



mesa·az Transportation Advisory Board Report

Date: August 19, 2014
To: Transportation Advisory Board
From: Mark Venti, Senior Transportation Engineer
James Hash, Planner II
Subject: City of Mesa 2040 Transportation Master Plan
Draft Final Review

Purpose

The purpose of this report is to present the draft final version of the City of Mesa 2040 Transportation Plan to the Transportation Advisory Board (TAB) for information, discussion and recommendation to Council for Adoption.

Background and Discussion

The City's Transportation Department is currently finalizing the update to the *City of Mesa 2025 Transportation Plan*. This update will serve as the long-range transportation plan for the City with a planning year horizon of 2040. The 2040 Transportation Master Plan is anticipated to be completed and ready for City Council adoption during October of 2014.

The Mesa Transportation Department has coordinated this effort with the Mesa Planning Division, which recently updated the City of Mesa General Plan, and the Transit Services Department's update of the Transit Plan. Throughout this process, Transportation shared planning materials, chapter reviews, and updates on the *This are my Mesa* website, which is located at www.ThisIsMyMesa.org. Throughout the course of the planning process, the Transportation Department has relied on oversight and advisory input from the TAB.

This month's review consists of the draft final version of the City of Mesa 2040 Transportation Plan. Transportation staff are also continuing to review the draft for clarity, typographical corrections, etc. before the final version goes to Council for adoption.

Summary

Transportation staff has worked within the timeline of the update of the General Plan and Transit Master Plan, and worked to ensure that all three plans are consistent. The General Plan was presented to Council and Adopted in June of 2014 and is set to be presented to the voters of Mesa in November 2014 for approval. The Mesa 2040 Transportation Plan and Mesa Transit Plan 2040 are scheduled to be presented to Council for adoption in October 2014.

Note that the Executive Summary of the Plan was substantially revised since being sent to the TAB last month. Therefore, the updated version of the Executive Summary is attached with this report.



My Mesa 2040 Transportation Plan



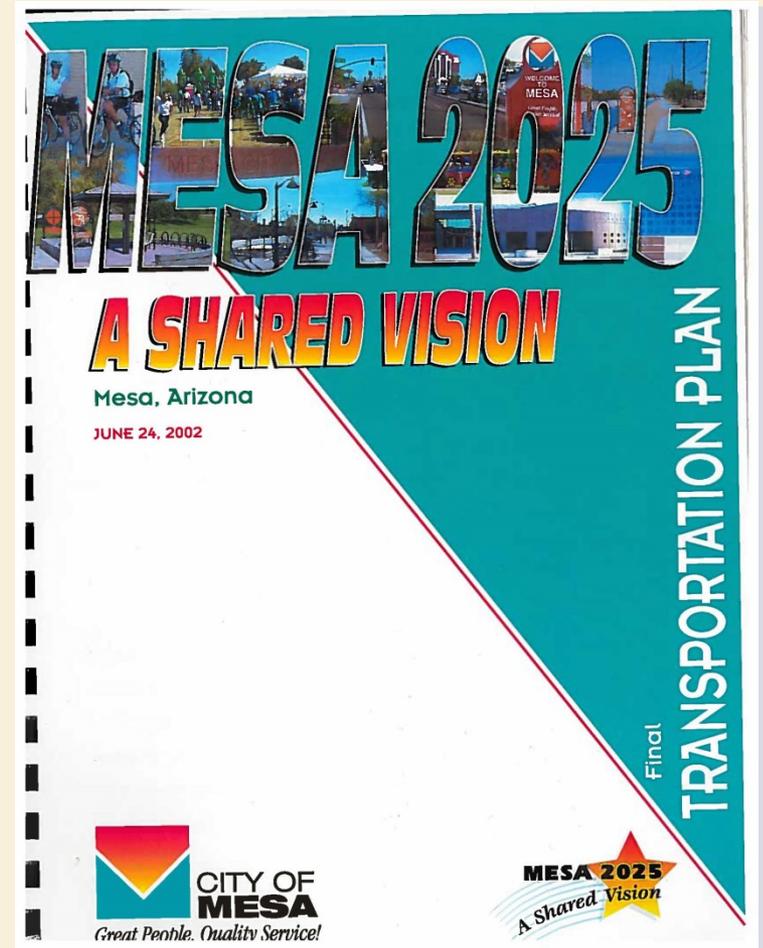
Transportation Advisory Board Update

August 2014

Transportation Plan Background

∞ 2025 Transportation Plan

∞ June 24, 2002



Transportation Plan Background

∞ Began 2 years ago

∞ Public input

- Community events
- Meetings of groups and organizations
- Village meetings
- Plan Advisory Committee
- Website



