



June 21, 2011
10:30 a.m. to 11:30 a.m.
Conference Room B-2

Council Sustainability Committee Members:

Present were Councilmember/Chairperson Yvonne Knaack (Barrel District), Vice Mayor Steve Frate (Sahuaro District), and Councilmember Norma Alvarez (Ocotillo District)

City Staff Members:

Present were Larry Broyles, Marilyn Clark, Jon Froke, Craig Johnson, Karen Hesser, Stuart Kent, Doug Kukino, Kerri Logan, Bob Manginell, Deborah Mazoyer, Jamsheed Mehta, and Jo Miller

I. Approval of the Minutes of April 19, 2011

Chairperson Knaack called for a motion to approve the minutes of the April 19, 2011 meeting. The motion was moved by Vice Mayor Frate and seconded by Councilmember Alvarez. The minutes were approved as written.

II. Presentation on Transit Options and Traffic Operations

Jamsheed Mehta, Executive Director, Transportation Services presented this agenda item.

Introduction

Mr. Mehta stated in his opening remarks that in almost everything they do within transportation, there is some element of sustainability being achieved. He mentioned three elements associated with sustainability that he asked the committee to be conscious of as they listen to the presentation.

The first element being the green transportation component, which encompasses the environmental element of sustainability. Green transportation applies to auto emissions, which is the single largest source of environmental air pollution. The second element relates to improving the quality of life, which is the social element of sustainability. This element is often associated with timing, as in the reduction of congestion, and is also associated with the longevity of resources or the longevity of enjoyment. The third element represents the economic side of sustainability. Streets, highways, and bridges are traditionally identified as the source of urban sprawl, but it can also have benefits to the economic aspect of sustainability.

The following is a summary of the presentation:

Transit Service

Regions and environmental stewardships are often identified with its mass transit system. Impacts of traffic congestion and commute times have been a major concern in communities for some time.

❖ Solar Energy at Bus Shelters

The solar energy used at the Glendale Park-and-Ride is a good example of green and economic sustainability. This facility is located at the northwest corner of Glendale Avenue and the Loop 101. Every bus shelter has a solar panel with enough battery power to illuminate the bus shelters at night. The buses run up to 11:00 or 11:30 pm in the evening, but the lights continue to glow until the early morning hours.

❖ Glendale's Commitment to Transit

We live in difficult times and transit plays a big part in setting the pattern of growth and development within a community. People rely on the transit system and make major decisions as to where to locate, where to rent, and where to buy based on the availability of transit. Under difficult times, we are looking for solutions to the financial challenges we face as funding for fixed routes is diminishing. We are forced to make concessions that require changes to service hours, changes in the bus routes, and in some cases, eliminating bus routes altogether.

During the 2001 election, Glendale voters approved the half-cent transportation sales tax, which created funding sources for the G.O. Program, which included transit projects dealing with all modes of transportation. This example of economic sustainability became an early reward as transit service improved over the first couple of years, unlike streets and highways, which took five to six years to come on line.

❖ Buses Using Alternative Fuels

Field Operations provides two kinds of alternative fuels, E85 ethanol and bio-diesel fuels, which are cleaner burning fuels.

❖ Park-and-Ride Facility Features

As part of Transportation's commitment to transit, sustainable features were incorporated into the design of Glendale's Park-and-Ride facility.

➤ Pervious Concrete

The use of pervious concrete was used throughout the parking area. This environmentally friendly concrete helps reduce the storage of heat, which significantly reduces the heat island effect phenomenon typically experienced in large paved areas. Another advantage is that the concrete is designed to absorb water, which aids in reducing stormwater retention.

➤ **Lighting**

No glare soft lighting was incorporated as another sustainable feature at the facility. This is more energy conscious, and from a social aspect, it provides security without sacrificing energy.

➤ **Promotes Lower Emissions**

With ridership and cars using the facility, it offers a reprieve from traffic congestion, escalating gas prices, long commute times, and the reduction of emissions.

Bike and Pedestrian Efforts in Glendale

Glendale is constantly improving and expanding upon the city's bicycle and pedestrian facilities for the enjoyment, safety, health, and convenience of its citizens. Benefits of these ongoing efforts include less urban traffic congestion, which decreases the amount of CO2 pollutants from automobile emissions, not to mention the fact that biking and walking also promotes good health.

