2009

Transportation Master Plan

Pleasant Grove

Utah's City of Trees

HORROCKS ENGINEERS

Approved by City Council on June 23, 2009

Project # 0902-047

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Executive Summary

Similar to the overall growth in Utah County, Pleasant Grove has also experienced rapid residential and commercial growth in recent years. The Bureau of the Census reported a total population of 23,468 for the City in the year 2000. In July of 2007, it estimated a population of 31,552. That growth amounts to an increase over the seven year period of just slightly more than 34 percent, or almost 5 percent annually. As far as future growth is concerned, the Governor's Office of Planning and budget projects a population of 34,446 in 2010, 42,877 in 2030, and 52,600 in 2050 for Pleasant Grove City.

Due to this expansive growth, many of the transportation facilities throughout the City are experiencing increasing congestion and may soon become overwhelmed. Other new transportation facilities will be needed in addition to improving existing facilities.

Recognizing the need to update the Transportation Master Plan (TMP) to accommodate the future development throughout and around the City, travel demands that will result from the planned land uses outlined in the City's General Plan were modeled and documented. The results of that modeling process were used to make plans regarding future transportation improvements. This TMP is a culmination of the master plan update process and is intended to guide the City's transportation system for the next several years.

The TMP discusses the various elements of transportation in Pleasant Grove City, including traffic volumes and conditions, roadway functional classification, typical street sections, alternative transportation modes, traffic signals, access management, corridor preservation, capital improvements, and more. Important items from the TMP are summarized in the following paragraphs.

Roadway Elements

To accommodate growth expected to occur throughout the City and simultaneously maintain the quality of life desired by the city residents, several revisions were made to the City's existing transportation master plan. The updated roadway plan (Figure 7) outlines the roadway functional classifications; number of lanes; typical cross-sections; right-of-way required to accommodate future traffic in the year 2040 on each roadway; and locations for intersection improvements. In addition to the above, the TMP:

- Outlines typical cross-sections to be applied to each roadway functional classification;
- Provides guidance on how to ensure safety as a primary goal in the design and operations of the City's roadways;
- Discusses the implementation of different traffic calming measures;
- Describes proper access management guidelines and procedures;
- Expounds on traffic impact study requirements for developers;
- Summarizes the practice of preserving future transportation corridors, coordinating with other agencies, and implementing impact fees to developers; and

- Provides guidance on alternative modes of transportation such as public transit, bicycle, and pedestrian facilities.

Alternative Transportation Elements

To provide a well balanced transportation system in Pleasant Grove, the City will encourage and develop transportation alternatives to the automobile. As the City grows and develops, alternative transportation elements such as public transit and bicycle/pedestrian facilities will play an increasing role in the overall transportation system. This TMP discusses future opportunities to encourage alternative modes of transportation throughout the City including car pooling, park-and-ride lots, local UTA bus routes, bus rapid transit, commuter rail transit, and bicycle, pedestrian, and equestrian plans.

Other Transportation Related Elements

In addition to the roadway and alternative transportation elements, this TMP addresses other transportation related elements such as safety, traffic calming, access management, and corridor preservation.

Safety is a primary concern to the TMP as well as forecasting traffic growth and providing adequate facilities to meet needs as they arise. To make sure safety concerns are addressed, the City will construct and maintain its transportation facilities in compliance with applicable design and engineering standards.

The City can implement several types of traffic calming measures to reduce speeds on residential and commercial roadways. In summary, those measures include the use of traffic control devices, actual street modification, and ultimately route modification where deemed necessary. There are appropriate situations and locations where traffic calming can be used; however, the City must be cautious and organized in developing and implementing a traffic calming program, or more problems could result than are solved. The general approach involves conducting an engineering study to determine the nature and extent of the traffic problems with guidelines for traffic calming measures to address the identified problems. Once a traffic calming measure is selected, the City will implement it on a temporary basis and monitor it to evaluate the success of the treatment. Details of the different types of traffic calming measures and implementation are outlined in this TMP.

Access management principles include controlling the location, amount, spacing, and type of driveways and intersections on arterial and collector streets. Managing access design will minimize traffic conflicts and maximize the capacity of major travel routes. This TMP provides access management guidelines for the City to use as more development occurs.

Corridor preservation allows a city to identify and protect land from development that is needed for future transportation facilities. New roads are needed to accommodate future transportation demands. Through corridor preservation practices, the City will be able to preserve and protect land that the City needs for future transportation facilities. These practices include exactions, developer incentives and agreements, fee simple acquisitions, transfer of development rights and/or densities, land use controls,

and purchases of options and easements. By preserving these corridors now (securing future right-of-way), the City will ultimately lower the cost and impact of these facilities.

Transportation Improvement Program

The Transportation Improvement Program (TIP) indicates which transportation improvements will be needed and prioritizes their implementation schedule. Each improvement is given a planning level cost estimate and a time frame for its implementation. Improvements are separated into short range (0 to 5 years), medium range (5 to 10 years), and long range (10 to 20 years) time frames. Improvements are shown graphically in Figure 23 and described in Table 12. Even if an improvement is shown in the TIP, the City is not obligated to implement that improvement. The City will determine the actual implementation of facilities as well as funding for each project on a case by case basis as the City works through the annual budgeting process.

Pleasant Grove City intends this TMP to be a living document that the City will use to plan and guide the development of its transportation system in a timely and efficient manner. Since many aspects of this TMP are primarily developer driven, the City will update the TMP as the City grows and changes. Significant land use changes or fluctuation in population could alter the need for or timing of improvements identified in the TIP. As a result, the City will review and update the TMP on a regular basis. Significant reviews will be performed at least every two to three years. This will ensure that the TMP reflects the values and growth of Pleasant Grove City and serves its intended purpose for many years to come.

1.0 Introduction

Pleasant Grove City is located in northern Utah County along the Wasatch Front. Its adjacent neighboring cities include American Fork, Lindon, and Cedar Hills. A vicinity map of the City is shown in Figure 1.

Pleasant Grove City has a considerable amount of developable land within the City limits, which will allow it to grow well beyond its current population. Similar to the overall growth in Utah County, Pleasant Grove has also experienced rapid residential and commercial growth in recent years. For example, the Bureau of the Census reported a total population of 23,468 for the City in the year 2000. By July of 2007, it had estimated the City's population to be 31,552, which amounts to an increase over the seven year period of just slightly more than 34 percent, or almost 5 percent annually.

Due to this expansive growth, many of the transportation facilities throughout the City are experiencing increasing congestion and may soon become functionally obsolete and in need of improvements. The City will need other new transportation facilities on the outskirts of the City as a result of new growth in those areas.

The last update to the City's transportation element of the General Plan was completed in 2007. The City recognizes the need to update the Transportation Master Plan (TMP) to accommodate the future travel demand as the City grows. This TMP is a part of the master plan update process and is intended to guide the City's transportation system for the next several years.

The TMP discusses the various elements of transportation in the City, including traffic volumes and conditions, roadway functional classification, typical street sections, alternative transportation modes, traffic signals, access management, corridor preservation, and capital improvements.

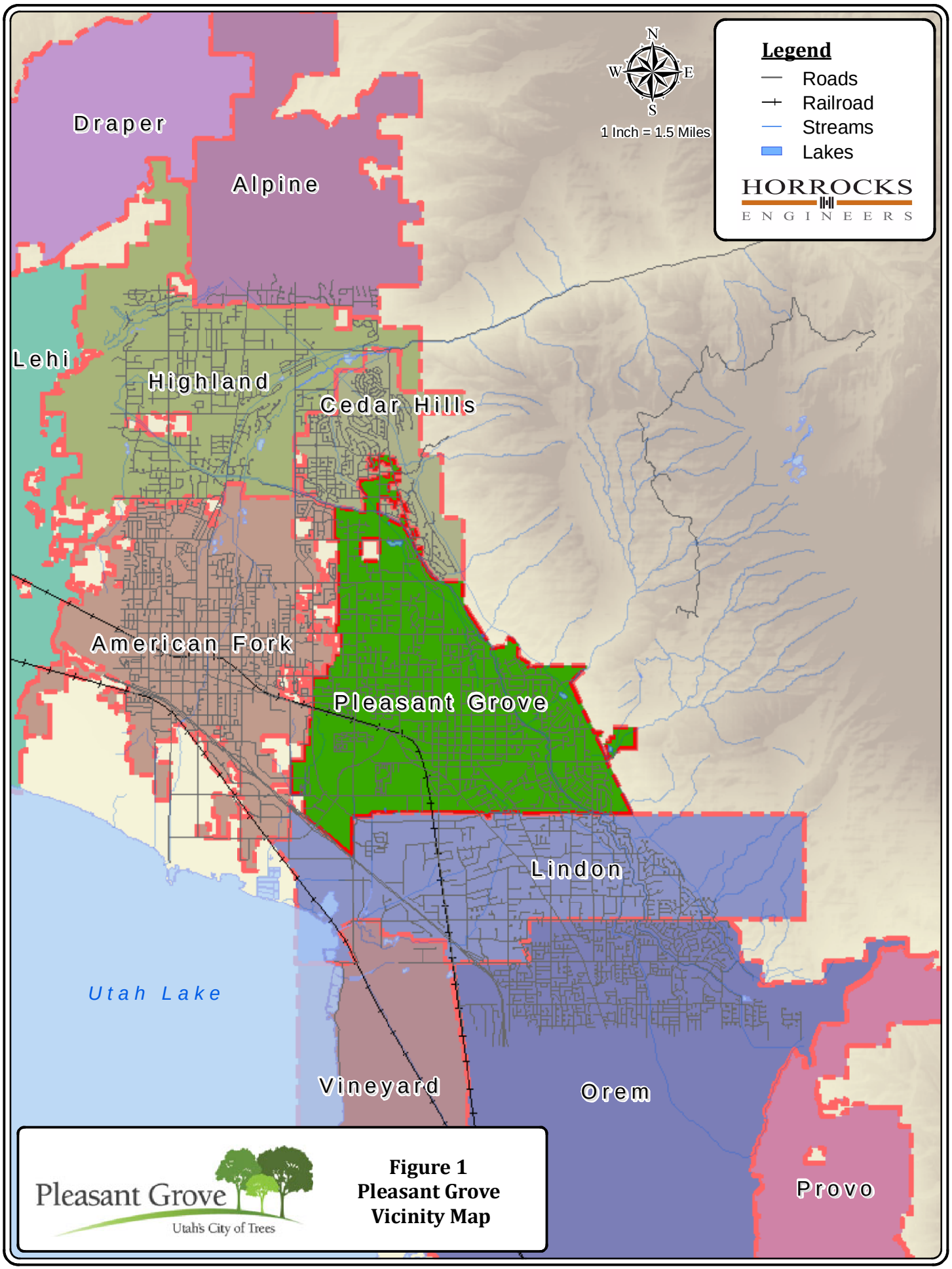


Figure 1
Pleasant Grove
Vicinity Map

2.0 Transportation Goals and Policies

This section of the TMP outlines the general transportation desires of the City and will assist City leaders, planners, engineers, and land developers in developing transportation guidelines, standards, and solutions that reflect the unique characteristics of the City. City staff and leaders will use these goals and policies to evaluate transportation alternatives that are not specifically addressed in the City's TMP to assure that any alternatives be in harmony with the City's transportation needs and desires. The City's Transportation Goals and Policies are outlined as follows:

Safe Transportation System

Background:

Automobile accidents are one of the leading causes of injury and death in the United States. While we often freely accept the trade-off of increased exposure to accidents versus travel conveniences when we use automobiles, there is an inherent trust in the public infrastructure to comply with reliable safety standards.

Goal:

Set safety of the transportation system as a high priority and work diligently to meet applicable safety standards.

Strategies and Actions:

A. *Strategy*: Require all major subdivision developments to provide multiple entrances for emergency vehicles. The City will require a secondary access for all projects with roadways lengths greater than 1,000 feet.

   Action: The Planning Department will implement this requirement during the site plan review process.

B. *Strategy*: Provide pedestrian crossings for children, particularly near schools and recreation areas. Encourage development of school routing plans and recreation plans which minimize vehicle/pedestrian conflicts.

   Action: Involving the School District, PTA, City Public Works, and Engineering Department, conduct an annual review of the safe walking routes. The Engineering and Planning

Departments will work with the School District to plan future school locations and walking routes within the existing municipal and annexation policy declaration boundaries consistent with the transportation system.

C. *Strategy*: Establish speed limits based on traffic engineering analysis and enforce speed limits, especially near schools and in residential areas.

   Action: The Engineering Department will complete speed studies for areas of concern and law enforcement agencies will enforce safe speeds. The City will maintain a logical progression of speed limit areas such that similar areas and street types are consistent in speed limitations.

D. *Strategy*: Improve guidance of traffic on streets through striping, raised medians and islands, reduction of roadside obstructions, and other traffic engineering solutions.

   Action: The Engineering Department will review intersections and developments that are problem areas for possible traffic channelization solutions.

E. *Strategy*: Require all roadway features to meet minimum design standards established by the American Association of State Highway and Transportation Officials (AASHTO). All signs, pavement markings, and traffic signals must meet standards established by the Manual of Uniform Traffic Control Devices (MUTCD).

   Action: The Engineering Department will enforce and follow current design standards during the design review process.

F. *Strategy*: Upgrade or install pedestrian safety features at intersections and crossings areas as deemed necessary by City Staff which may include but are not limited to:

   a. Warning lights and audible signals at high volume intersections
   b. ADA ramps at all crossing areas
   c. Street lights on both sides of the street at mid-block crossings and flashing beacons where feasible (Note: The City will minimize the establishment of mid-block crossings where possible.)
   d. Raised median pedestrian refuge where feasible on roadways with four or more lanes
   e. Stricter enforcement of jay-walking through signage and increased monitoring
   f. Optimal sidewalk conditions for walking and wheelchairs through repairing cracks and bumps, minimizing slopes, and maintaining visibility at corners

   Action: City Staff will conduct a regular review of pedestrian facilities throughout the City.

Corridor Preservation

Background:

Corridor preservation allows a city to identify and protect land from development that is needed for future transportation facilities.

Goal:

Plan sufficiently for the future needs of community wide transportation systems.

Strategies and Actions:

A. *Strategy*: Preserve future corridor locations and secure right-of-way using innovative methods including: exactions, developer incentives and agreements, fee simple acquisitions, transfer of development rights and/or densities, land use controls, and purchase of options and easements.

Action: Involve the local, regional, and state agency participation in developing the goals of the plan. Implement the projects planned in the City's Transportation Improvement Program (TIP). The City will thoroughly review and update the TMP and TIP on a regular basis, at least every two to three years.

