicular traffic.



Big-box retail developments provide a range of stores and services

LAND USE

Commercial

- This alternative has a moderate amount of commercial development compared to the other alternatives.
- Regional (big-box) retail would be concentrated at the Regional Retail and Community College Magnet cores, which adds to the activity within these magnet cores.
- Smaller retail establishments would be dispersed throughout the Plan Area, but may not be close to every neighborhood nor be comprehensive in goods and services.
- A regional retail center within Community College Magnet would be located approximately one mile from the Highway 41 intersection, which could limit regional access.



Commercial development around a community college in Fresno

Housing

- This alternative has a moderate amount of dwelling units compared to the other alternatives.
- Higher-density housing would be concentrated within each magnet's core to be consistent with the high density of the magnet core areas.
- Single-family housing would primarily be located in the outer areas of each magnet.



Various types of housing along one street

Employment

- This alternative has a moderate amount of employment (includes office, business park, and industrial) compared to the other alternatives.
- Job centers would be concentrated within the Community College and Regional Retail Magnets to be consistent with other high-density uses.
- Other larger job centers would be located at the existing industrial site at the intersection of Church and Fruit Avenues and by the Highway 41 intersection.
- Existing industrial uses located at the intersection of Church and Fruit Avenues would be rezoned to minimize impacts on adjacent residences, encouraged to relocate, or become clean industry. These new uses will become a new job center. The mechanism to achieve this will need to be explored.
- Industrial uses along Elm Avenue would be restricted to clean industrial uses only.



Professional offices and retail

Schools

- A new community college or other intensive uses would act as a center of activity in Southwest Fresno.
- New or existing schools would be dispersed to support population growth within the Plan Area.

Parks

- A moderate number of park acreage among the three alternatives would be provided because it has a moderate number of dwelling units.
- Each magnet would have one or two large parks to serve each neighborhood and each park would be new, expanded, or improved.
- Parks would be fewer in number, but larger in size, which means some residents would live further away from a park. Larger parks could provide opportunities for larger facilities (e.g., playgrounds, sports fields, and courts) and more space to utilize.
- There is an emphasis on improving the Regional Sports Complex so that it becomes a magnet, and attracts and spurs surrounding development, including housing and services.
- The creation of an airport-themed park adjacent to the Fresno Chandler Airport could provide a public amenity adjacent to this destination.



Different uses, including housing, adjacent to a larger park facility

TRANSPORTATION

Transportation improvements would be focused around magnet cores, with multimodal facilities connecting between each magnet core.

Pedestrian

- Wide sidewalks and pedestrian connections would be focused and provided within each magnet core to serve higher pedestrian demand within these higher intensity areas, as well as along existing canals.
- Lesser pedestrian improvements (i.e. standard sidewalks) would be provided on other roadways between magnet cores and along routes with less pedestrian demand.



Adequate sidewalks and pedestrian connections should be provided at magnet cores

Bicycle

- Bicycle facilities would be focused in and around magnet cores.
- Bicycle connections would be provided between magnet cores.
- Separated bicycled facilities (i.e. Class I Bike Path, Class IV Cycle Track) should connect between magnet cores either via trails along existing canals or on roadways with higher traffic volumes.
- Lower traffic streets outside of magnet cores could provide less intensive bicycle facilities (i.e. Class II Bike Lanes, Class III Bike Routes) and utilize Bicycle Boulevards, a type of neighborhood bikeway located on low volume neighborhood streets designed to be ideal for bicycle travel, to run parallel to high traffic volume connectors.



Bikeways can provide connections between magnets and surrounding residential development

Transit

- There could be a potential transit center linking multiple transit routes at one or more of the magnet cores.
- Additional transit routes would need to be provided and connect to magnets and Downtown.
- There could be potential demand for an internal circulator within Southwest Fresno connecting the magnet cores.



Mix of transportation options at an activity or magnet core

- Expansion of transit service would more likely become feasible after a critical mass of buildout has occurred. Any new service proposed would also be subject to funding availability.