Focus for Transportation Plan Update

This is My Mesa General Plan

- ∞ Coordination between Plans
- ∞ Philosophy Intent
- ∞ More Approachable

This is My Mesa 2040 Transportation Plan

- ∞ Integrated
- ∞ Flexible
- ∞ Livable





Focus for Transportation Plan Update

- ∞ Support guiding principals of the General Plan
- ∞ Emphasis on Multi-Modal Mobility
- ∞ Complete Streets and Transportation Integration
- ∞ Usable document
 - Long term vision with key goals, policies and strategies versus itemized list of projects

Plan Outline

☞ Part 1: Introduction, Goals and Objectives

☞ Part 2: Mode Elements

- Complete Streets
- Roadway
- Transit
- Pedestrian
- Bicycle
- Aviation
- Travel Demand Management
- Intelligent Transportation Systems

☞ Part 3: Mesa's Circulation Blueprint

Part One — Vision and Goals

Mesa's Shared Vision for Transportation

Mesa will develop a transportation system that supports shorter trips, sustainable mode choices, a high quality of life, economic development and the creation of high-quality jobs.

Part One — Vision and Goals

Goal #1 Develop a safe and efficient transportation system that provides access to all public places by multiple modes of travel and by various users.

Part One — Vision and Goals

Goal #2 Develop inviting streets that identify with the context of the surrounding neighborhood and help to create a sense of community and vibrant public space.

Part One — Vision and Goals

Goal #3 Develop a transportation network concentrated around activity centers that encourages dense, diverse public places and fosters economic growth.