Multi-Modal Approach

Background:

The private automobile is presently the most common and convenient form of transportation. However, the City needs to plan for all types of transportation to meet all the needs of the community and to establish a more desirable urban environment. Alternative modes of transportation primarily include such modes as public transit, walking, and bicycling. Alternative modes of transportation can assist in reducing vehicular congestion and delay, as well as reduce overall pollution emissions from vehicular traffic.

Goal:

Provide for effective connections and community use of mass transit systems in and near the City. Provide a balanced multi-modal approach to transportation problems which considers mass transit, car pools, and other alternative modes to the single occupant automobile.

Strategies and Actions:

A. *Strategy*: Develop and continually update a long range mass transit plan for the City as part of the City's TMP.

Action: Plan for future light rail service and transit-oriented development in the downtown and other strategic locations.

Action: Encourage transit and multi-modal facilities by improving bus stops.

Action: Require developers of new commercial developments to consider transit and other multi-modal service in their design of parking facilities, roadways, and pedestrian access.

Action: Work with UTA to establish new transit routes throughout the City and to develop bus stop and park-and-ride requirements for office and commercial land uses.

Action: Support implementation of park-and-ride lots and encourage the development of high frequency, express transit services.

Improve the Physical Condition and Efficiency of the City's Roads

Background:

Roads require consistent monitoring and maintenance to avoid unnecessary ware and tare. Pavement conditions, vegetation overgrowth, signing & striping conditions, etc. should all be monitored regularly to address deficiencies in a timely manner to avoid further deterioration.

Goal:

Maintain an efficient roadway network through regular monitoring and maintenance programs.

Strategies and Actions:

A. *Strategy*: Widen, improve, and complete unfinished streets, and install streets where there are high traffic demands.

   Action: Program street overlay improvements to repair all old and damaged roads. Plan for and complete the projects in the City's TIP.

B. *Strategy*: Provide funding for needed road improvement projects.

   Action: Set aside funds for needed road improvements each budget year.

C. *Strategy*: Work with the railroad and other agencies to set target dates for improvements to railroad crossings.

   Action: Repair all roadways where there are railroad crossings.

Circulation Flow

Background:

Pleasant Grove, as many other cities throughout the Wasatch Front, has established its street network on a grid system. In order to provide proper circulation flow on this grid system, the

City has established a hierarchy of roadway functional classifications. Continuity in the defined functional classification of roadways needs to occur between adjacent jurisdictions. Discontinuity in the functionality of each roadway can cause confusion and congestion on the street network. Each roadway needs to serve a distinct function and purpose.

Goal:

Design transportation facilities to assure efficient traffic flow throughout the City with compatible connections to regional transportation systems.

Strategies and Actions:

A. *Strategy*: The City's TMP is designed to have a hierarchy of streets compatible with the land use the street system serves.

Action: Abide by the hierarchy of streets identified in the TMP (Figure 7). The City will follow corridor preservation techniques to preserve the right-of-way necessary for the different street classifications (Figure 12 and Figure 13).

B. *Strategy*: The principle function of arterial streets is to move large volumes of through traffic on a continuous route over a substantial distance. To ensure that arterial streets function properly, the City will implement and enforce access management principles and standards (as outlined in the appendix), as well as parking restrictions.

Action: The Planning and Engineering Departments will implement and enforce these standards.

C. *Strategy*: The street system shall include a hierarchy based on vehicle usage. The TMP expects trucks to stay on designated truck routes, which are primarily limited to arterial streets.

Action: Develop and pass a truck route ordinance mandating trucks to travel on designated truck routes and that roadway designs provide adequate turning radii at intersections based on the specific roadway classifications (Table 10). In addition, the Engineering Department should develop a signage system that would inform heavy vehicle operators to drive on designated truck routes. The Planning Department will ensure that land uses requiring truck delivery are located along roadways that can accommodate trucks.

D. *Strategy*: Minimize traffic speeds on local streets by providing direct routes to collector streets, and verify that street designs are compatible with street functions.

Action: Require major housing units, commercial developments, and major public buildings to have direct routes onto arterial and collector roads to minimize their impacts on the community. In addition, the City needs to mandate, through ordinance, requiring the conduct of a traffic impact study for these types of developments. Both the Planning and Engineering Departments will work with all new developments during the review process to ensure proper design that is in conformance to the standards set in the City's TMP.

E. *Strategy*: Require access to any new residential development be provided via a local road or an appropriate on-site circulation roadway system. Where feasible, the City will not allow new residential development to face collector or arterial streets in order to preserve and maintain the functionality and mobility of the major roadways throughout the City. The City will follow the access management standards as outlined in the appendix of this document.

   Action: The Planning and Engineering Departments will enforce these requirements.

F. *Strategy*: Establish a hierarchy of streets by classifying all new roads according to their function and purpose.

   Action: Classify any new roads according to their function and purpose.

G. *Strategy*: Provide for internal circulation to occur within the City by designing a functional hierarchy of streets to assist in dispersing traffic. This hierarchy of streets will incorporate a broad network of arterial streets with smaller internal networks of collector and local roads.

   Action: Ensure that a series of roadways within commercial districts are established to allow for the dispersal of traffic thereby reducing congestion. Require residential subdivisions to have a minimum of two access connections to neighboring subdivisions or streets. The City will require that residential areas are interconnected with adjacent neighborhoods to prevent children from traveling on arterial and collector streets to reach nearby neighborhoods and schools.

H. *Strategy*: Design a circulation system to accommodate regional transportation needs.

   Action: The Engineering Department is responsible for obtaining updated information regarding projected traffic volumes and regional transportation plans affecting the City at least annually, or as information is available from both MAG and UDOT.

Level of Service

Background:

Level of Service (LOS) is a traffic engineering term for describing and measuring the level of travel delay experienced by vehicles. LOS ranges from free-flow traffic conditions (LOS A) to extremely congested travel (LOS F). Since traffic and overall travel is generally most congested at morning and afternoon peak periods, typical practice generally allows for some driver discomfort during these peak periods while providing better LOS throughout the remainder of the day.

Goal:

Improve traffic flow and circulation to major activity centers in the City. Provide a street system that operates at an acceptable Level of Service (LOS) standard during peak-hour periods.

Policies and Implementation:

A. *Strategy*: Provide streets that at a minimum operate so that the average travel speeds would be no lower than about 40 percent of the free-flow speeds. Also, provide intersections that operate at a LOS of C (minimum average) during the peak hour (i.e., an average delay of less than 35 seconds per vehicle at signalized intersections and less than 25 seconds per vehicle at unsignalized intersections). Exceptions to these standards may be made in instances where the associated impacts of the improvements needed to bring the facility up to standard are disproportionate to the benefits and funding to implement the improvements is not available.

   Action: Adhere to the year by year improvement project list in an effort to reduce congestion on arterial streets and at intersections.

B. *Strategy*: Improve the efficiency of streets and reduce potential traffic conflicts through the use of improved or new signals, signing, pavement markings, and street lighting.

   Action: Adhere to the year by year project list that improves signals, signs, pavement markings, and street lighting.

C. *Strategy*: Work with businesses to explore non-traditional methods for reducing traffic volume through travel demand management and system management strategies.

   Action: Develop programs that provide a mix of land uses with differing peak traffic periods, provide incentives for rideshare systems, and encourage flex-time work schedules, parking management, telecommuting, and transit ridership incentives. The Engineering and Planning Departments will implement such programs as development warrants.

D. *Strategy*: Plan future streets for the width necessary to serve projected traffic at an acceptable LOS as identified above. Require development to protect, preserve, and donate needed street width. Figure 12 and Figure 13 show the desired typical cross-sections for the different roadway classifications.

   Action: The Engineering Department will mandate a Traffic Impact Study (TIS) be performed for every new development that would generate more than 100 peak-hour trips. Table 1 outlines some examples of minimum thresholds for different land uses that would require a TIS to be performed. The City will collect traffic impact fees that are directly proportional to the impact of a development on the collector and arterial roadways.

Table 1 Examples of Land Use Thresholds that Require Traffic Impact Studies

Land Use	Size of Development that Generates ≥ 100 Peak-Hour Trips
Residential (Single Family Homes)	90 Units
Residential (Apartments)	150 Units
Residential (Condos/Townhomes)	190 Units
Residential (Mobile Home Park)	170 Units
Shopping Center	6,000 Sq. Ft. of GLA
Fast-Food Restaurant with Drive-In	3,000 Sq. Ft. of GFA
Gas Station with Convenience Store	7 Fueling Positions
Bank with Drive-In	2,000 Sq. Ft. of GFA
General Office	67,000 Sq. Ft. of GFA
Medical/Dentist Office	29,000 Sq. Ft. of GFA
Research and Development Facility	71,000 Sq. Ft. of GFA
Light Industrial/Warehousing	185,000 Sq. Ft. of GFA
Manufacturing Plant	144,000 Sq. Ft. of GFA
Park-and-Ride Lot with Bus Service	160 Parking Spaces

Source: *ITE Trip Generation Manual (7th Edition)*
GLA = Gross Leasable Area. GFA = Gross Floor Area.

Quality Image through Streetscape Design

Background:

The sense of community is often defined by both the driver's perspective passing through an area as well as the resident's observation living and working in an area. Communities establish a sense of pride by creating a vision to define a unique and positive image of and for the community.

Goal:

Consider aesthetics in the design of each of the different roadway classifications to enhance the overall image of the City. Achieve a higher standard for street beautification, function and safety.

Strategies and Actions:

A. *Strategy*: Require all new developments to plant trees in the park strips as part of the landscaping. The City will identify main thoroughfares where landscaping beautification will benefit the community, explore alternative landscaping options for better visibility and safety, coordinate with Public Works to insure maintenance needs are addressed, and use flexible street design to accommodate existing mature trees.

Action: Require all new developments to plant trees and landscape the medians and park strips and to provide for water and other maintenance needs of the landscaped areas.

Action: Create a list of approved park strip trees to ensure that tree roots do not create maintenance problems.

B. *Strategy*: Upgrade and beautify sidewalks and other walkways to create a functional, but aesthetically pleasing pedestrian streetscape. Create pedestrian rest stops with places for park benches and additional landscaping. Explore alternatives for standard waste receptacles.

C. *Strategy*: Streetscape design needs to reflect and enhance the adjacent land use. Size and type of trees and width of park strips can vary according to need.

Pedestrian and Non-Motorized Circulation

Background:

The scale of a community is best expressed and further enhanced through short, slow-speed trips within the city as opposed to trips which go through the city. Pleasant Grove will support the use of pedestrian and bicycle travel as alternatives to the private automobile.

Goal:

Achieve a more walkable community. Support and encourage bicycle, pedestrians and other non-motorized travel within the City. Coordinate with adjacent jurisdictions to offer continuous routes for travel and recreation between communities.

Strategies and Actions:

A. *Strategy*: Increase connectivity and efficiency of bicycle and pedestrian facilities along all major arterial and collector streets.

Action: Keep the City's bicycle and pedestrian facilities master plan current.

B. *Strategy*: Create a balance between bicycle and pedestrian facilities to satisfy both the transportation and recreational needs of residents.

Action: Improve bicyclist and pedestrian access to parks, recreation centers, mass transit facilities, schools, and other activity destinations by requiring the incorporation of bicycle and pedestrian facilities into private development plans.

Action: Require sidewalks of sufficient width on both sides of all roads. The City will vigorously enforce this standard on arterial roadways and within commercial areas with exceptions granted on a case by case basis.

Action: In developing bicycle and pedestrian facilities, it is important that these facilities lead to somewhere, are as direct as possible, and that they are interconnected with each other.

Action: Coordinate with school districts on existing and future new school locations relative to student bicycle and pedestrian issues.

Action: Assure that bicycle and pedestrian facilities are incorporated into roadway and mass transit construction project plans, since it is much more difficult and more expensive to retrofit bicycle and pedestrian facilities to existing roads and transit facilities.

Action: Encourage the development of multi-use trail facilities in the City's urban environment, since they are more practical and efficient.

Action: Coordinate with UDOT on new state road construction projects relative to bicycle and pedestrian facilities, such as State Street and Main Street (Geneva Road).

Action: Coordinate with UTA on any new projects and facilities they own regarding bicycle and pedestrian issues.

C. *Strategy*: Encourage alternative modes of transportation through carefully developed support systems.

Action: Work with local businesses to offer better access for bicycles and improved security for storage.

Action: Encourage employers to provide lockers and showers for employees who walk or cycle to work.

Action: Work with UTA in establishing bike-and-ride facilities at bus stops, car pool lots and park-and-ride lots.

Action: Create continuous bicycle paths/routes between residential, commercial and other areas.

Action: Pave the shoulders of roadways that are unpaved and that are designated to accommodate bicycle lanes or a route. The City will ensure that space is provided for bicycle lanes, or in the case of a route, a wider outside general purpose lane (14 feet).

Action: Create a safer environment for bicyclists and pedestrians through proper location and design of sidewalks, bike lanes, multi-use trails, and other bicycle and pedestrian facilities.

Action: Coordinate with the adjacent communities, such as Lindon, American Fork, and Cedar Hills (as well as the Forest Service) on bicycle and pedestrian standards; and so that the City's bicycle and pedestrian facilities will have a greater likelihood of interconnecting with the facilities of the adjacent community.

Action: The City will conduct planning/engineering studies for its planned bike, pedestrian, and other trail facilities for purposes of locating, designing, and acquiring right-of-way for these facilities.

Action: The City and the Murdock Canal Company will work together in developing and executing an agreement to formally make available a portion of the canal right-of-way for the development of a multi-use trail, which would include equestrian use.

D. *Strategy:* Maintain Safety and accessibility of pedestrian walkways.

Action: Develop a maintenance program for sidewalk cleaning, clearance, and snow removal with a clear division of City and citizen responsibility.

Action: Develop a program for sidewalks that includes an inventory of the condition of the City's sidewalks and an identification of where there are gaps (lack of sidewalks) in the existing sidewalk network.

Action: Determine priorities for sidewalk replacement and new construction on the basis of sidewalk conditions and safety.

Action: In areas of highest need, annually allocate resources in order to replace inadequate sidewalks and construct new sidewalks in areas where there are gaps in the network.

Traffic Calming Design

Background:

Traffic calming design encourages the reduction of speeds and vehicle volumes through the manipulation of roadway design elements. Design elements include roadway width, alignment of streets, and connectivity to adjacent streets. Traffic calming is most warranted on residential streets and in other high pedestrian use areas.

Goal:

Encourage slow speeds through residential neighborhoods and in the downtown area by implementing traffic calming techniques where necessary.

Strategies and Actions:

A. *Strategy*: Geometrically design new residential streets to avoid excessive speeds.

Action: Vary street widths and patterns to encourage or discourage through traffic where appropriate.