Vehicle

- Multimodal connecting corridors within the Plan Area would need to be provided to connect the magnet cores.
- Depending on the location of the magnet cores and where the most intensive traffic-generating uses are concentrated, the number of lanes required on roadways within Southwest Fresno may slightly differ from the planned number of lanes identified in the Fresno GP MEIR:
 - The Fresno GP MEIR shows existing/planned four-lane roadways on Jensen Avenue, California Avenue to the east of West Avenue, and Marks Avenue and Walnut Avenue north of Jensen Avenue.
 - Elm Avenue is planned to remain a four-lane roadway, as is under existing conditions.
 - Additional roadway lanes for key connections near magnet cores may be necessary, such as along Hughes Avenue and West Avenue around the Regional Retail and Regional Park Magnet cores, and along Walnut Avenue and Martin Luther King Jr. Boulevard around the Community College Magnet core.
 - There may be opportunities for fewer roadway lanes in areas away from magnet cores than the planned number of lanes identified in the Fresno GP MEIR.

Trucks

- Many of the existing truck routes would remain.
- Truck routes would need to be evaluated based on the ultimate locations of industrial and commercial uses within and adjacent to magnet cores.
- The existing truck route on Jensen Avenue would most likely remain given its connection to Highway 41, and is planned to have four lanes of travel.
- The truck route on California Avenue or Church Avenue could possibly be eliminated/rerouted depending on the location of industrial land uses and if there is a parallel truck route available on Jensen Avenue.
- Any elimination/rerouting of truck routes would need to be vetted with the City's Public Works Department.

