

12 | Transportation Policies & Strategies

12.1 OVERVIEW

The following sections focus on specific areas that relate to or are affected by transportation decisions. By concentrating on these areas, the MPO can make better decisions for achieving its vision, mission, and goals.

12.2 TRANSPORTATION AND LAND USE

Transportation and land use are intrinsically linked – one affects the other and each must be considered as communities in the MPO area continue to grow. The location and density of development affects, and is affected by, the transportation system and other infrastructure. Communities face tradeoffs regarding the density of development in the rural or urban settings, the amenities built with a given density, and the accompanying tax-base. Also, a lack of connectivity within the transportation network reduces the number of routes available for trips and consolidates traffic. This may lead to wider roads, a further separation of land uses and a loss of human scale to development and the public space of the street. Transit, walking, and biking can become ineffective due to long distances and safety concerns.

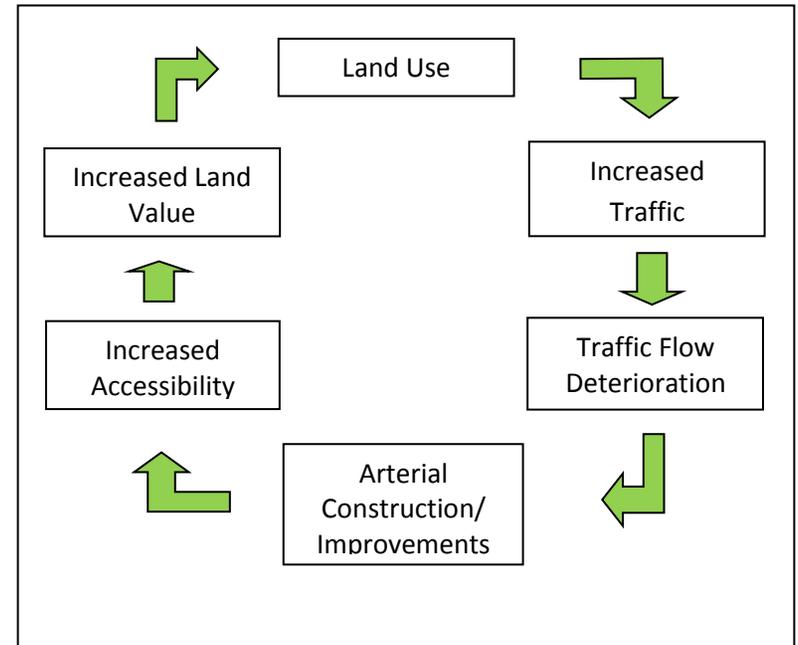
The work of the Complete Streets Advisory Group is centered on developing Design Guidelines for use by area local governments, developers and others to create streets which serve the variety of modes of travel. These streets are suited to the surrounding land use and the street's particular functional classification. Complete Streets includes complete networks for the variety of travel modes and can produce a positive relationship between the transportation network and land uses. The Design Guideline is being drafted to encourage complete streets applications in many different settings – from rural



to urban; commercial, to residential or industrial; and narrow lanes to broad boulevards.

Smart transportation and land use decisions increase the viable options people have for accessing employment opportunities, goods, services, and other resources to improve the quality of their lives. A balance between transportation and land use should be sought. The MPO, along with NMDOT, local transit systems, and the local entities should develop partnerships and incorporate land use considerations into their transportation planning activities. The following policies and strategies should be implemented to achieve the transportation/land use balance:

- Develop a Complete Streets policy that integrates all transportation modes into the design and construction of roadways
- Employ the MPO major thoroughfare plan to preserve corridors and prevent future developments from interfering with future corridors
- Encourage the development of complimentary land uses
- Identify activity centers that become the focal point for a variety of surrounding land uses
- Promote reuse and in-fill development to strengthen existing parts of the communities in the MPO Planning Area
- Create transportation and land use master plans for developing areas in San Juan county that are located in unincorporated areas
- Develop a specific budget and funding source to construct more walking and biking facilities
- Establish a stable budget and funding source for transportation upgrades, maintenance and improvements
- Perform scenario planning which incorporates transportation modeling with land use data



Source: Iowa Access Management Handbook

12.3 OZONE & PARTICULATE MATTER

Transportation decisions have a direct impact on air quality and environmental issues. More vehicles on the road, longer commutes and idling engines increase pollutants emitted into the air. Ozone and particulate matter are two common pollutants that can be caused by transportation. Emissions standards for these pollutants are monitored and enforced by the Environmental Protection Agency (EPA).