Action: Employ stop controlled intersections or roundabouts spaced no farther than 1000 feet apart for residential streets.

Action: Maintain traffic connections that do not over utilize residential routes.

Action: Restrict residential roads to a maximum length of 1,300 feet and connect both ends to either a Local Road or Collector Road.

Action: Limit the maximum length of a cul-de-sac to 400 feet. Loop or circle streets are preferred to cul-de-sacs to maintain circulation and emergency access.

B. *Strategy*: Local neighborhood streets need to provide vehicular and pedestrian access to all land parcels.

Action: Reduce speeds on downtown and residential streets to 20 miles per hour.
Action: Create a City-wide traffic calming plan including justification, warrants, standards, and specifications for the various traffic calming measures.

Design Circulation and Street Pattern to Support the General Plan Land Use Goals

Background:

A relationship exists between the type of land uses and the volume of traffic that travels on streets. Therefore, the City will design circulation and street patterns that are compatible to existing and future land use goals.

Goal:

Design and plan the City's transportation system so that it can serve as a tool in implementing the General Plan's Land Use Goals.

Strategies:

A. *Strategy*: Low speed and minimal traffic in residential neighborhoods improves quality of life. Thus, the City should minimize vehicular traffic on these streets through the use of traffic calming measures where necessary.

B. *Strategy*: Restrict large retail developments to areas adjacent to arterial streets which are designed to facilitate large traffic volumes. The City will use zoning and other land use regulatory tools to restrict commercial developments to property facing arterial streets.

C. *Strategy*: Coordinate land use and transportation elements of the general plan to insure complimentary goals and policies.

Preserve Air Quality and Energy

Background:

An efficient transportation system contributes to a decrease in the amount of pollution and consumption of energy that is associated with most forms of transportation. Therefore, an efficient street network that reduces the amount of time vehicles idle at intersections is in the best interest of residents of the City. Using non-motorized travel is another way to reduce pollution and energy consumption.

Goal:

Where possible, the transportation plan will investigate innovative methods of preserving air quality and conserving valuable energy resources.

Strategies:

A. *Strategy*: Improve intersection design and traffic signal timing plans to reduce vehicular stop time at major intersections throughout the City. Coordinate traffic signals along arterials to reduce delay experienced by through traffic.

B. *Strategy*: Create a street system that moves automobile traffic efficiently through City streets by:

   a. Securing right-of-way that is necessary to accommodate future traffic volumes.
   b. Requiring traffic impact fees that are proportionate to the traffic impacts that development will produce.
   c. Encouraging mixed use developments to decrease vehicle trips during peak hours.

C. *Strategy*: Encourage other methods of travel within the City by constructing trails and larger sidewalks.

D. *Strategy*: Encourage public awareness and participation in emission reduction programs.

3.0 Existing Conditions

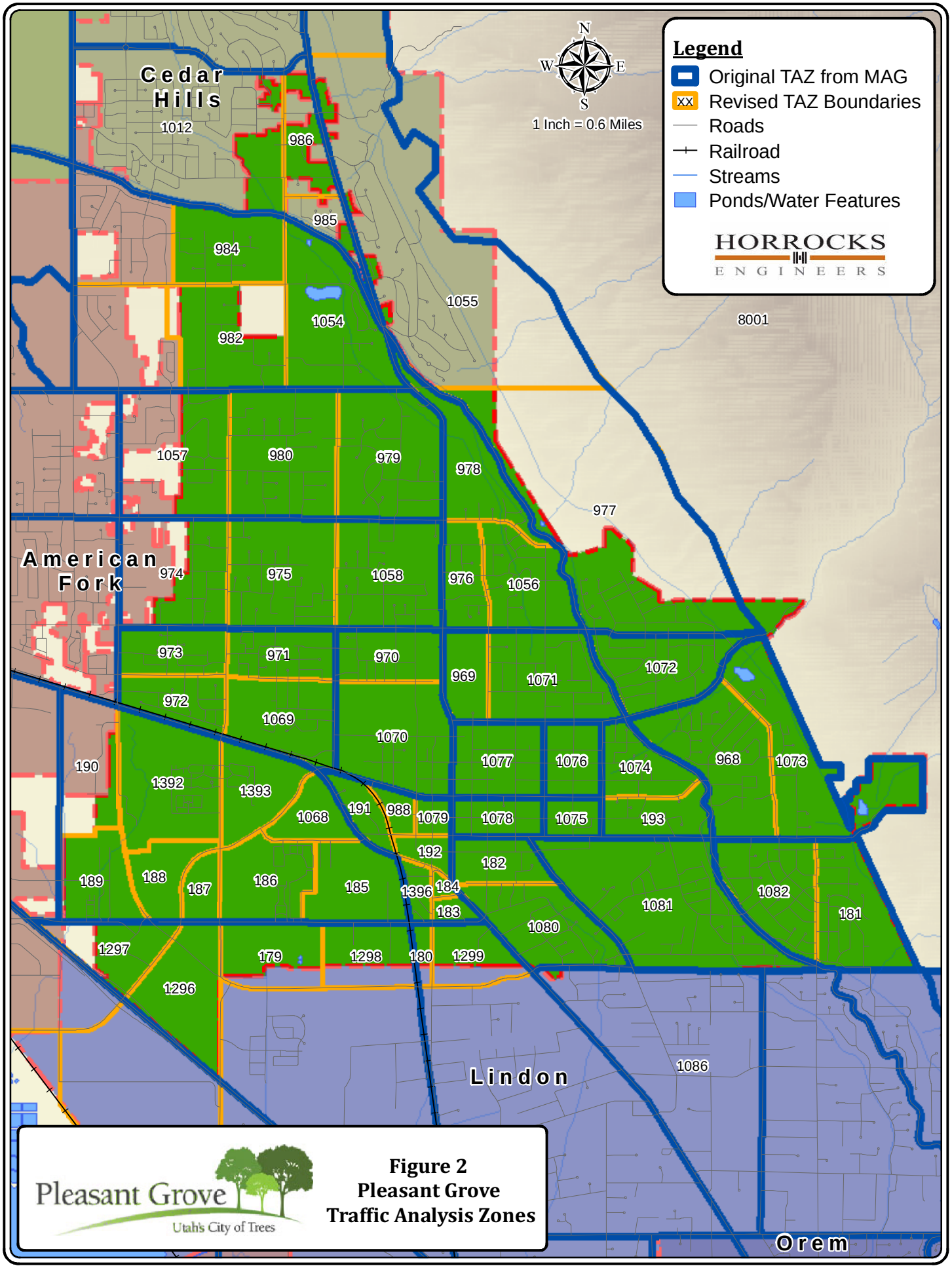
A thorough documentation of the existing conditions was performed in order to evaluate the City's transportation system and update the TMP to address the City's current and future needs. In order to evaluate existing conditions, the following data were collected and analyzed: existing socio-economic conditions, existing land use, existing roadway inventory (including lane configurations, functional classification, intersection control, etc.), existing traffic volumes, existing traffic conditions (Level of Service, etc.), existing roadway jurisdiction, and existing alternative transportation modes (transit, pedestrian, and bicycle facilities). This data forms the basis for analyzing the existing transportation system as well as provides the foundation for future traffic projections.

Existing Socio-economic Conditions

Socio-economic data consists of statistics including population, employment (number and type of jobs including retail, industrial, and other), and number of households associated with a particular area or zone. These statistics were obtained from the Mountainland Association of Governments (MAG) and reviewed by the City for accuracy. The MAG travel demand model uses these statistics to predict the number of trips traveling to and from each Traffic Analysis Zone (TAZ) defined by the model. Since MAG's travel demand model serves the primary purpose of forecasting traffic volumes and level of service on a regional level, the model was modified by dividing up some of the regional TAZ into smaller local TAZ throughout the City to more accurately estimate the travel demand characteristics on a local level. These newly divided up TAZ can be seen in Figure 2. A summary of the corresponding socio-economic data for each of these zones is found in Table 2.

Existing Land Use

Traffic volumes and patterns are directly related to land use and development density. In order to develop an accurate travel demand model, a thorough review of existing land uses throughout the City was conducted and the model subsequently calibrated to represent existing traffic conditions. This included identifying and quantifying the various land uses throughout the City.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Railroad
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1086
Pleasant Grove
Utah's City of Trees
Figure 2
Pleasant Grove
Traffic Analysis Zones

Table 2 Existing (2009) Socio-Economic Conditions

TAZ Number	Population (persons)	Employment (jobs)	Dwelling Units (units)
179	8	222	3
180	34	27	9
181	1180	43	312
182	577	154	199
183	131	252	52
184	61	118	25
185	350	367	99
186	356	373	101
187	120	126	34
188	59	40	17
189	88	60	25
190	108	74	31
191	326	628	129
192	214	411	85
193	337	12	97
968	973	14	264
969	417	73	126
970	497	196	161
971	936	140	273
972	834	125	243
973	899	135	262
974	1046	449	257
975	1043	448	256
976	337	6	86
977	1365	28	324
978	598	11	152
979	856	21	237
980	885	22	245
982	521	12	133
984	370	9	95
985	248	24	63
986	449	43	114
988	274	176	109
1012	2505	235	633
1054	604	14	154
1055	1421	29	337
1056	604	11	154
1057	883	22	244

TAZ Number	Population (persons)	Employment (jobs)	Dwelling Units (units)
1058	1036	445	254
1068	184	193	52
1069	1389	208	405
1070	1058	418	342
1071	1104	193	332
1072	1370	23	349
1073	1112	15	302
1074	370	14	106
1075	395	2	106
1076	504	6	172
1077	870	105	298
1078	414	0	145
1079	91	527	36
1080	1232	328	425
1081	2086	333	558
1082	1159	43	306
1086	1742	1513	483
1296	2	69	1
1297	2	224	1
1298	7	196	2
1299	141	115	38
1392	167	113	47
1393	252	265	71
1396	196	378	78
TOTAL:	**39,397**	**10,876**	**11,049**

Existing Roadway Inventory

The existing number of lanes and the current functional classification of each roadway were collected from field visits, aerial photography, the City's previous TMP, and transportation plans from surrounding jurisdictions. The results of that existing roadway inventory are shown in Figure 3. In addition, the type of intersection control and existing auxiliary lanes for all major intersections was documented. All of this data was used to model and analyze existing traffic conditions throughout the City.

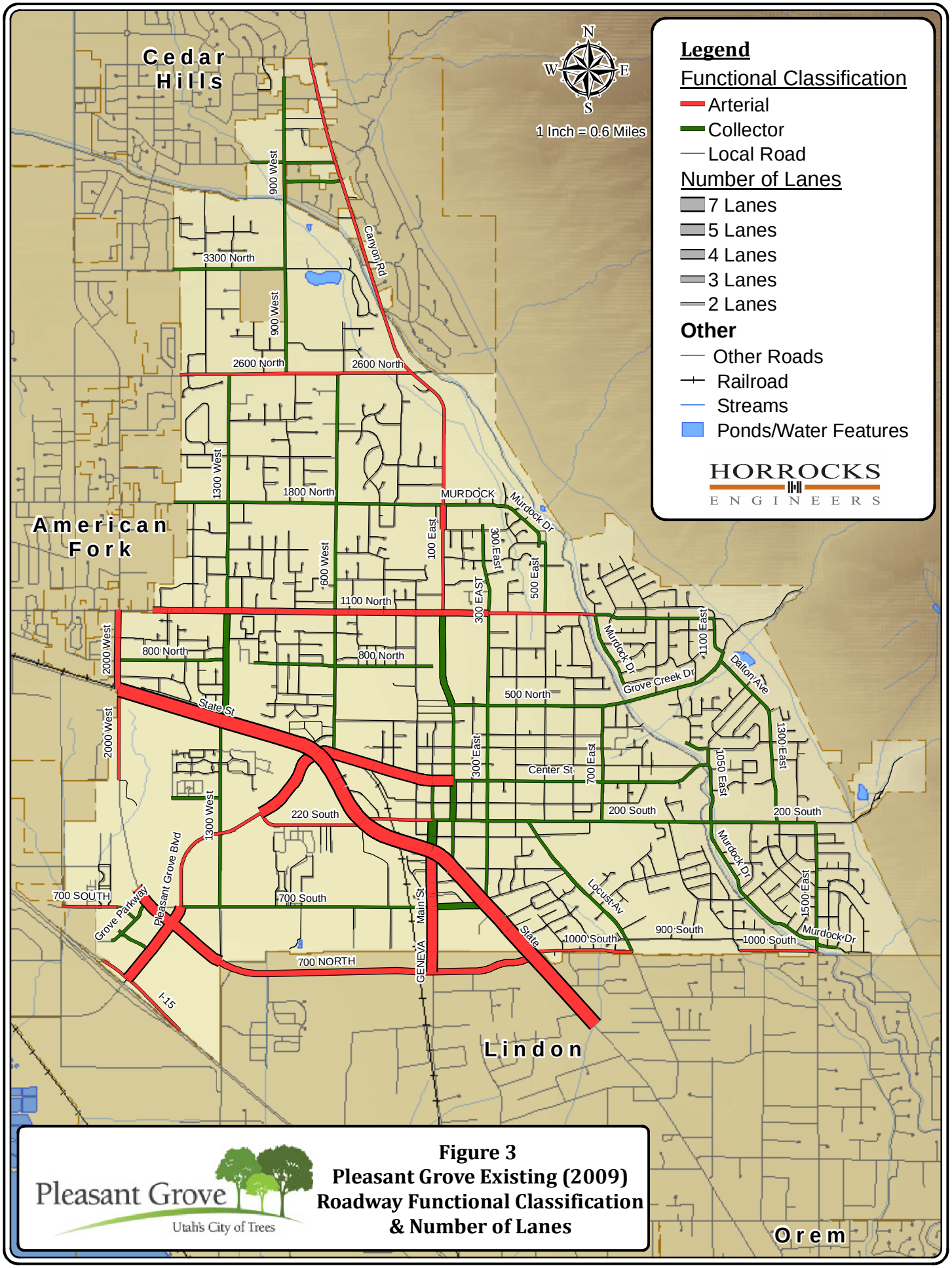


Figure 3
Pleasant Grove Existing (2009) Roadway Functional Classification & Number of Lanes

Pleasant Grove
Utah's City of Trees

Existing Traffic Volumes

In order to evaluate roadway capacities, calibrate the travel demand model, and identify existing deficiencies in the roadway system, existing (2006-2009) traffic volumes were collected on numerous key roadway segments. These counts were obtained from a variety of sources, including UDOT's Average Daily Traffic (ADT) volumes, traffic counts performed for previous traffic studies in the area, and manual traffic counts collected at 28 different intersections throughout the City. Where necessary, these counts were adjusted up to the year 2009. The raw traffic data collected is provided in the appendix.