Part Two - Transportation Plan Elements



Complete Streets
Element



Roadway
Element



Transit
Element



Pedestrian
Element



Bicycle
Element



Aviation
Element

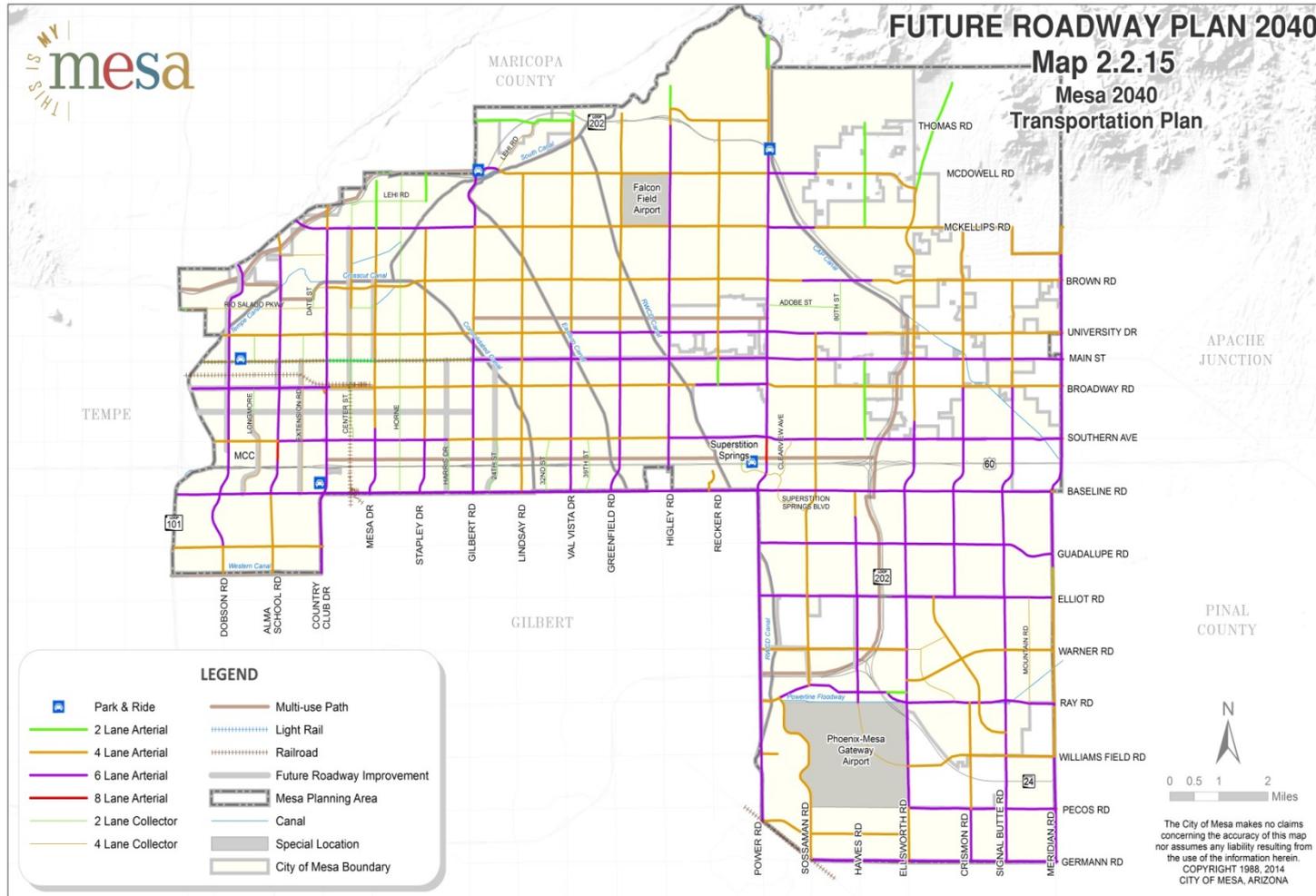


Travel Demand
Management
Element



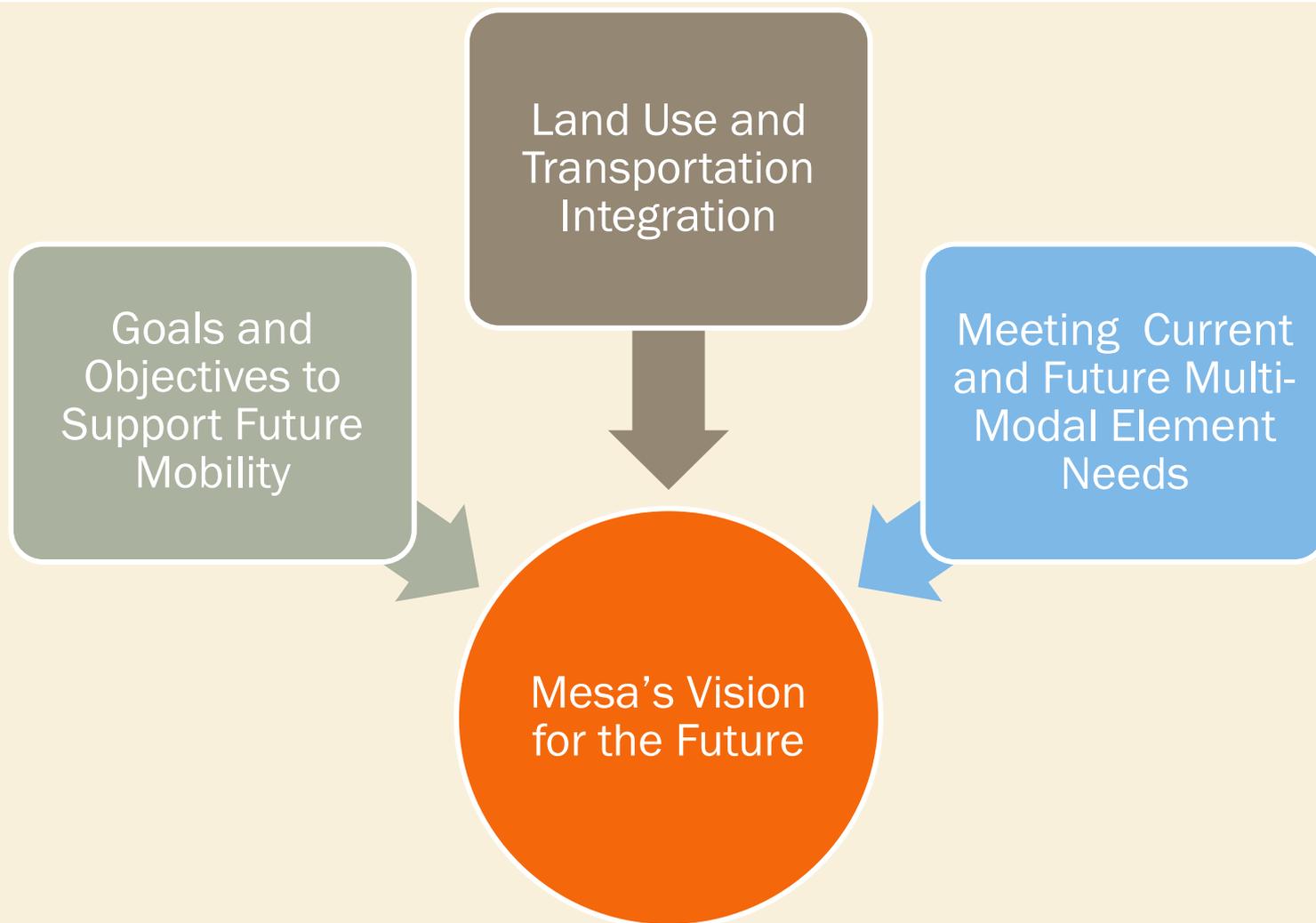
Intelligent
Transportation
Systems
Element