The newly opened pedestrian/bicycle friendly bridge over the Loop 101 at 63rd Avenue is a perfect example of the social element of sustainability. This multi-use bridge provides pedestrians and bicyclists a safe connection to neighborhoods that were once divided by the freeway.

Mr. Mehta gave a brief summary of the five bike and pedestrian projects in the MAG Transportation Improvement Program that will receive federal funding to enhance routes and trails in the Glendale area. They included the Skunk Creek Multi-Use Underpass at Union Hills Drive, the Downtown Alley Improvement Project, the Maryland Avenue Bike Route Improvement Project, the Grand Canal Multi-Use Bike Project, and the New River Multi-Use Path Project.

Glendale has over thirteen miles of off-street bike paths and close to fifty-seven miles of on-street bike routes for a combined total of seventy miles of bike paths/routes. As Glendale develops, another three miles of bike paths and twenty-three miles of bike routes will be added to the total.

In 2006, Prevention Magazine rated Glendale as the 12th most walkable city in the United States out of America's top 100 cities for walking.

Demand Management

❖ **Employee Trip Reduction**

Because Glendale is a major employer, the city is mandated by Maricopa County to have an approved Trip Reduction Program, which provides education and support for alternative modes of transportation for their employees. Through the Trip Reduction Survey, fifty-three percent of the City's employees were identified as using some trip reduction method with respect to an alternate work schedule such as four-tens, nine-eighty's, or in some cases, telecommuting.

❖ **Travel Green**

Trip reduction programs such as Travel Green encourages businesses and their employees to carpool, take the bus, ride a bike, or walk to work to reduce traffic impacts on air pollution and emissions. The city offers incentives to those employees using alternative modes of transportation.

❖ **Bus Buddies and B.A.G. IT (Bus and GUS Individual Training)**

Glendale residents can benefit from using public transit to get to destinations, but many do not know how to ride a bus or do not feel comfortable riding public transportation alone. This program is designed to educate senior citizens in various assisted living facilities on how to use the transit system.

Bus Buddies educates people on the ins and outs of using public transportation such as teaching people how to ride the bus. Bus Buddies are matched with individuals who have never ridden a bus or are afraid of riding a bus. This program gives people like senior citizens the added confidence needed to allow them to ride the bus alone and the self-assurance that the bus will be there to pick them up. Using the transit system reduces the demands on dial-a-ride; this in turn saves both the city and residents money.

❖ **Walk and Bike to School Program**

The Walk and Bike to School Program was developed to help reduce traffic congestion and air pollution around schools. This program encourages students to use alternative modes of transportation and provides educational information on bicycle safety for the children.

❖ **Safe Routes to Schools Plan**

The Safe Routes to School Program is a state mandated program that provides parents and schools safe walking and biking alternatives. Students learn various safe routes to schools designated from city and school officials. Glendale works with forty-one schools that are k-to-eight in seven school districts, providing them with the safest routes to schools.

Streets and Roadways

The value that the street and roadway improvement programs bring to the City of Glendale can be measured through the green, social, and economic elements of sustainability.

❖ **Grand Avenue Improvements**

The key features of this project include improvement of traffic flow, which will decrease accidents and improve safety, and a beautification project with enhanced landscaping and a new decorative wall along this heavily travelled roadway. The revitalization of the existing corridor is being rebuilt to handle more traffic and thereby reduce the need for costly new freeway construction.

❖ Northern Parkway

This project offers a six-lane roadway for east-west valley commuters providing them with a high capacity alternative to access existing freeways, which would allow for reduced travel time and improved access to downtown Phoenix. The parkway will reduce traffic volumes on parallel arterial streets, improving livability for adjacent neighborhoods. Other benefits to Glendale come with the future growth in this area, which increases job opportunities, and a transportation plan that attracts high quality development.

❖ Loop 101 High Occupancy Vehicle (HOV) Lanes

A construction project has begun to provide three miles of new HOV lanes in both directions on the Loop 101 between Camelback and Northern. With the addition of three miles of freeway and six miles of frontage road, the door is opened for potential development in this area.

❖ Intersection Improvements

Several intersection improvement programs are underway in Glendale. Intersections identified with a high volume of accidents will take part in this program. It is expected that the improvements will decrease accidents occurring at these intersections and will help improve traffic flow, thus decreasing travel time and reducing pollution. Federal funding towards this project will minimize the cost to Glendale residents.