Existing Traffic Conditions

A term used to describe the traffic operations on roadways and at intersections is Level of Service (LOS). While there are different methodologies available to calculate LOS, the most commonly used methods are found in the Highway Capacity Manual (HCM) published by the Transportation Research Board. The HCM defines six different levels of LOS ranging from LOS A to LOS F; LOS A represents free-flow conditions while LOS F represents extremely congested traffic conditions. For this analysis, two different types of LOS were used to evaluate the roadway network: Roadway LOS and Intersection LOS. A discussion of these different types of LOS is found below.

Roadway Level of Service

Roadway LOS is used as a planning tool to quantitatively represent the ability for a particular roadway to accommodate the travel demand. As a general rule of thumb and based on previous experience, the following tables were used to estimate the Roadway LOS based on the functional classification, number of lanes, and ADT of each roadway in question:

Table 3 Freeway LOS Capacity Criteria (Maximum Volume)

Lanes	LOS C	LOS D	LOS E
4	60,000	70,000	89,000
6	95,000	110,000	140,000

Table 4 Arterial LOS Capacity Criteria (Maximum Volume)

Lanes	LOS C	LOS D	LOS E
2	10,800	12,400	16,200
3	12,400	14,000	17,800
5	28,600	32,900	42,100

Table 5 Collector LOS Capacity Criteria (Maximum Volume)

Lanes	LOS C	LOS D	LOS E
2	9,700	11,300	14,600
3	10,800	12,400	16,200
5	23,200	27,000	34,000

Intersection Level of Service

Intersection LOS is a more precise method for quantifying traffic operations compared to the Roadway LOS methodology described above. The Roadway LOS looks at the big picture, while the Intersection LOS considers individual vehicular movements within an intersection. Since intersections tend to be the source of bottlenecks within transportation networks, a detailed look into the delay experienced at each intersection is performed. The methodology for calculating this delay is outlined in the *Highway Capacity Manual* (HCM). The resulting LOS criteria for both signalized and unsignalized intersections are described in Table 6.

Table 6 Signalized & Unsignalized Intersection LOS Criteria

	Signalized	Unsignalized*
Level of Service	**Average Control Delay (sec/veh)**	**Average Approach Delay (sec/veh)**
A	≤ 10	≤ 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

**Note: The LOS for unsignalized intersections shown in Figure 4 represents the approach with the highest delay.*

Even with the rapid growth that has occurred in Pleasant Grove City in recent years, most roadways throughout the City operate at an acceptable LOS at the existing (2009) travel demand (Figure 4). A few areas as shown on the map are experiencing undesirable traffic congestion and delay:

- Pleasant Grove Boulevard from 700 North to approximately 100 South experiences a higher demand than a 3-lane arterial can accommodate at a LOS C or better. The City will widen this section of roadway to a 5-lane arterial street to better handle existing traffic demands.

- The unsignalized intersection at 1300 West and Pleasant Grove Boulevard is failing (LOS F). This is in part due to high demand from 1300 West. Once 2000 West is completed, some of this high demand on 1300 West will move north and south via the new 2000 West corridor, thereby improving overall operations. Regardless of this anticipated decrease in demand, the City will construct a traffic signal at this intersection to help mitigate some of the safety concerns with regards to the lack of sight distance and the past accident history at this intersection.

- 100 East from Center Street to 2600 North carries 12,000 to 15,000 vehicles per day. These current volumes have eroded service to a LOS E & F. 100 East from Center Street to 200 South operates at a LOS D. The TMP categorizes this facility as a future 5-lane arterial, which will improve LOS to C or better. While roadway LOS is failing in these segments, all intersections along 100 East are operating at a LOS C or better during the peak hour, with the exception of 100 East & Center Street.

- The signalized intersection of 100 East and Center Street currently operates at a LOS D with the current phasing and cycle length according to Synchro modeling; however, excessive queues have been observed during the PM peak in the eastbound direction extending as far back as State Street. As a result of this excessive queuing, the intersection is actually failing under real-life operations. The queuing is developing for several reasons. The first is the close proximity to the unsignalized four-way stop-controlled intersection at Center Street & Main Street. Vehicles traveling eastbound on Center Street are metered by the four-way stop at Main Street. As a result of traffic being naturally metered by the four-way stop and the current extension time for a detection call only being 1.0 second, the eastbound traffic is not receiving adequate phase time. The City will extend the extension time to at least 3.0 seconds to prevent the eastbound phase from gapping out. In addition, the City will retime the signal to provide more time to the eastbound direction during the PM peak. The signal currently has equal splits for all directions, however if the east or westbound approaches do not receive a call from detection, the time is automatically transferred to north and southbound coordinated movements.

- The unsignalized intersection at Main Street and Center Street currently operates at a LOS D. Even though the modeling shows that this intersection operates at a LOS D, the turning movement counts used to model this intersection was collected during the State Street Construction Project and may not accurately represent normal conditions. The City will not make any improvements for this intersection at this time but will, upon the completion of the State Street Construction Project, have additional analysis performed to determine if improvements are needed to meet overall LOS standards.

- Another traffic signal within the City is operating below the acceptable LOS standards, namely State Street & 2000 West (LOS D). This intersection will likely improve upon completing the 2000 West extension since the existing heavy southbound left turn movement will be reduced as many of those trips are anticipated to move over to the southbound through movement. The City will continue to monitor traffic operations on the north leg of this intersection to verify if additional auxiliary lanes are necessary for optimal LOS. The City will continue to coordinate with American Fork City, UDOT, and MAG regarding widening 2000 West north of State Street as shown on the cities' plans, as well as MAG's 2015 plan.

- The unsignalized intersection at State Street and 200 South currently operates at a LOS D. This intersection operates at a LOS D as a result of high traffic volumes on State Street limiting gaps in traffic for vehicles on 200 South to maneuver. In the future the City will realign the intersection and it will become signalized when signal warrants are met.

- The unsignalized intersection at State Street and 100 East currently operates at a LOS D. 100 East is a major arterial for people coming from north Pleasant Grove and Cedar Hills. With the combination of the high volumes on State Street and 100 East, left-turning vehicles coming off 100 East often experience excessive delay. To provide continuity between the City's arterial roadways and to improve overall traffic operations, the City will realign 100 East and Geneva road to provide for a continuous movement along these two major arterials. In addition, the City

will signalize the new intersection of 100 East, Geneva Road, and State Street at the completion of the realignment. The existing signal at Main Street & State Street would no longer be needed as a result of this future realignment.

- The unsignalized intersection at Center Street and 300 East currently operates at a LOS D during the peak hour. In order for this intersection to operate at an acceptable LOS, the City will stripe a southbound right-turn lane onto the existing pavement and have parking restricted to accommodate this additional auxiliary lane at this intersection. This would improve the LOS at this intersection by separating the southbound right-turn movement from the southbound through movement.

- Although not shown in Figure 4, a problem exists at the intersection of Center Street & 600 West. As a result of closely spaced intersections, queues waiting to turn left from Center Street onto 600 West often back up into the intersection of State Street & Pleasant Grove Blvd resulting in unsafe and inefficient traffic operations. Since this problem will continue to worsen as development occurs, the City will realign Center Street with Garden Drive and realign 600 West with Pleasant Grove Blvd. This will improve the overall safety and operations of these intersections. In addition, by realigning Center Street, the heavily skewed railroad crossing that exists today can be eliminated, thereby again improving overall safety.

Existing Roadway Jurisdiction

The current street system in and around Pleasant Grove consists of a mixture of state, county, and locally owned and operated roads. This mixture may present challenges when coordinating roadway maintenance and improvement programs between jurisdictions. However, by identifying the different agencies and the roadways each jurisdiction is responsible for, coordination of future improvements is enhanced.

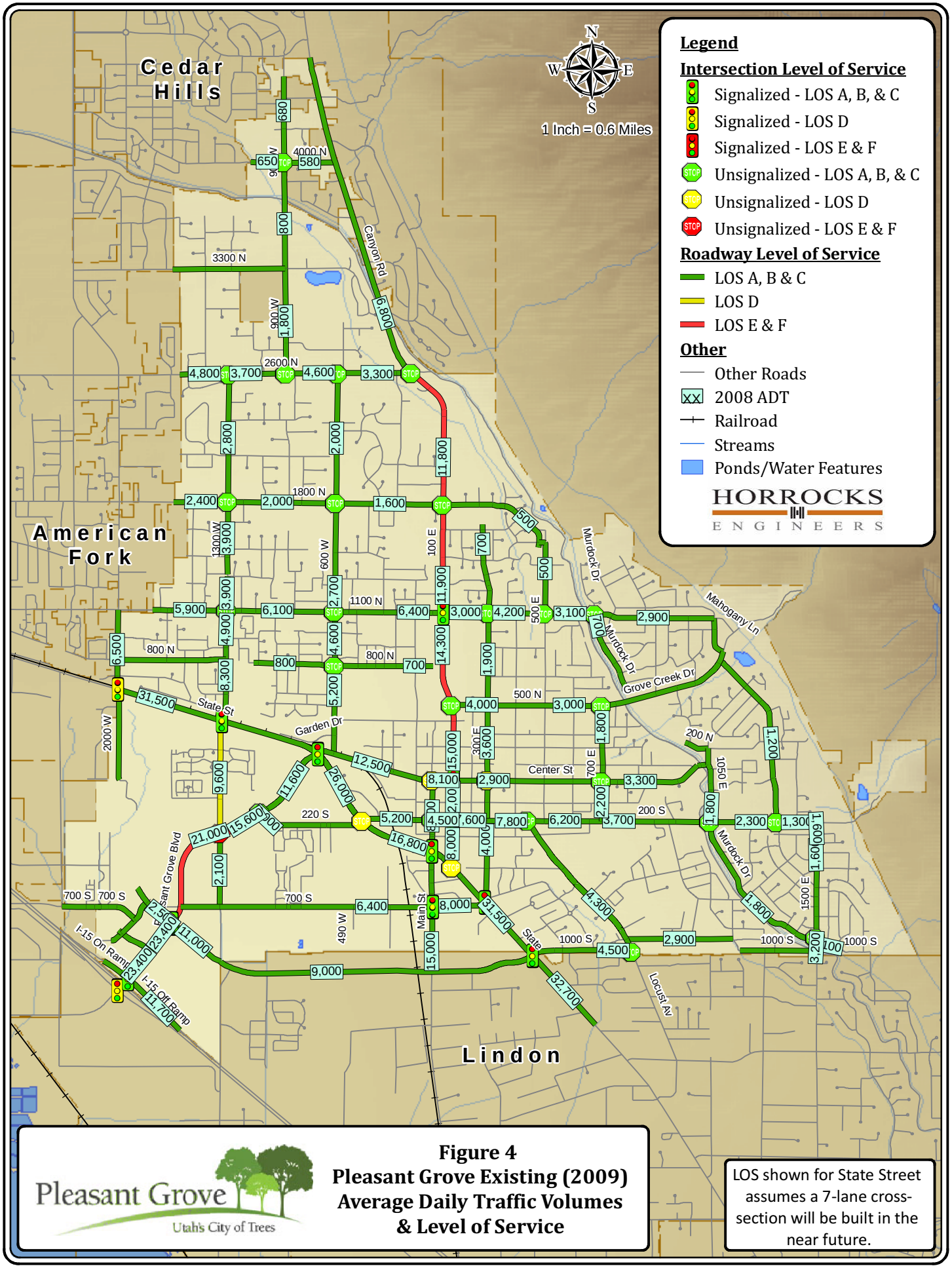


Figure 4
Pleasant Grove Existing (2009) Average Daily Traffic Volumes & Level of Service

Pleasant Grove
Utah's City of Trees

LOS shown for State Street assumes a 7-lane cross-section will be built in the near future.

Existing Alternative Transportation Modes

Public transit is a form of alternative transportation within Pleasant Grove City provided by the Utah Transit Authority (UTA). Figure 5 shows the existing transit facilities that run through the City. As shown in the figure, there are several regional UTA bus routes that run through the City along State Street and other roads with several stops located in downtown Pleasant Grove.

Most of the bus service in Pleasant Grove consists of express bus service whose routes use I-15 and other principle roads. This service is used by Pleasant Grove residents and businesses for access to Salt Lake City and other Salt Lake County locations, as well as Orem, Provo, Payson and other Utah County locations.

The existing UTA bus routes that connect Pleasant Grove with other communities are as follows:

Route 801 – **Provo/Orem/Salt Lake City Express**: This route has termini in downtown Salt Lake City and East Bay Blvd/1600 South, Provo. This route principally uses I-15. The nearest transfer point to Pleasant Grove is near Utah Valley University at University Parkway and 800 West.

Route 802 – **Salt Lake City/Lehi/American Fork/Orem Express**: This route has termini in downtown Salt Lake City and East Bay Blvd/1600 South, Provo. This route principally uses I-15. The nearest transfer point to Pleasant Grove is near Utah Valley University at University Parkway and 800 West.

Route 803 – **North Utah County/Salt Lake City Express**: This route has termini in downtown Salt Lake City and Utah Valley University (University Parkway and 800 West). This route principally uses I-15. The nearest transfer point to Pleasant Grove is located near the American Fork Main Street/I-15 Interchange at UTA's park-and-ride facility.

Route 804 – **Lindon/Orem/Pleasant Grove/Salt Lake Express**: This route has termini in downtown Salt Lake City and Center Street/State Street in Orem. A part of the route runs through Pleasant Grove's downtown. There is a transfer point on Main Street between 100 South and 200 South.

Route 805 – **South Utah County/Salt Lake City Express**: This route has termini in downtown Salt Lake City and Payson Main Street/I-15 Interchange. This route principally uses I-15. There are no transfer points or stops for this route noted on the route map.

Route 807 – Pleasant Grove/Cedar Hills/Highland/Alpine to SLC Express: This route has termini in downtown Salt Lake City and downtown Pleasant Grove. A part of the route runs through Pleasant Grove's downtown. There is a transfer point on Main Street between 100 South and 200 South.

Route 810 – **Orem/American Fork/Lehi/U of U Express**: This route has termini at the University of Utah University Hospital and at the Timpanogos Transit Center in Orem located about 1200

South and 750 East. A part of the route runs through Pleasant Grove's downtown. There is a transfer point on Main Street between 100 South and 200 South.