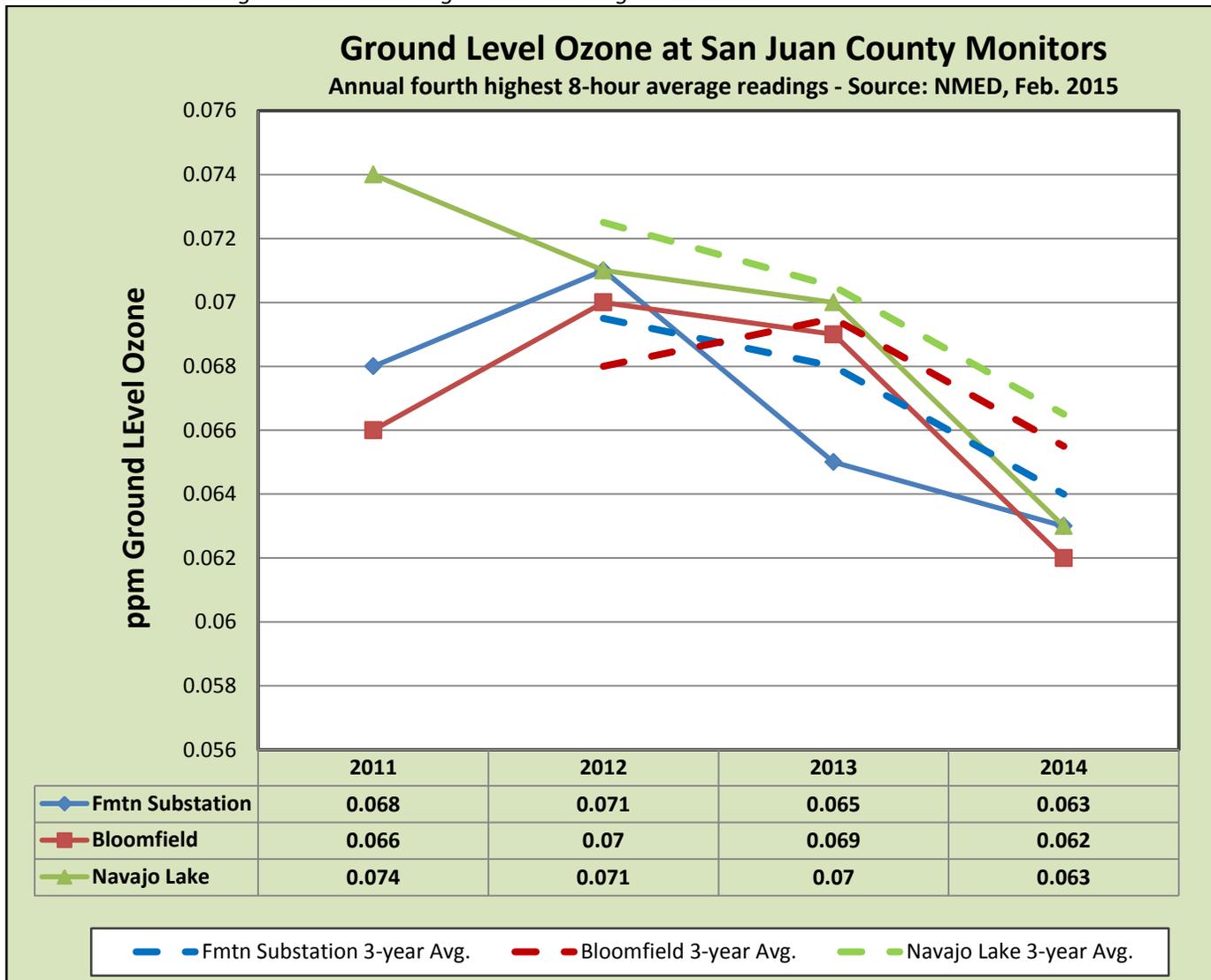


Currently, the Farmington MPO is in attainment for all air quality standards. In recent years, data collected at regional monitoring stations and a reduction in the ozone standard to 0.075 parts per million (ppm) have indicated that San Juan County has been on the threshold of being in non-compliance for ozone standards but is steadily trending down (see Table 12-1). In November, 2014, EPA proposed to reduce the standard to a range of 0.060ppm to 0.070ppm. A decision on the new standards will be made by October 1, 2015 and a decision regarding designation would occur in 2017 and would be based on 2014-2016 measurements. If the area is designated as being in nonattainment, the State Environment Department and EPA would work to develop a plan for addressing pollutants that lead to ozone creation. As a result, more stringent reporting and congestion mitigation requirements efforts would go into effect. Violations of air quality standards can lead to federal funds being withheld from the MPO.