Future Roadway Plan 2040



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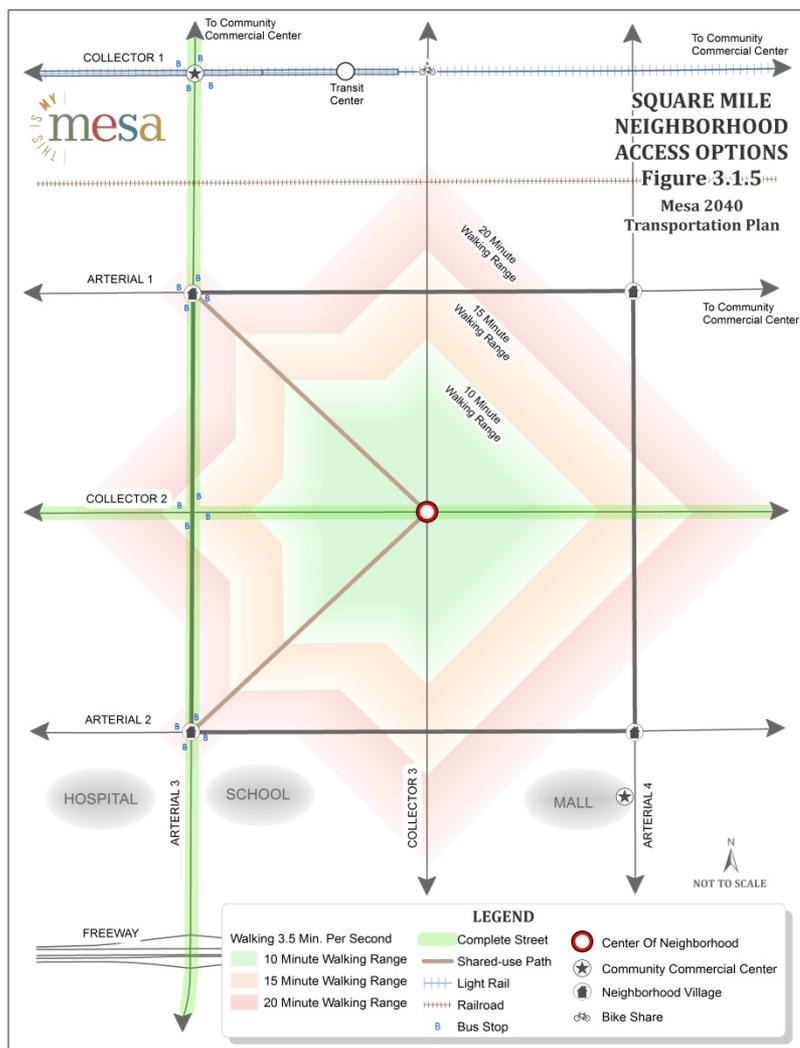
Part Three – Mesa’s Circulation Blueprint