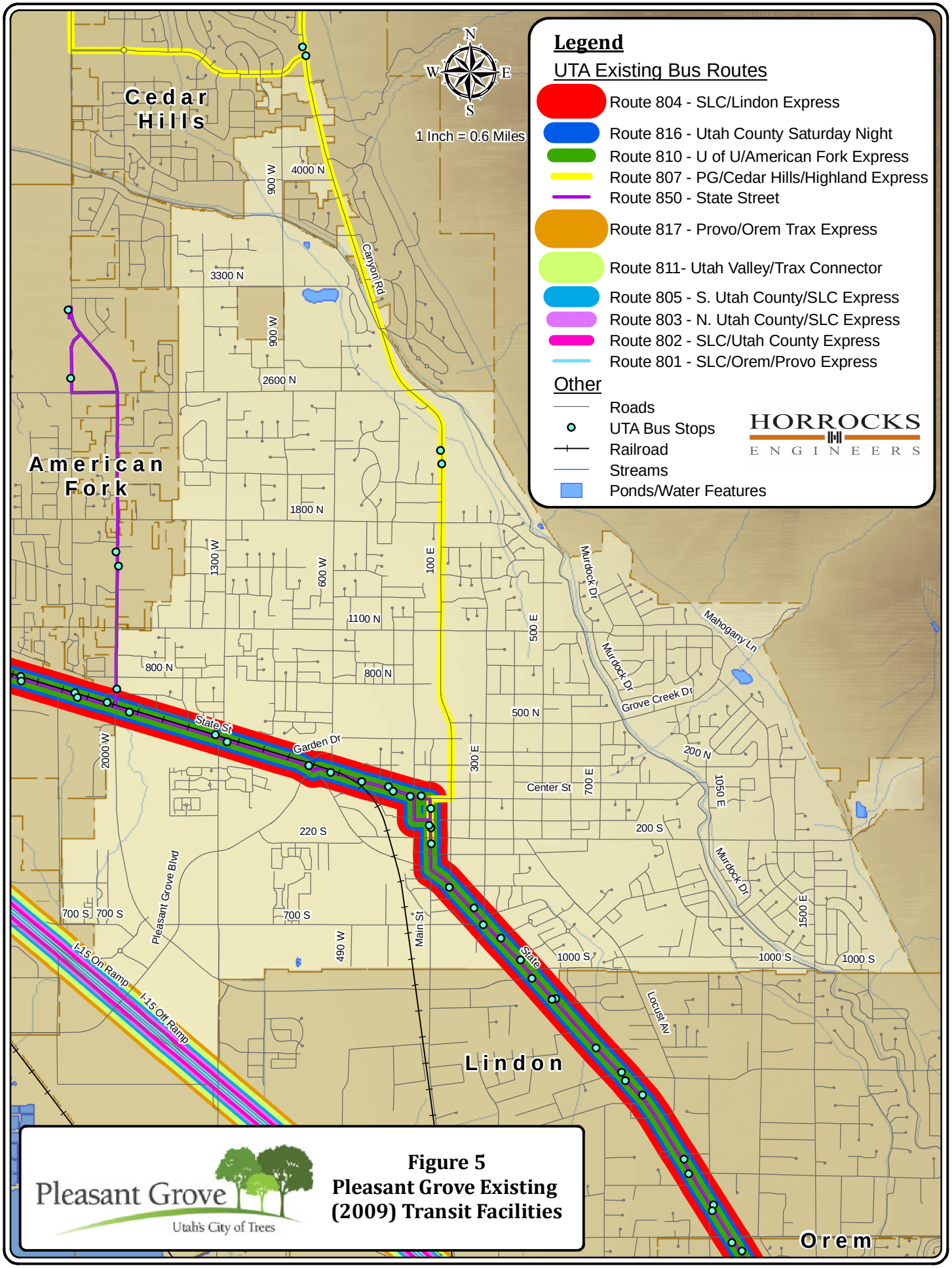
Route 811 – **Utah Valley TRAX Connector**: This route has termini at the Sandy Civic Center TRAX Station (10000 South) and University Avenue and 200 South in Provo. This route principally uses I-15, University Parkway and University Avenue. The nearest transfer point to Pleasant Grove is located near the American Fork Main Street/I-15 Interchange at UTA's park-and-ride facility.

Route 816 – **Timpanogos Saturday Service**: This route has termini at the Sandy Civic Center TRAX Station and East Bay Blvd/1600 South in Provo. A part of the route runs through Pleasant Grove's downtown. There is no transfer point in Pleasant Grove's downtown, but there are a number of stops. The nearest transfer point is located near the American Fork Main Street/I-15 Interchange at UTA's park-and-ride facility.

Route 817 – **Provo/Orem TRAX Express**: This route has termini at the Sandy Civic Center TRAX Station (10000 South) and University Avenue and Center Street in Provo. This route principally uses I-15, and University Parkway. The nearest transfer point to Pleasant Grove is located near the American Fork Main Street/I-15 Interchange at UTA's park-and-ride facility.

Route 850 – **State Street Shuttle**: This route has termini in downtown Lehi and East Bay Blvd/1600 South, Provo. A part of the route runs through Pleasant Gove's downtown. There is not a transfer point in Pleasant Grove's downtown, but there are a number of stops. The nearest transfer point is located at 300 West State Street in Lehi.

Going hand-in-hand with mass transit, are bicycle and pedestrian transportation. The City considers these alternative modes as an important part of the City's transportation system. There are several existing trails that are available to pedestrians, bicyclists, and equestrians. The Upper Bonneville Shoreline Trail and Bonneville Shoreline Trail are located principally on Forest Service land east of the City. The Murdock Canal Trail is in the City and is frequently used by walkers, joggers and mountain bikers. All of these trails are important to City residents as recreational recreation facilities. Walking paths, multi-use trails (such as the one on Pleasant Grove Boulevard), and pedestrian routes are available to Pleasant Grove's citizenry.



Pleasant Grove
Utah's City of Trees

Figure 5
Pleasant Grove Existing (2009) Transit Facilities

4.0 Future Conditions

Future travel patterns and the associated travel conditions are a direct function of projected land use and socio-economic conditions. Thus, due to the fact that travel is not restricted to municipal boundaries, a larger area of socio-economic characteristics is used to estimate future travel in Pleasant Grove City and the surrounding street systems. Future land use and socio-economic data were obtained from the Mountainland Association of Governments (MAG) and supplemented by data from Pleasant Grove City.

Future Socio-economic Conditions

The analysis of land use and socio-economic data and projections is generally beyond the scope of this type of transportation study. However, since the transportation system has been planned and designed to accommodate future growth projections, a certain amount of socio-economic documentation is appropriate. The City considers the socio-economic data that was collected to be the best available; however, land use planning is a dynamic process and the assumptions used in this report should not be used to supersede other planning efforts. Table 7 shows the estimated socio-economic conditions such as population, employment, and dwelling units for the Traffic Analysis Zones (TAZ) within Pleasant Grove City as shown in Figure 2 for the year 2040.

Pleasant Grove City plans for the growth to occur throughout the City. Today's transportation system needs to accommodate existing traffic demands and also have capacity built into it to accommodate the projected traffic demands of tomorrow. A couple of assumptions were considered regarding the socio-economic data presented in this report and the growth expected to occur within the City. First, the TAZ specific socio-economic information only approximates the Pleasant Grove City boundaries based on the data provided by the MAG and reviewed by the City. In addition, actual values may differ somewhat as a result of the large study area of the Regional Transportation Model which includes the unincorporated areas in and around Pleasant Grove City.

MAG is responsible for regional transportation planning throughout the Utah Valley area. The primary responsibility of MAG is to act as the designated Metropolitan Planning Organization (MPO) for Utah County. As such, MAG helps to ensure that consistent right-of-way widths and general standards are followed by all cities and counties in the urbanized areas of Utah County to ensure adequate regional transportation facilities. The primary products of MAG include a 20-year Long Range Transportation Plan and a 5-year Transportation Improvement Program. Both of these are constrained by available (or

reasonably available) revenue. As a result of this constraint, the Long Range Plan does not typically include all of the regional facility improvements which are planned by local communities.

Table 7 Future (2040) Socio-Economic Conditions

TAZ Number	Population (persons)	Employment (jobs)	Dwelling Units (units)
179	9	2254	3
180	164	185	51
181	1269	55	362
182	582	187	222
183	111	102	50
184	0	152	0
185	0	578	0
186	999	1217	308
187	0	360	0
188	0	630	0
189	1209	829	372
190	1036	148	319
191	350	900	155
192	229	679	102
193	470	16	147
968	1267	17	373
969	486	94	160
970	575	214	204
971	829	201	263
972	738	179	234
973	950	193	302
974	1220	548	323
975	1216	546	322
976	470	8	129
977	2227	31	568
978	834	13	229
979	1359	23	408
980	1406	24	422
982	1106	35	304
984	785	25	216
985	290	48	79
986	523	86	143
988	294	263	130
1012	2922	479	795
1054	1281	40	352

TAZ Number	Population (persons)	Employment (jobs)	Dwelling Units (units)
1055	2317	32	591
1056	843	13	232
1057	1402	24	421
1058	1208	542	319
1068	589	356	182
1069	1277	644	405
1070	1464	144	518
1071	1288	248	423
1072	1383	30	380
1073	1447	20	426
1074	516	17	161
1075	378	3	109
1076	557	8	209
1077	936	115	353
1078	452	0	175
1079	98	788	43
1080	1243	399	474
1081	2433	428	705
1082	1248	55	356
1086	2480	2168	746
1296	0	1677	0
1297	0	1879	0
1298	0	424	0
1299	693	782	214
1392	2003	496	615
1393	964	629	311
1396	335	28	150
TOTAL:	**54,760**	**23,308**	**16,565**

Future Land Use

The future conditions traffic analysis assumes full buildout as represented in the City's current General Plan. The General Plan outlines the densities and types of land uses the City expects will ultimately be built throughout the City. This data was used to validate and modify where necessary the projected socio-economic conditions used in MAG's travel demand model for the TAZ located in and around the City.

Travel Demand Modeling

Future travel demand projections are a function of projected land use and socio-economic conditions. MAG's regional travel demand model was used to accomplish this effort. First, the TAZ from MAG's model were divided up into smaller TAZ in order to more accurately model traffic demand within and around the City. Using existing traffic and land use data from Pleasant Grove City, the travel demand model was then calibrated to accurately reflect existing traffic conditions in Pleasant Grove City. Once the travel demand model was calibrated for existing conditions, the model used future land uses and socio-economic data as inputs to predict future roadway traffic volumes and conditions.

Projected Traffic Volumes and Conditions

The resulting output of the travel demand model consisted of projected traffic volumes on all the major streets throughout the City. This data was used to formulate the roadway improvements on individual streets. Various alternatives were modeled and analyzed to develop these improvements. Various measures of effectiveness were considered to establish the projected traffic volumes and traffic conditions for the future improvements including Level of Service, delay, and overall safety. Existing (2009) and future (2040) traffic scenarios of Pleasant Grove City were modeled. The following scenarios of broad alternatives are described in greater detail below.

Existing Conditions

Conditions as they exist in 2009 were simulated using the travel demand model. These conditions were reviewed and compared with existing operations and traffic volumes to determine existing deficiencies, or problems that are caused by existing travel demand as opposed to growth in travel demand. Existing traffic volumes and LOS are depicted in Figure 4.

No-Build Conditions

The no-build conditions consisted of modeling the potential development and growth throughout the City without making any additional improvements beyond what is already on the MAG Long Range (20 year) Plan. The resulting traffic volumes (2040 projections) and LOS of this option are shown in Figure 6. This broad alternative was modeled to help pinpoint various problem areas throughout the City and to demonstrate the need for traffic improvements throughout the City. This option assumes that all the improvements on MAG's current plan would be built by the year 2040, including widening State Street to 7 lanes, constructing the extension of 2000 West, widening Pleasant Grove Blvd to 5 lanes, and constructing the extension of 4000 North to the west. Regardless of these assumed improvements, a few roadways throughout the City are expected to operate at an undesirable LOS without any additional improvements; particularly:

- 100 East from State Street north through the City;
- 900 South between Locust Drive and 1200 East; and,
- Main Street from State Street south to Lindon.

In addition to basic roadway widening concerns, various intersections are anticipated to operate poorly without proper improvements, including:

- 200 South & State Street
- 200 South & Pleasant Grove Blvd
- 200 South & 300 East
- 200 South & Murdock Drive
- 600 West & Center Street
- 1300 West & 1000 South
- 100 East & State Street
- 100 East & 1800 North
- Canyon Road & 2600 North
- Canyon Road & 4000 North
- 1100 North & 600 West
- 1100 North & 1300 West
- 1100 North & 2000 West
- 1800 North & 600 West
- 1800 North & 1300 West
- 2600 North & 600 West
- 2600 North & 900 West
- 2600 North & 1300 West
- 4000 North & 900 West
- Locust Drive & 1000 South
- Locust Drive & 200 South

Build Conditions

A build alternative (2040) was developed while attempting to balance transportation needs with realistically available funding. Figure 7 outlines future improvements throughout the City as a whole; Figure 8, Figure 9, and Figure 10 each demonstrates the improvements for the north, southwest, and southeast sections of the City, respectively. Figure 11 shows the anticipated traffic volumes and LOS if all the improvements are implemented. Details of these future improvements are outlined in further detail in the next chapter.