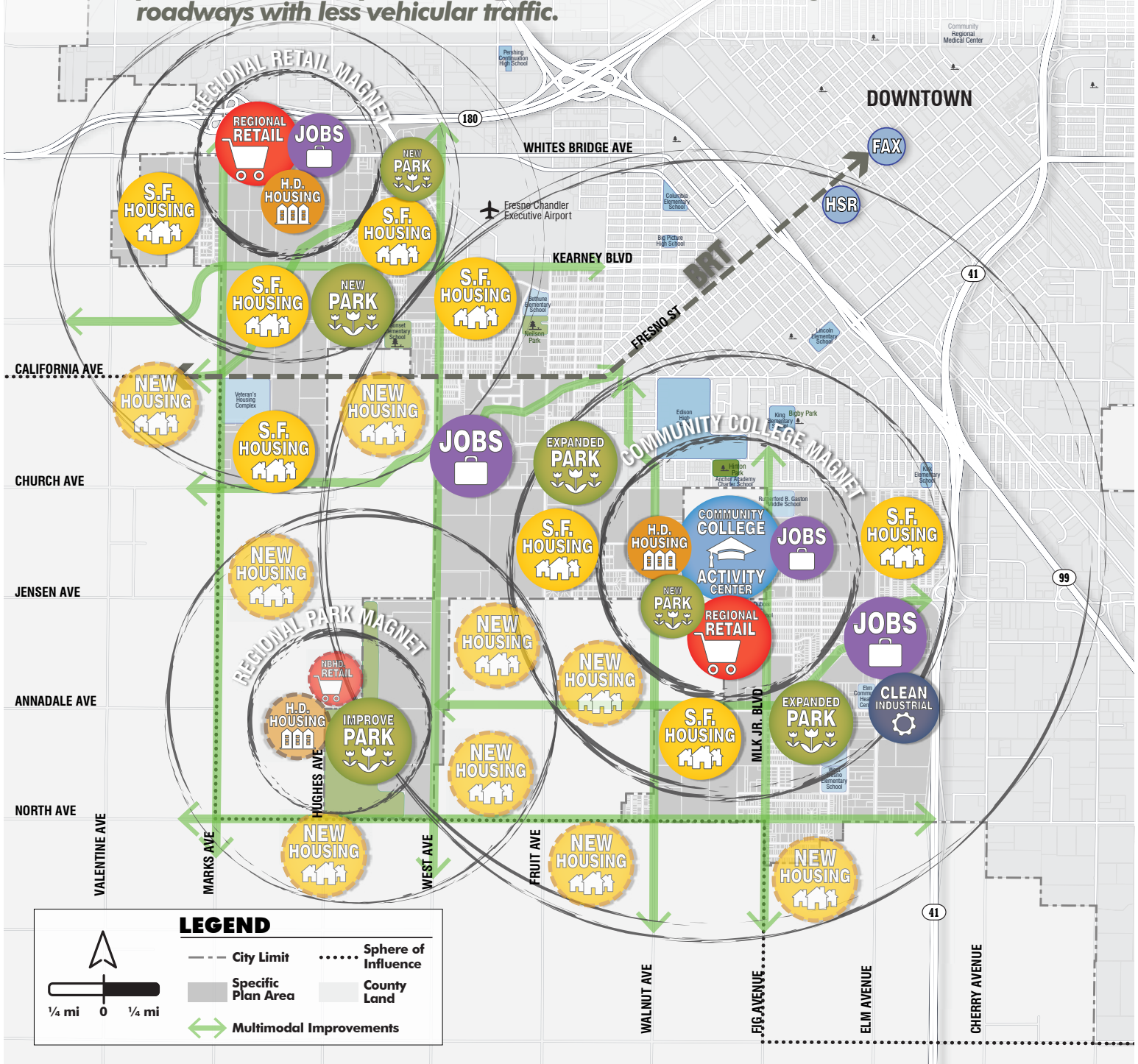


SOUTHWEST FRESNO SPECIFIC PLAN

3

NEIGHBORHOODS AROUND MAGNET USES

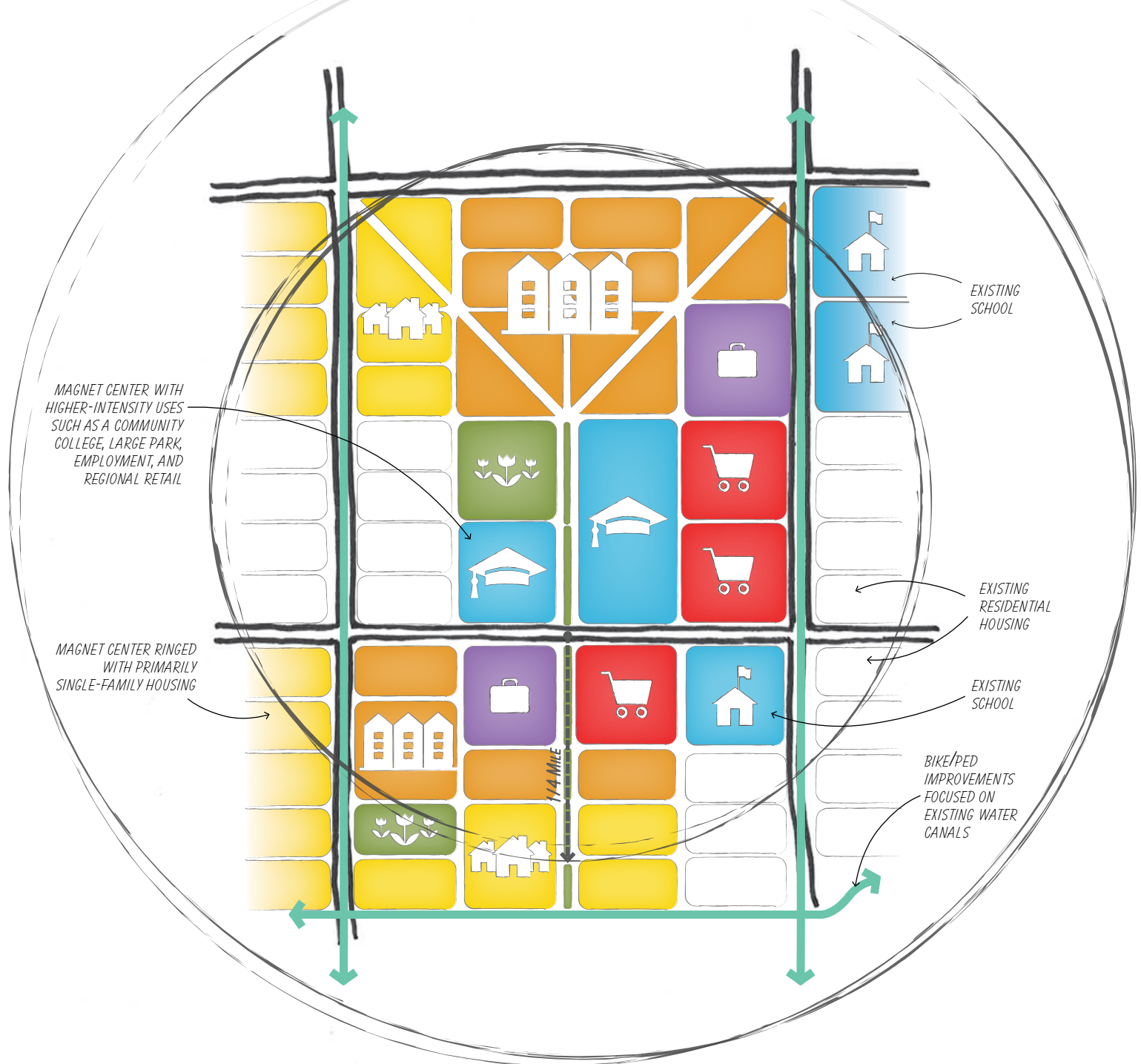
Three neighborhoods developed around higher intensity cores each with a primary magnet use. Each neighborhood core is ringed with housing and/or employment areas that support the core. The neighborhoods are linked with pedestrian and bicycle connections that follow the existing water canals and roadways with less vehicular traffic.