Part Three — Mesa's Circulation Blueprint



Mesa's Neighborhood of the Future



Walkable Access

Accessibility to Multiple Mode Choices

More Efficient Transportation System

Complete Streets

Major Themes

More flexible approach to Transportation

Square Mile Neighborhoods and Complete Streets

VS.

Wide uninviting streets and lack of access to services from neighborhoods

Major Themes

- Focus on 3 guiding principles
- Improve connection to all transportation choices
- Better connection between transportation and land use

Questions?



EXECUTIVE SUMMARY

DRAFT FINAL

The City of Mesa Transportation Department was fortunate to begin the update of this Plan at the same time that the City's Planning Department was updating the General Plan. This timing allowed coordination between the two Plans, not only for schedule, but also for philosophy and intent. Planning moved away from quantitative technical analysis and instead "kept the General Plan, general." It was a move meant to allow the Plan to be more approachable for residents, rather than for academia. Much of this method was possible due to the maturity of the City of Mesa. For example, the road network is largely established. Therefore, new concerns must be addressed as the City moves into the future that rely less on level of service analysis and more on a sense of place.

Both Planning and Transportation discovered the same opinions expressed by residents during public meetings and surveys – citizens want more focus on livability, neighborhoods, and greater connectivity and mobility. The goals and objectives found in Part 1 of the Transportation Plan reflect an intentional focus more on square-mile neighborhoods, complete streets, and multi-modal transportation opportunities. Additionally, the results and implementation of this Plan are meant to be flexible without fixed yearly project lists. Rather the Plan provides a sense of what the Mesa transportation system should be at build-out. This vision can then be used on a periodic basis to develop projects that coincide with the Plan as needed, and when funding is available.

Part 3 of this Plan presents some samples for possible future projects. Again, these projects are meant to align with what was heard from the public, as well as fill gaps in

a finer fashion for all street users. These sample projects apply the concepts presented throughout Part 2 of this Plan, which is devoted to the elements that make up the transportation system. The ultimate goal for future projects is to bridge activity centers and neighborhoods with infrastructure usable by all modes.

PART 1

Introduction, Goals and Objectives

As discussed in the This is My Mesa General Plan, Mesa will continue to grow and change over time, which will provide the City with new challenges. Therefore, the City needs a framework to provide direction for the future of the transportation network.

Four specific components were used to develop possible goals and objectives:

- 1) The existing goals and objectives found in the 2025 Transportation Plan.
- 2) A classic approach found throughout history in various cities.
- 3) Results from public outreach
- 4) The goals, objectives and visions being developed concurrently as part of the City's General Plan update.

Each of these components was paired down to find large themes and patterns, which were then organized into a preliminary set of goals and objectives for each component. These goals and objectives were then compiled and analyzed as a whole.

Public input was received through several means such as public meetings and an

online survey. Some of the common themes found in the public input include:

- An overwhelming demand for more paths and trails, including lighting and amenities for those trails
- A strong focus on improving signal timing
- A desire for detached sidewalks, shade and seating along streets
- A demand for more bicycle and pedestrian safety education and awareness programs
- A need for more roadway connections in the southeast area of Mesa

The update to the General Plan emphasizes the relationship between land use and transportation. Therefore, the goals and objectives of the Transportation Plan update are aligned with those of the General Plan.