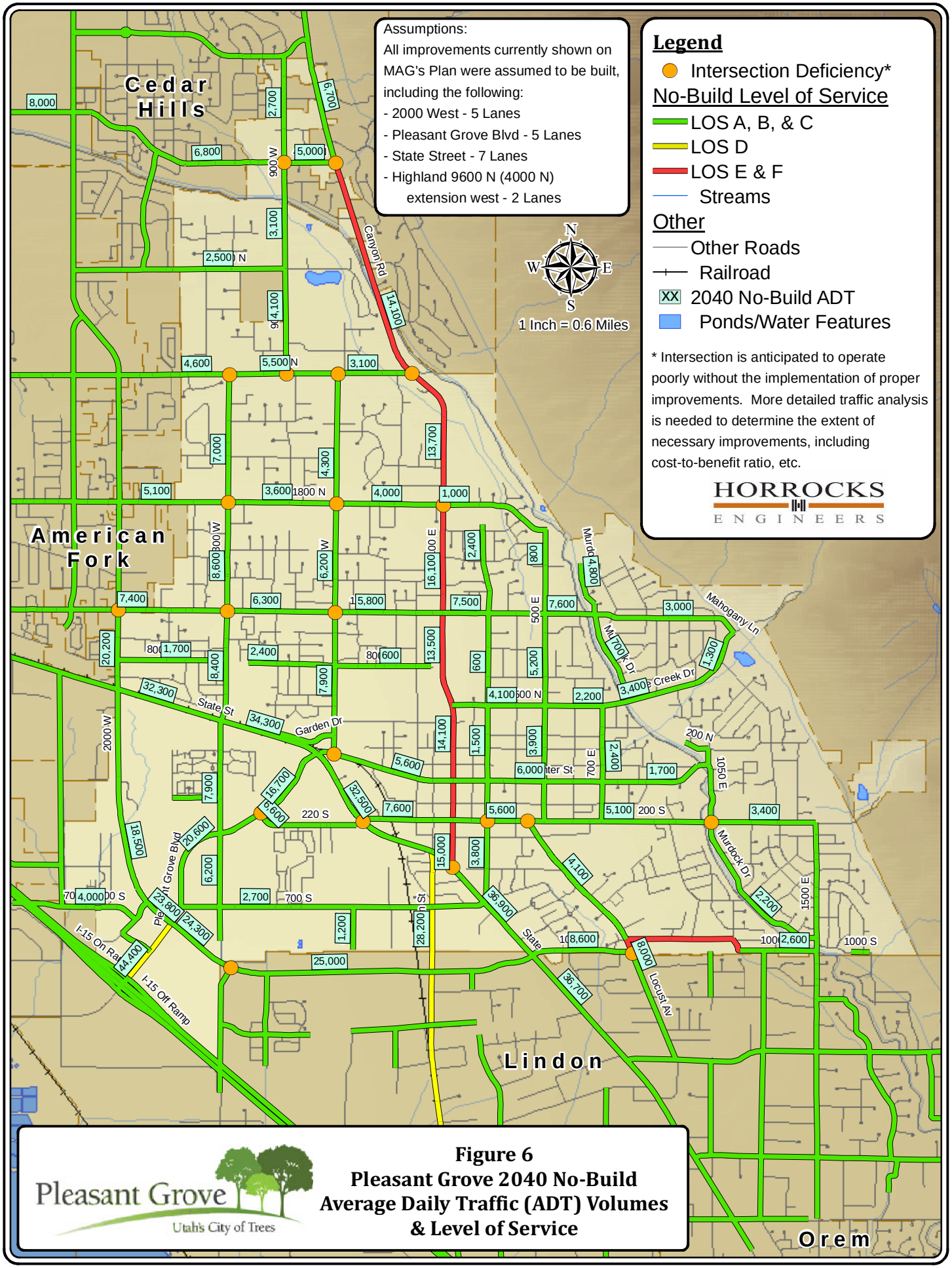
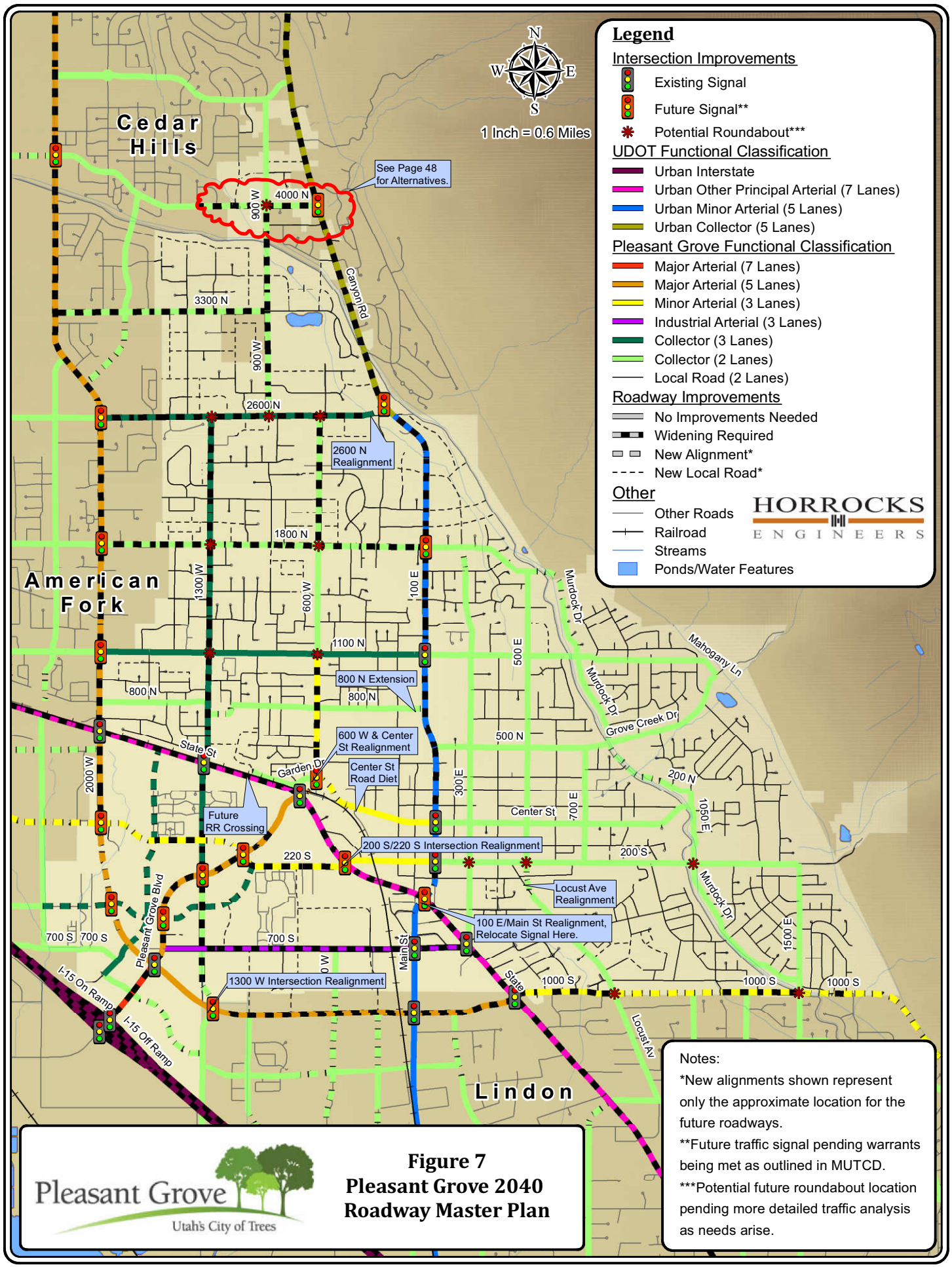
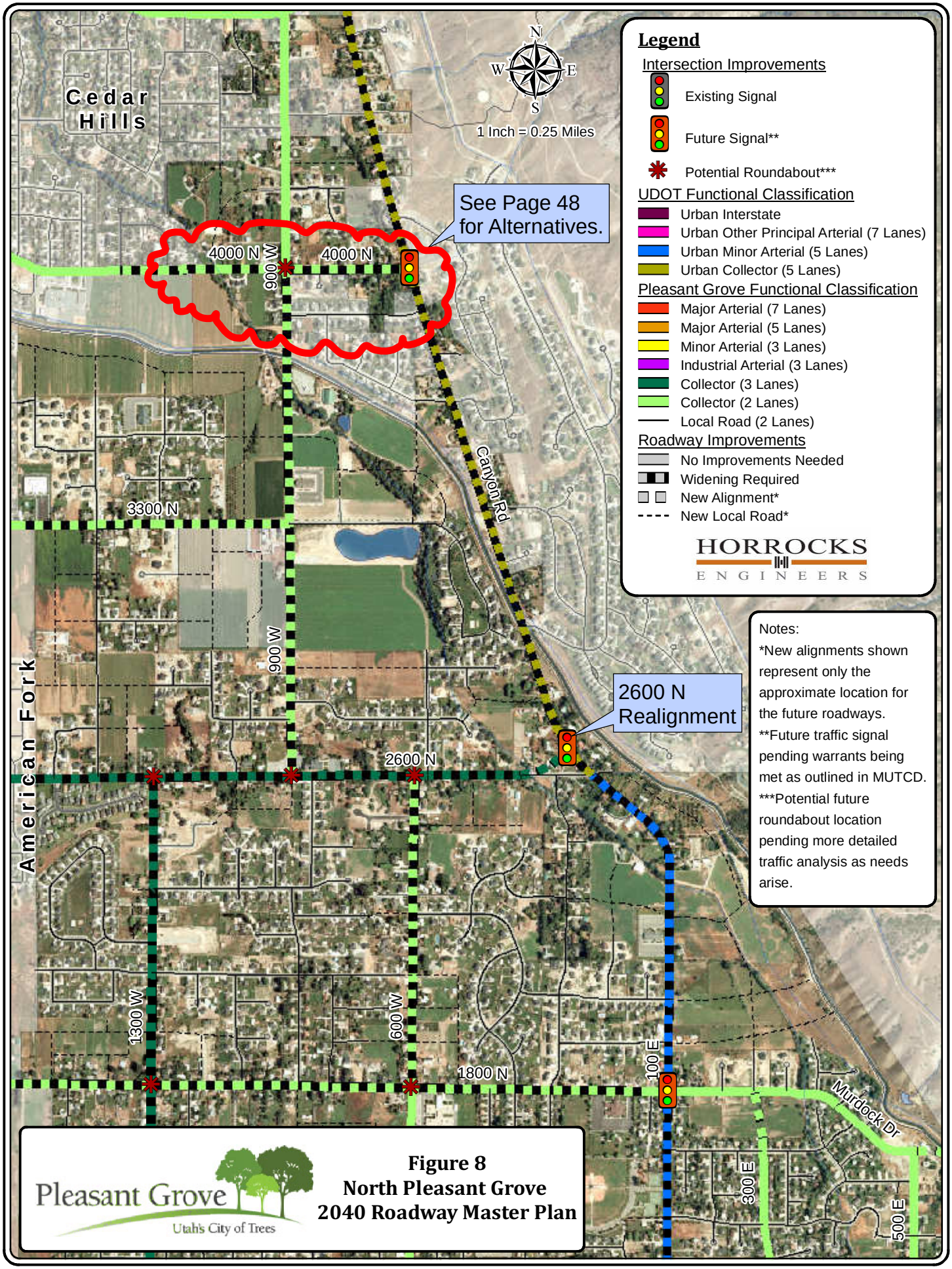


Figure 6
Pleasant Grove 2040 No-Build Average Daily Traffic (ADT) Volumes & Level of Service


Legend
Intersection Improvements
Existing Signal
Future Signal**
Potential Roundabout***
UDOT Functional Classification
Urban Interstate
Urban Other Principal Arterial (7 Lanes)
Urban Minor Arterial (5 Lanes)
Urban Collector (5 Lanes)
Pleasant Grove Functional Classification
Major Arterial (7 Lanes)
Major Arterial (5 Lanes)
Minor Arterial (3 Lanes)
Industrial Arterial (3 Lanes)
Collector (3 Lanes)
Collector (2 Lanes)
Local Road (2 Lanes)
Roadway Improvements
No Improvements Needed
Widening Required
New Alignment*
New Local Road*
Other
Other Roads
Railroad
Streams
Ponds/Water Features
HORROCKS ENGINEERS
N
S
E
W
1 Inch = 0.6 Miles
Cedar Hills
American Fork
Lindon
See Page 48 for Alternatives.
4000 N
900 W
3300 N
Canyon Rd
2600 N
2600 N Realignment
1800 N
1300 W
600 W
100 E
1100 N
800 N
800 N Extension
500 E
Murdock Dr
Mahogany Ln
Grove Creek Dr
500 N
600 W & Center St Realignment
Center St Road Diet
State St
Garden Dr
2000 W
300 E
700 E
200 N
1050 E
Center St
Future RR Crossing
200 S/220 S Intersection Realignment
220 S
200 S
Locust Ave Realignment
100 E/Main St Realignment, Relocate Signal Here.
Pleasant Grove Blvd
700 S
Main St
1500 E
1300 W Intersection Realignment
I-15 On Ramp
I-15 Off Ramp
State
1000 S
Locust Av
Notes:
*New alignments shown represent only the approximate location for the future roadways.
**Future traffic signal pending warrants being met as outlined in MUTCD.
***Potential future roundabout location pending more detailed traffic analysis as needs arise.
Pleasant Grove
Utah's City of Trees
Figure 7
Pleasant Grove 2040
Roadway Master Plan


Cedar Hills
American Fork
N
W
E
S
1 Inch = 0.25 Miles
See Page 48 for Alternatives.
4000 N
900 W
3300 N
900 W
2600 N
2600 N Realignment
Canyon Rd
1300 W
600 W
1800 N
100 E
300 E
500 E
Murdock Dr
Legend
Intersection Improvements
Existing Signal
Future Signal**
Potential Roundabout***
UDOT Functional Classification
Urban Interstate
Urban Other Principal Arterial (7 Lanes)
Urban Minor Arterial (5 Lanes)
Urban Collector (5 Lanes)
Pleasant Grove Functional Classification
Major Arterial (7 Lanes)
Major Arterial (5 Lanes)
Minor Arterial (3 Lanes)
Industrial Arterial (3 Lanes)
Collector (3 Lanes)
Collector (2 Lanes)
Local Road (2 Lanes)
Roadway Improvements
No Improvements Needed
Widening Required
New Alignment*
New Local Road*
HORROCKS ENGINEERS
Notes:
*New alignments shown represent only the approximate location for the future roadways.
**Future traffic signal pending warrants being met as outlined in MUTCD.
***Potential future roundabout location pending more detailed traffic analysis as needs arise.
Pleasant Grove
Utah's City of Trees
Figure 8
North Pleasant Grove
2040 Roadway Master Plan