SOUTHWEST FRESNO SPECIFIC PLAN

Conceptual Diagram of Core Uses in Alternative 3: Neighborhoods around Magnet Uses



This conceptual diagram shows potential land uses and transportation improvements around the Community College Magnet. Higher-intensity uses such as employment, regional retail, higher-density housing, and a park would surround the college to create an activity center. Single-family housing would be located outside of the core and ring the magnet.

Bicycle and pedestrian improvements would be focused along existing water canals and on roadways with less vehicular traffic. Parks would be larger in size, fewer in quantity, and have potential for more amenities.



Next Steps

These draft development alternatives will be presented at the next community workshop on February 16, 2016, where members of the community will provide their input. Taking community input into account, the Steering Committee will meet on March 1, 2016 to select a Preferred Alternative and make recommendations to the City of Fresno Planning Commission and City Council in Spring 2016. The Preferred Alternative can include a mix of elements from the three alternatives.

APPENDIX: UTILITIES ANALYSIS

The differences between the three alternatives are very small for projected demands for the Southwest Specific Plan including the City of Fresno Sphere of Influence.

WATER

The differences in water demand are driven both by differences in proposed population density and in differences in landscape areas between the alternatives. Alternative 1 has the highest proposed population, which drives water demand up, but also has the smallest number of acres that are proposed for open space (parks, roadway landscape, buffer), which drive demand down. Alternative 2 has the lowest proposed population and is in the middle of the three alternatives in open space uses. Alternative 3 has the second largest proposed population, but the lowest area proposed for open space uses. The combination of relatively high population and high open space uses results in Alternative 3 having the greatest water demand.

WASTEWATER

The differences in wastewater generation between alternatives is less for wastewater than for water because water demand is driven both by consumption for domestic use and for landscaping whereas wastewater is only a function of consumption and will therefore, reflect the differences in population more closely than water. This is apparent from the calculated wastewater generated for each alternative. Alternative 1, with the highest proposed population, generates the greatest amount of wastewater. Alternative 2, with the smallest population, generates the lowest amounts of wastewater and Alternative 3, with a proposed population between Alternative 1 and 2 holds the middle ground in wastewater generation.

STORMWATER

Stormwater runoff volume is a function of land use imperviousness. Alternative 1, with the higher proposed population and proposed development corridors (both which create imperviousness) and with the smallest open space area, will generate the greatest amount of stormwater runoff. Alternatives 2 and 3, with more open space area and less intense development will have lower runoff volumes.

ELECTRICITY AND NATURAL GAS

Electricity and Natural Gas uses are affected by population and density of development. Population consumption is relatively easy to correlate. Density of development implies greater use of area by commercial and industrial uses, which are also large consumers of electricity and natural gas. Therefore, Alternative 1 is assumed to have the greatest demand for electricity and natural gas. Alternative 3 is assumed to have the second greatest demand and Alternative 2 is assumed to have the lowest demand.