The General Plan is built around a framework consisting of:

- Community character
- Creating and maintaining a variety of great neighborhoods
- Growing and maintaining diverse and stable jobs
- Providing rich public spaces and cultural amenities

On top of this framework, the overall vision is made up of five key elements:

1. High-quality development
2. Changing demographics
3. Public health
4. Urban design and place-making
5. Responding to a desert environment

The initial Transportation Plan goals and objectives resulted from a merging of these four General Plan component sets. Similar ideas were grouped together, resulting in

statements that were clearly overall goals, while supporting statements were objectives underneath each goal. Numerous statements were similar or overlapped in some way, and were included in this final list. Other statements were outliers found only in one of the components, or some were just too detailed for an objective. Those were not carried forward. Through this process, a final set was created and listed below:

GOAL ONE: Develop a safe and efficient transportation system that provides access to all public places by multiple modes of travel and by various users.

GOAL TWO: Develop inviting streets that identify with the context of the surrounding neighborhood and help to create a sense of community and vibrant public space.

GOAL THREE: Develop a transportation network concentrated around activity centers that encourages dense, diverse public places and fosters economic growth.

Numerous objectives that correspond to each goal are listed in Part 1.

Finally, from the collection of various statements, a vision was defined:

MESA WILL DEVELOP A TRANSPORTATION SYSTEM THAT SUPPORTS SHORTER TRIPS, SUSTAINABLE MODE CHOICES, A HIGH QUALITY OF LIFE, ECONOMIC DEVELOPMENT AND THE CREATION OF HIGH-QUALITY JOBS.

PART 2

This section of the Mesa 2040 Transportation Plan focuses on each element of the transportation network. The following elements are defined in the 2040 Mesa Transportation Plan:

- Complete Streets**
- Roadway
- Transit
- Pedestrian
- Bicycle
- Aviation**
- Travel Demand Management (TDM)
- Intelligent Transportation Systems (ITS)**

***Complete Streets, Aviation and ITS are new elements to this Plan update*

Existing conditions for each element were examined, and then compared to the Plan's Goals and Objectives. This analysis and comparison helped to develop a list of needs that should be addressed as the City moves towards the projected build out and Planning horizon of 2040.

The needs are meant to be general and ways to meet them flexible. The needs should be addressed strategically in small, short-term segments in order to remain relevant to the changing desires of Mesa's residents and economic climate. Key points from Part 2 are noted below.

Complete Streets principles should continue to be used and further integrated with City and private development projects. Context appropriate Complete Streets elements should be incorporated into the design of new streets and applied in reconstructing or retrofitting existing streets.

A comprehensive design guide should be developed to help achieve this.

The City's **Roadway System** is not just for cars. The street right of way is often shared by several modes including automobiles, trucks, buses, bicycles and pedestrians. Improvements to the street system must balance the needs of all users.

The street system provides access to activity centers, supports new development, and provides for recreational travel. While widening streets adds capacity to the system, it cannot eliminate congestion. The modern street system must provide a combination of integrated components that can work together to manage congestion.

The **Transit Element** of the Mesa 2040 Transportation Plan is an executive summary of the stand-alone Transit Master Plan that was written concurrently with this Plan update.

The Transit Plan is activity center-based with an emphasis on connections to major activity centers and regional transportation nodes. Recommendations include further consolidation of transit service into priority corridors, and responding to changes in travel patterns as land use and transit opportunities become more urban in character.

Taking into account various travel markets and transit technologies, five Alternative Transit Plan Scenarios are presented ranging from short-term to build-out. The Alternative Scenarios vary based on assumptions about future high capacity transit service. Refer to the Transit Master Plan for details

The **Pedestrian Element** of the Plan focuses on making the transportation system more inviting and accommodating for pedestrians. Locations of sidewalk gaps are identified, and the Mesa Pedestrian Toolbox concept is introduced. Common pedestrian issues can be addressed with these tools:

- Engineering
- Education
- Enforcement
- Encouragement
- Evaluation
- Funding

Applying principles of Walk Friendly Communities is recommended to encourage and accommodate walking.