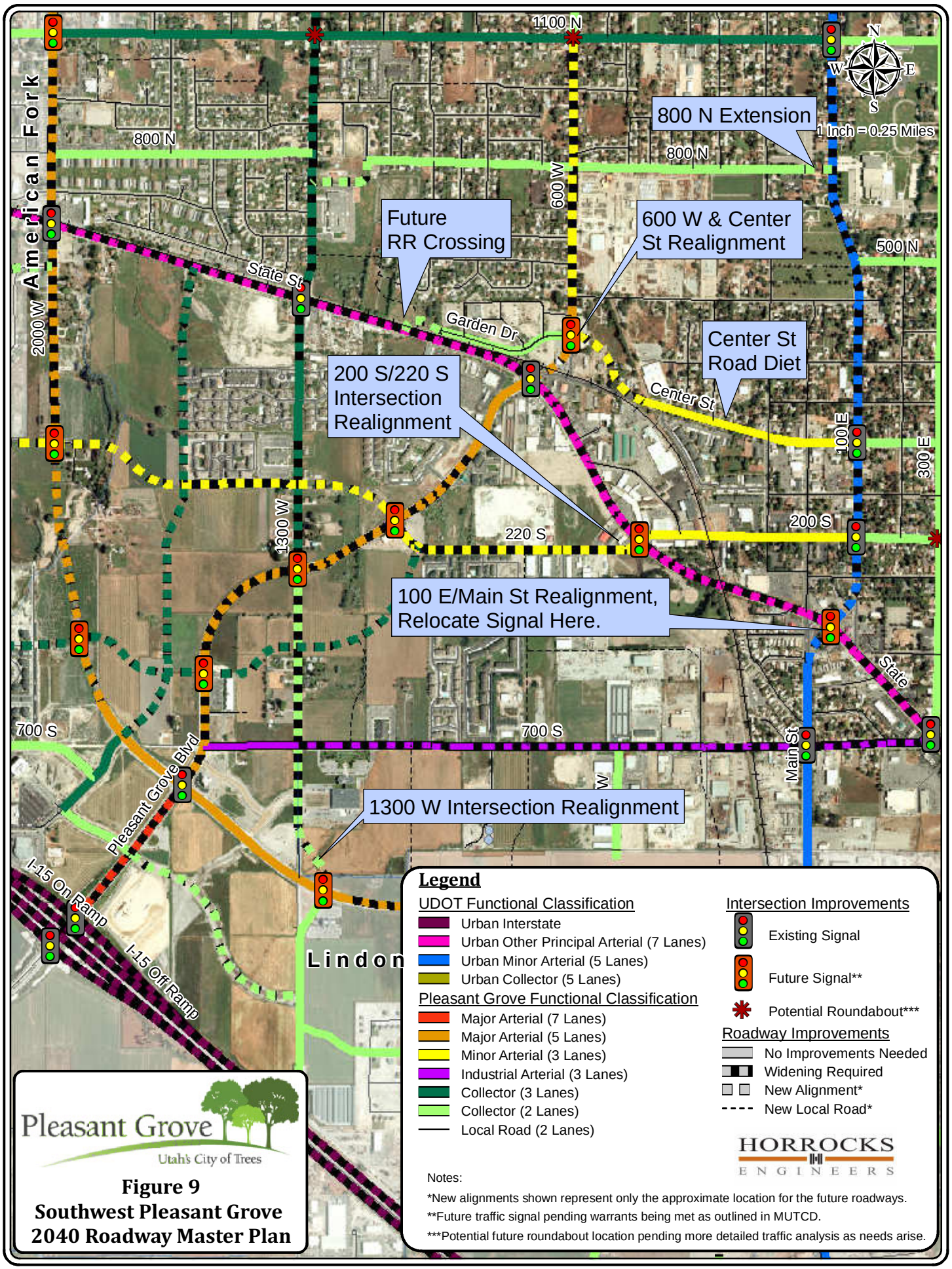

1100 N
800 N
800 N
800 N Extension
1 Inch = 0.25 Miles
American Fork
2000 W
600 W
Future
RR Crossing
600 W & Center
St Realignment
500 N
State St
Garden Dr
Center St
Road Diet
200 S/220 S
Intersection
Realignment
Center St
100 E
300 E
1300 W
220 S
200 S
100 E/Main St Realignment,
Relocate Signal Here.
State
700 S
700 S
Main St
Pleasant Grove Blvd
1300 W Intersection Realignment
I-15 On Ramp
I-15 Off Ramp
Lindon
Legend
UDOT Functional Classification
Urban Interstate
Urban Other Principal Arterial (7 Lanes)
Urban Minor Arterial (5 Lanes)
Urban Collector (5 Lanes)
Pleasant Grove Functional Classification
Major Arterial (7 Lanes)
Major Arterial (5 Lanes)
Minor Arterial (3 Lanes)
Industrial Arterial (3 Lanes)
Collector (3 Lanes)
Collector (2 Lanes)
Local Road (2 Lanes)
Intersection Improvements
Existing Signal
Future Signal**
Potential Roundabout***
Roadway Improvements
No Improvements Needed
Widening Required
New Alignment*
New Local Road*
HORROCKS ENGINEERS
Notes:
*New alignments shown represent only the approximate location for the future roadways.
**Future traffic signal pending warrants being met as outlined in MUTCD.
***Potential future roundabout location pending more detailed traffic analysis as needs arise.
Pleasant Grove
Utah's City of Trees
Figure 9
Southwest Pleasant Grove
2040 Roadway Master Plan

Figure 10
Southeast Pleasant Grove 2040 Roadway Master Plan

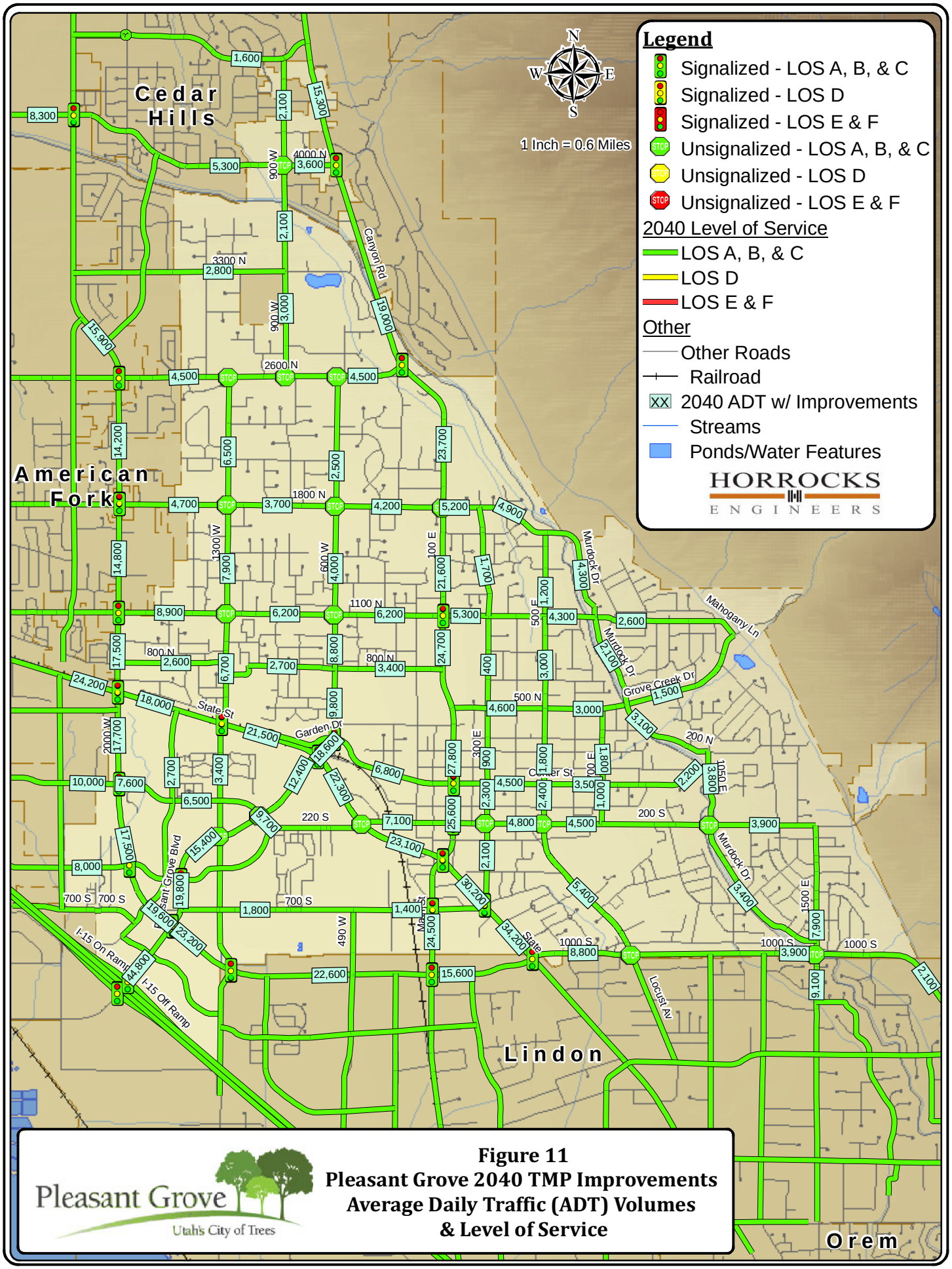


Figure 11
Pleasant Grove 2040 TMP Improvements
Average Daily Traffic (ADT) Volumes
& Level of Service

5.0 Alternatives Evaluation and Guidelines

Upon evaluating the existing and future conditions, several guidelines to better accommodate future traffic volumes and conditions are outlined in the following pages.

Roadway Functional Classification

Transportation planning allows for adequate transportation solutions, as well as connectivity with the surrounding areas, while at the same time identifying ways impacts can be kept to a minimum. The key to maintaining this balance exists in the ability to adequately plan for major corridors that minimize through traffic in neighborhoods, while at the same time coordinating land use and transportation plans in order to capitalize on the efficient movements of people and goods. To accomplish this objective, a hierarchy of streets known as a Functional Classification of Streets is defined. The functional classification scheme coincides with the surrounding areas. The City has defined a functional classification system consisting of the following roadway classifications:

- Major Arterial (5 to 7 lanes – 112’ & 136’ right of way)
- Minor Arterial (3 lanes – 76’ right of way)
- Industrial Arterial (3 lanes – 76’ right of way)
- Collector (2 to 3 lanes – 70’ right of way)
- Local Road (2 lanes – 48’ & 56’ right of way)

Each of these roadway classifications has a specific purpose and function. For example, the primary purpose of an arterial street is to move traffic, accommodate longer trips, and serve higher density retail and commercial land uses. Long continuous routes with high traffic volumes and speeds characterize arterial roadways. On the other hand, local roads are intended to provide for local access to individual properties. Local roads are shorter in length with lower speeds and volumes. Collector roads provide a transition between arterials and local roadways by providing both access and traffic moving capability. Collector type facilities serve moderate traffic volumes at moderate speeds.

Table 8 and Table 9 summarize some of the planning and design issues for each roadway classification, including right-of-way width, number of travel lanes, access control, traffic capacity, speed, trip length and expected accident rate. In addition, the City designed typical cross-sections for each of the roadway classifications listed above. These typical cross-sections are illustrated in Figure 12 and Figure 13. A functional classification was assigned to all of the important roadways throughout the City; these are shown in Figure 14.

Table 8 Functional Classification Planning and Design

Functional Group	Right-of-Way Width	No. of Travel Lanes	Access Control	Traffic Capacity (vehicles per day)
Major Arterial	136 feet	7	Public Streets Only	< 64,000
Major Arterial	112 feet	5	Public Streets Only	< 42,000
Minor Arterial	76 feet	3	Encourage Public Streets Only	<17,800
Collector	70 feet	2	Control Driveway Spacing	<16,200
Local	56 feet	2	Varies	<2,000 (& varies)

Table 9 Functional Classification Operations

Functional Group	Speed (mph)	Typical Trip Length	Typical Accident Rate (Accidents per million vehicle miles)
Major Arterial	45+ (& varies)	3 to 15 miles	3
Minor Arterial	35 to 45 (& varies)	1 to 5 miles	6
Collector	25 to 40 (& varies)	<2 miles	8
Local	<25 (& varies)	<0.5 miles	Varies

At the intersections of many major and minor arterials, traffic volumes are expected to be high enough to potentially warrant additional turning lanes such as exclusive right-turn lanes or dual left-turn lanes. To accommodate these extra lanes, the City will require widening some localized intersections. As City staff reviews traffic impact studies submitted by developers, particular attention will be given to intersection operations surrounding the future development to determine the need for additional auxiliary lanes. In addition, the City will conduct a detailed intersection analysis of existing traffic operations during every major review of the City TMP once every two to three years.

Additional widening for exclusive bus turnout lanes does not appear to be necessary at this time; however, the City may determine that exclusive bus turnout lanes are necessary in specific locations based on a case by case basis to preserve roadway capacity. Unless otherwise specified by the City, bus maneuvers will primarily occur within the shoulder areas at designated bus stops.

Roadway designs need to provide adequate curb radii at intersections based on the specific roadway classifications of the intersecting roads. Table 10 outlines appropriate turning radii for corresponding intersecting roadway classifications.

Table 10 Intersection Curb Radii Chart

Cross Street	Major Road			
	Major Arterial	**Minor Arterial**	**Collector**	**Local**
Major Arterial	35’	35’	35’	N/A
Minor Arterial	35’	35’	30’	N/A
Collector	35’	30’	30’	25’
Local	N/A	N/A	25’	25’

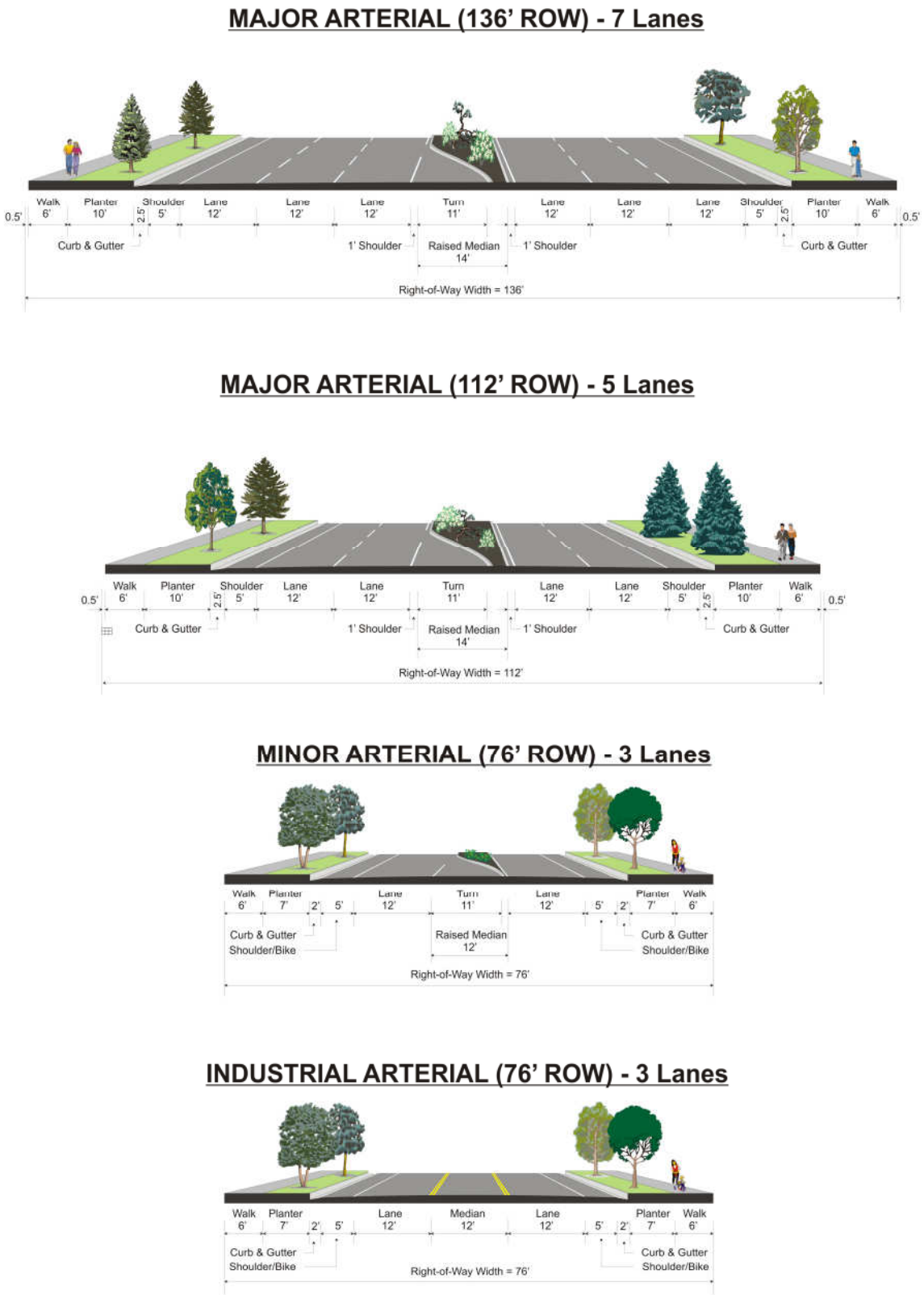
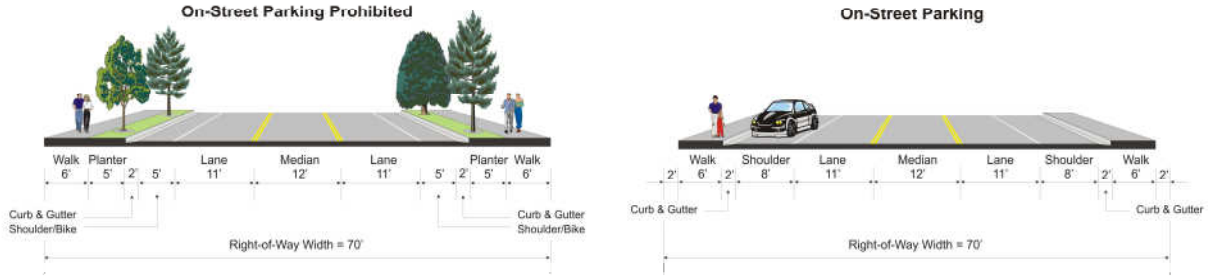