❖ ROAM Street Light Monitoring System

ROAM stands for Remote Operations Asset Management system that allows the street lighting staff to identify malfunctioning streetlights from their computers with extreme accuracy. In terms of efficient management, this has been one of the best programs the Transportation Department has implemented. Malfunctions have been promptly identified, saving time and money. Fewer instances of street light outages have occurred which has reduced service and travel time.

Traffic Systems Management

The intent of the traffic management program is geared towards creating a sustainable transportation system.

❖ Coordination of Traffic Signals

The coordination of traffic signals creates efficient flow of traffic along major streets. As an example of the green element of sustainability, timing the signals minimizes stops and cuts down on emission outputs, which in turn reduces the CO2 pollutants in the air. This also impacts user costs by reducing vehicle fuel consumption, which is associated with the economic aspect of sustainability. On the social side of sustainability, the reduction of travel time is often viewed as an enhanced quality of life issue.

❖ Message Signs

Message signs are designed to quickly communicate information to motorists. Some examples include adverse traffic and road conditions, special event information and routing, emergency notifications regarding accidents or closures, and even Amber

alerts. It is also one of the best ways to provide motorists with positive directional traffic information with the ability to suggest alternative routes.

Traffic Signals

❖ LED Conversion

After the Transportation Department conversion to LED traffic lighting, the estimated annual energy savings was \$92,000 for 192 signalized intersections. LED uses less electricity, and has an average lifespan of five times longer than incandescent lighting.

❖ New Wiring System at 33 Intersections

New cabling provides a more efficient path for electricity to travel through resulting in the reduction of time, energy, and fuel.

❖ New Control Cabinets at 61 Intersections

The installation of the latest technology increases the efficiency of the traffic signal and enhances safety of the signal operation.

❖ New Signal Controllers at 26 Intersections

The new traffic signal controllers enhance safety by communicating more effectively with other electronic components within the cabinet.

Signs and Markings

❖ Recycling and Refurbishing Traffic Signs

As part of a recycling program, signs that are beyond refurbishing are placed in a bin and sold for scrap. Damaged aluminum signs that can be refurbished are sent to an outside vendor to be repaired and returned to the city. The amount received from the recycling program offsets part of the cost of the refurbished signs. The savings from this can be up to fifty percent, depending how much is scraped.

❖ Thermoplastic Traffic Symbols

The application of a new technology called thermoplastic has replaced the outdated adhesive pavement symbols used in the past. The life span of the adhesive symbols was very short. The symbol had a tendency to peel off the road, which left an incomplete symbol, and replacement adhesive could not be used over the old symbol; therefore, you would have to grind off the old symbol in order to apply a new symbol. This process was costly and time consuming. With the new thermoplastic pavement marking, there is no peeling or pulling because the symbol is embedded into the asphalt. When it is time to reapply, no grinding is necessary; the application can be applied over the existing symbol. A street arrow will now cost \$10.00 per arrow instead of \$50.00 using the old adhesive method.

❖ Re-Using Sign Posts

Another noteworthy project is the recycling of damaged sign posts. Nine-foot and eleven-foot sign posts that have been damaged are cut off to make four-foot posts. These recycled sign posts are being put to good use to accommodate some of

Transportation's traffic needs. The recycling process takes a little bit of an effort but the benefits are numerous.

Mr. Mehta's presentation was well received by everyone. It was very informative and educational, demonstrating many of the efforts Transportation Services has made in their contributions towards sustainability. Chairperson Knaack commented that it was a great presentation and thanked Mr. Mehta for his time and effort.

This agenda item was for informational purposes only, therefore no action was required on the part of staff.

III. Proposed Meeting Schedule - July to December 2011

Committee members received a meeting schedule that included a list of potential topics for the remainder of 2011 for their consideration and recommendation.

IV. Discussion on Appointment of New Committee Chairperson

Stuart Kent, Public Works Executive Director informed the Committee that the selection of a new committee chairperson will be on the agenda for August 16, 2011, and that an official vote would be taken at the meeting.

V. Staff Updates

Jo Miller, Environmental Program Manager updated the Committee on some of the past Energy Education Programs, as well as the upcoming Green Living Classes for Glendale residents scheduled at Rose Lane Recreation Center on June 22, 2011, and at O'Neil Recreation Center on June 29, 2011.

ADJOURNMENT

The meeting was adjourned at 11:40 a.m.

NEXT MEETING: August 16, 2011
10:30 a.m. to 11:30 a.m.
Conference Room B-2

TOPIC: Tree and Shade - Planning and Education

Respectfully submitted,



Marilyn Clark, Recording Secretary