The **Bicycle Element** in the Mesa 2040 Transportation Plan is an executive summary of the stand-alone 2012 Bicycle Master Plan that was adopted by Council in January of 2013. Its goal is to provide a well-connected and intelligent transportation network that weaves bicycling together with other modes in the transportation network of the 21st century.

The 2012 Bicycle Master Plan created a framework for the City's bicycle network, as well as defined supporting facilities and programs necessary to make bicycling a viable choice for the residents of Mesa, and in turn, increase social connectivity and interaction, offer an alternative to driving, and promote education and awareness programs to advance Mesa towards Bicycle Friendly Community Platinum status through the League of American Bicyclists.

The focus of the **Aviation Element** is integration of all modes of transportation, both on the ground and in the air, at

Phoenix-Mesa Gateway and at Falcon Field. Being mindful of circulation for all modes is important in and around the airports to not only provide internal connections to and from businesses, neighborhoods and services, but also provide connections with the surrounding area, the region and wherever residents may live, work or fly.

The **Travel Demand Management Element** provides a reference guide to programs for increasing the use of alternatives to the single occupant vehicle trip. Potential programs include incentives for alternate modes as well as disincentives for single occupant vehicle use such as:

- Rideshare (carpool, vanpool)
- HOV Lanes
- Telecommuting
- Alternative Work Schedules
- Parking Management
- Bike Share
- Car Share
- Guaranteed Ride Home

These programs help employers comply with the Maricopa County Trip Reduction program, a mandatory program implemented via State Statute and County ordinance in response to a 1980s court ruling requiring greater efforts to improve air quality.

Intelligent Transportation Systems apply technology to improve mobility and safety of the street system. Mesa has a relatively well established and robust Intelligent Transportation System. Ongoing efforts should emphasize operating the system to maximum benefit, ensuring the system's coverage expands as the City continues to grow, staying abreast of and

adopting new technologies that can improve efficiency, and maintaining the system. Consideration should be given to establishing a backup Transportation Management Center. Also as the City grows, it is likely additional technical staff will be needed.

PART 3

Part 3 of the Mesa 2040 Transportation Plan looks at the overall circulation Plan for the City of Mesa. All available materials, budgetary issues, identified infrastructure and facility needs, and public input gathered through the planning process are considered. These considerations led the goals and objectives in the Mesa 2040 Transportation Plan for implementation through the planning horizon year.

Although it is not the intent of this Plan to identify and prioritize specific projects to be built, it will be necessary to establish an implementation strategy for programming projects and taking advantage of future grant funding opportunities.

Integrating transportation and land use planning is essential. Integration of all planning documents is critical to the success of Mesa's effort to ensure a balance of travel mode choices.

As a maturing city, Mesa faces different issues than it did during its years of rapid growth. As Mesa seeks to develop a more uniquely recognizable identity, it should mature into a community where residents can age in place, where they can work, live, and relax without having to leave their neighborhoods or travel long distances to do so.

The Transportation Plan will work alongside the General Plan to achieve the vision for the future, the "Sense of Place" that Mesa residents are seeking. A place where they will experience:

- Recognizable Neighborhoods
- Innovative Jobs
- Memorable Public Spaces

These General Plan guiding principles are directly supported by the Transportation Plan through its emphasis on:

- Interconnected safe, efficient, multi-modal access throughout the City
- Context appropriate streets that serve all users and contribute to creating neighborhood identity, a sense of community, and vibrant public spaces
- Robust transportation networks around activity centers

Part 3 ties all of the Plan's concepts, goals, objectives, and vision for the future of Mesa together through a cumulative illustration demonstrating how these concepts could transform a typical Mesa arterial street within today's network into a multi-modal integrated Complete Street. The illustration shows how street corridor treatments can provide connectivity with a 15-minute walk from any activity center to surrounding Neighborhood Village Centers, Specialty Districts, and Employment Centers.

Part 3 unites the General Plan and Transportation Plan. By providing a transportation network as conceptualized in Part 2, and in the framework of Part 1's Goals and Objectives, neighborhoods can become more livable with easy bicycle and pedestrian access to activity centers and public transit.