COMPARE THE ALTERNATIVES (2-5-16)

	ALTERNATIVE 1: Corridors & Neighborhoods	ALTERNATIVE 2: Many Smaller Neighborhoods	ALTERNATIVE 3: Neighborhoods around Magnet Uses	ALL ALTERNATIVES
Summary	Three neighborhoods complete with housing, retail, parks, and employment areas. These large neighborhoods are linked by well-defined corridors lined with higher, more intensive development, and multimodal transportation improvements.	Roughly one-square-mile neighborhoods that include housing and community-serving uses, such as a small neighborhood park, school, and local retail. Multimodal transportation improvements are dispersed along the existing grid of arterial roadways throughout Southwest Fresno.	Three neighborhoods developed around higher intensity cores each with a primary magnet use. Each neighborhood core is ringed with housing and/or employment areas that support the core. The neighborhoods are linked with pedestrian and bicycle connections that follow the existing water canals and roadways with less vehicular traffic.	
Housing	Higher-density housing located along and around corridors and lower-density (single-family) housing outside of corridors, except the Historic Corridor (Kearney Blvd.) which would encourage larger single-family houses compatible with historic character.	Infill housing, with a preference for single-family housing, within existing residential neighborhoods. New housing, which includes primarily single-family and some higher-density housing, on undeveloped land.	Higher-density housing located within each magnet core. Each magnet core ringed with primarily single-family housing.	Investment in existing housing (e.g. housing rehabilitation).
Commercial	Unique mix and scale of retail located along each corridor: Regional Retail Corridor (Whites Bridge Ave.) — Big-box retail anchor and supermarket at or near the Highway 180 intersection and regionally-serving retail establishments. Historic Corridor — Services and retail located in buildings consistent with the character of nearby housing. Mixed Use Corridor (California Ave.) — Mixed use (ground-floor retail with higher-density housing above). Jobs Corridor (Jensen Ave.) and Clean Industrial Corridor (Elm Ave.) — Retail that serves the employers and employees.	Supermarkets located near freeway intersections at opposite ends of Plan Area. Smaller scale neighborhood retail (includes fresh groceries and services) dispersed throughout the Plan Area, often serving one or several small neighborhoods.	Retail located within each magnet core. Regional retail in larger Community College and Regional Retail magnets.	Two supermarkets or regional retail stores in each alternative.
Open Space	New or expanded park for each of the three complete neighborhoods. Improved facilities for existing parks. Fewer, but larger parks.	New neighborhood parks with new housing developments. Jointuse of open space with existing and new schools for public use. More, but smaller parks.	Expand and improve existing Regional Sports Complex and surround with new development to establish as a magnet core. New, expanded, and/or improved park within each magnet. Fewer, but larger parks.	Existing parks improved with new amenities.
Employment	Unique mix of jobs located along each corridor: Regional Retail and Mixed Use Corridors — Retail service jobs. Jobs Corridor — Offices and business parks. Clean Industrial Corridor — Clean industrial services and employment. Highest employment among the three alternatives.	Job centers located at the two freeway intersections near supermarkets. Other jobs dispersed throughout the community associated with neighborhood retail. Lowest employment among the three alternatives.	Jobs focused near community college, freeway exits, and where clean industry replaces existing industry.	New jobs concentrated in business parks in specific locations.
Schools	New schools with the development of new housing.	New or existing school near or within each neighborhood.	New community college as major magnet in Southwest Fresno. New schools with the development of new housing.	Investment in existing schools.
Industrial	New clean industrial uses in existing industrial areas on Church Avenue and along Clean Industrial Corridor.	Industrial uses relocated outside of Plan Area.	Possible clean industrial uses at Jensen/Elm intersection (to replace existing industrial uses).	Industrial either removed or clean.
Transportation	Neighborhood connecting corridors link neighborhoods and feature bike and ped improvements. Transit service is expanded and is focused along major corridors where more development is located.	Multimodal transportation improvements, including bikeways, pedestrian, and transit facilities, dispersed along existing grid of arterials throughout Plan Area.	Multimodal transportation improvements, including bikeways, pedestrian, and transit facilities, focused on existing water canals and on roadways with less vehicular traffic. Vehicle access near freeway entrances and exits. Street improvements focused on streets leading to magnet cores.	Multimodal transportation connections; accessible to all. Maintenance and repair of existing roads. Removal/ rerouting of some truck routes.