As of early 2010, the New Mexico Environmental Department (NMED) has focused its efforts on point sources of pollution; that is, what impacts are coal power plants and oil wells having on ozone levels. The Four Corners Air Quality Group identifies strategies for mitigating ozone creation. To avoid falling into non-attainment and the subsequent additional requirements, the MPO should proactively implement policies that reduce the sources that contribute to ozone from a transportation standpoint:

- Encourage policies which reduce pollutants, congestion, and which increase non-motorized or high-occupancy travel
- Facilitate updates to the MPO's ITS Architecture, in collaboration with NMDOT
- Assist local entities and NMDOT to implement ITS elements that reduce congestion
- Synchronize signals on major corridors to improve arterial travel flow movements
- Support planning efforts and development review by local government to New housing, business, and retail developments should be built around transit stops
- Continue to develop a Complete Streets Design Guideline and offer support during implementation by local governments
- Encourage the use of walking and biking by creating higher density and mixed-use developments

Table 12-1 – Fourth Highest 8-Hour Average Ozone Readings 2011-2014



Nationwide, innovative strategies are being discussed or implemented as the newest ways to reduce transportation-related emissions. While typically seen in non-attainment, large metropolitan areas, the MPO may consider the costs and benefits of the following strategies:

- Tax drivers based on distance traveled
- Charge vehicles to park at public facilities
- Implement road pricing, where motorists pay directly for using a particular road or for traveling in certain areas during peak time periods
- Create car-sharing programs to minimize personal automobile use
- Build rail systems that reduce vehicle trips and promote denser developments
- Telecommuting
- Incentives from businesses to employees to use other alternatives modes of travel

12.4 SYSTEM PRESERVATION AND EFFICIENCY

Transportation policy should include efforts to preserve the existing transportation system and improve its efficiency. System preservation can reduce costs over the life of infrastructure. While it is understood that new facilities will need to be built in the future to meet demand, maintaining the existing system reduces costly future improvements, reduces the tendency for urban sprawl to occur, and maintains access to neighborhoods, jobs, and employment centers.

Performance measurement requirements of MAP-21 include maintenance of the existing transportation network, and could require funds be dedicated to system preservation if targets for maintenance are not met. This will require states to focus funding on system preservation ahead of expanding capacity.

In order to preserve the transportation system, the following policies and strategies should be implemented:

- Preserve right-of-way (ROW) that allows future expansion of existing roadways without impacting or disrupting adjacent land uses.
- Select and enact pavement preservation strategies before roadways and bridges require extensive repair or re-building.
- Implement access management strategies to maintain the functionality of road classifications.
- Implement signal coordination plans for major corridors to reduce congestion and the need for adding more capacity to roadways.
- Research and consider implementing road diets, which can replace two travel lanes with bike lanes and/or parking lanes to improve safety.
- Construct roundabouts in warranted locations as a means of reducing congestion.

- Improve network connectivity to disperse vehicle trips.
- Connect and enhance the networks for bicycle, pedestrian, and transit modes to maximize the usefulness of these existing facilities and systems.
- Employ ITS technologies.
- Create and maintain funding strategies.
- Develop asset management plans at the local level and in coordination with NMDOT.
- Investigate and include life cycle cost into project development.
- Re-evaluate the areas of greatest need and route configurations to improve the efficiency of the transit system.

12.5 INTELLIGENT TRANSPORTATION SYSTEMS

Intelligent Transportation Systems (ITS) are integrated technologies that improve safety and mobility on roadways, coordinate emergency management procedures, and distribute regional traveler information. ITS Program Areas include Traffic Management, Traveler Information, Public Transportation Management, and Emergency Management.

An ITS architecture is a computer software program that an MPO uses to inventory the various ITS elements and stakeholders involved. The Farmington MPO architecture describes the stakeholders who are involved with ITS, the types of ITS technologies and services to implement, and the roles and responsibilities of the stakeholders. The MPO adopted an ITS architecture for the area in November 2006 and renewed it in November 2008. In 2014, NMDOT contracted for an update to regional ITS Architectures throughout the state. For a list of potential projects identified through the update process by various stakeholders, see the Farmington MPO website, www.farmingtonmpo.org.