Figure 12 Typical Cross-Sections – Arterial Roads

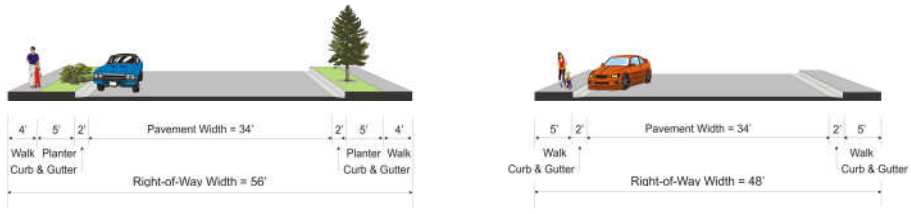
COLLECTOR (70' ROW) - 3 Lanes



COLLEGTOR (70' ROW) - 2 Lanes

RESIDENTIAL LOCAL ROAD (56' ROW) - 2 Lanes

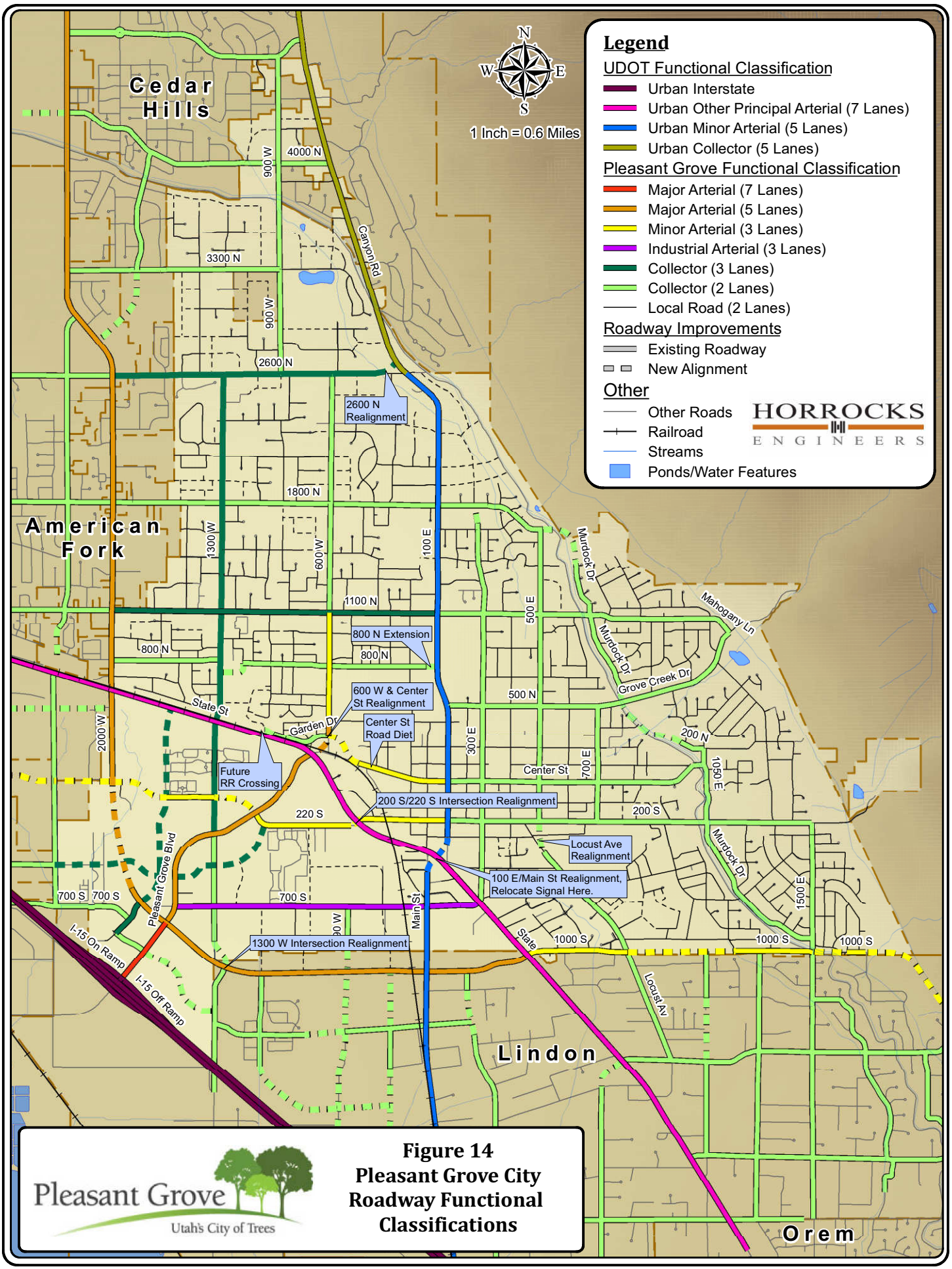
RESIDENTIAL SUB-LOCAL ROAD (48 & 56' ROW) - 2 Lanes



1. ONLY APPROVED FOR STREETS THAT ARE LESS THAN 800 FEET IN LENGTH AND LESS THAN 400 ANTICIPATED ADT.
2. A SUB-LOCAL STREET MAY NOT INTERSECT WITH ANOTHER SUB-LOCAL STREET.
3. DRIVEWAYS OF ADJACENT BUILDINGS SHALL BE NO CLOSER THAN 25 FEET TO ONE ANOTHER.

1. ONLY APPROVED FOR STREETS THAT ARE LESS THAN 600 FEET IN LENGTH AND LESS THAN 300 ANTICIPATED ADT.
2. A SUB-LOCAL STREET MAY NOT INTERSECT WITH ANOTHER SUB-LOCAL STREET.
3. MAY ONLY BE USED IN MULTI-FAMILY DEVELOPMENTS AND IS SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.
4. DRIVEWAYS OF ADJACENT BUILDINGS SHALL BE NO CLOSER THAN 25 FEET TO ONE ANOTHER.

Figure 13 Typical Cross-Sections – Collector & Local Roads



Pleasant Grove
Utah's City of Trees

Figure 14
Pleasant Grove City
Roadway Functional Classifications

Huntsman Lane (4000 North) Alternatives

After collecting and reviewing public comment, the City learned that residents living near 4000 North are concerned with potential improvements along the 4000 North corridor. MAG's current 2015 long range plan has an east/west corridor along the existing 4000 North corridor through the City. This alignment would begin from the I-15 Interchange at 2100 North/1200 West in Lehi, continue eastward through American Fork and terminate at Canyon Road in Pleasant Grove. MAG's plan refers to this alignment as "Highland 9600 North, Lehi to Pleasant Grove," and assumes the assumption of additional funds. The City will need to coordinate planning efforts for this area with the region (MAG & UDOT) and Cedar Hills.

Residents also pointed out concerns with available sight distance at the intersection of 4000 North and Canyon Road. Based on a site visit conducted by the City Engineer, appropriate sight distance at this intersection is not adequate and will need to be mitigated.

Although further study is necessary to determine the actual impacts of each alternative, a few alternatives are recognized as potential options for the 4000 North corridor:

- **Do nothing** (Figure 15). This is not a likely alternative since as the regional east/west facility is constructed to the west of the City, travel demands will increase along 4000 North and exceed the typical desired capacity of a residential local road. Regardless of roadway widening improvements to 4000 North, as mentioned earlier, intersection improvements would be necessary at Canyon Road and 4000 North to improve safety.

- **Follow the City's previously approved TMP** (Figure 16). The previous plan shows 4000 North being a collector road west of 900 West and a local road east of 900 West; 9530 North (the east/west road just south of 4000 North) between 900 West and Canyon Road is also shown as a collector. The offset of these east/west collector roads at 900 West would likely result in unnecessary congestion at these intersections. The City would need to construct the small extension of 9530 North that lies within the City for this alternative. Traffic calming measures would also be needed along 4000 North between 900 West and Canyon Road to discourage motorists from using this section of roadway even though it would be the most direct connection to the regional east/west facility.

- **Widen 4000 North to a collector status throughout the City** (Figure 17). This alternative would provide the most direct connection to the east/west regional facility to the west of the City. A roundabout at the intersection of 900 West and 4000 North would be an ideal intersection control to help minimize intersection delay and to calm and channelize traffic on the roadways approaching the intersection.

- **Realign 4000 North with 9530 North in Cedar Hills** (Figure 18). Another alternative that could provide direct connection to the east/west regional facility to the west of the City would consist of realigning 4000 North with 9530 North in Cedar Hills. The City would need to construct the

small extension of 9530 North that lies within the City for this alternative. A roundabout at the intersection of 900 West and 9530 North would be an ideal intersection control to help minimize intersection delay and to calm and channelize traffic on the roadways approaching the intersection.

Based on recent travel demand modeling efforts, the City anticipates the following Average Daily Traffic (ADT) volumes for the year 2040 regardless of the alternative:

- 4000 North between Canyon Road & 900 West – approximately 3,600 vehicles per day
- 4000 North between 900 West & 900 East (AF) – approximately 5,300 vehicles per day
- 900 West both north and south of 4000 North – approximately 2,100 vehicles per day

To provide a frame of reference, approximately 2,000 vehicles per day is typically the maximum volume for local residential roads before significantly impacting neighborhood traffic congestion, noise, and safety. Ideally, less traffic is desirable for residential local roads.

Figure 15 4000 North Alternatives – Do Nothing

Figure 16 4000 North Alternatives – Previously Approved TMP

Figure 17 4000 North Alternatives – Widening

Figure 18 4000 North Alternatives – Realignment

After reviewing and discussing the pros and cons of the above alternatives for the 4000 North Corridor, both the Planning Commission and City Council decided not to change the plan for this area, and to maintain 4000 North between 900 West and Canyon Road as a local road (Figure 16).

Alternative Transportation Modes

Mass Transit

As Pleasant Grove City and the surrounding areas continue to grow, roadways will become more congested due to increasing number of vehicles. In an effort to help alleviate some of the congestion and reduce the number of vehicles on the roadway system, alternative modes of transportation will become increasingly important. Several guidelines for increasing and improving alternative transportation modes in Pleasant Grove City are outlined in the following paragraphs:

UTA Local/Express Bus Service

Bus service helps provide a low cost alternative travel mode for the public while benefiting communities. With the continued growth in Pleasant Grove, expansion of the existing bus routes in the City is anticipated in order to meet the increasing demand for service. Currently, several different regional bus routes pass through the City. New bus routes are shown in Figure 20. The City and UTA need to coordinate with each other to solidify these routes so that they provide optimum linkage between the commercial/industrial areas and the residential areas of the City.

There are currently no specific plans by UTA to expand the local bus service. However, local bus route planning is an on-going process and as the need arises, the City will seek to add more service. City planning officials have indicated that additional local bus service could be considered by UTA using the following as routes: 100 East; the future 1000 South/1200 East (Lindon) Connection; Main Street/Geneva Road; 3300 North; and 900 West (North of 3300 North). Additionally, MAG has considered routes on 2000 West/700 North (Lindon)/1000 South; 500 East; 1100 North; 200 South; and State Street between Main Street and Pleasant Grove Blvd.

Intercity Connector

According to MAG's Regional Transportation Plan this project is identified as a Phase 1 project, meaning that it is planned to occur between 2009 and 2015. The route has a triangular shape north of University Parkway with an extension near the tip of the triangle. The extension runs from UTA's park-and-ride facility near the American Fork Main Street/I-15 Interchange to downtown Pleasant Grove. The eastern tip of the triangle is located at University Parkway and State Street in Orem. The western tip is located at 1200 South and Geneva Road. From there the system runs south through Provo using mostly University Avenue and State Street, through Springville using Main Street, and through Spanish Fork using U.S. Hwy. 89. The Intercity Connector will provide interface with the various FrontRunner stations in American Fork, Vineyard and Orem.

Bus Rapid Transit (BRT)

BRT is planned to occur in Phase I (2009-2015) of the Regional Transportation Plan (RTP). The RTP identifies a Bus Rapid Transit (BRT) project between Provo and Orem. The termini for this project are 1200 South/Geneva Road in Orem and 100 West and approximately 1800 South in Provo. It will interface with the Intercity Connector on University Parkway and 1200 South in Orem. To the south in Provo, the BRT would also interface with FrontRunner commuter rail.

Light Rail

A TRAX extension project from Lehi to Provo is in the planning phases and in the MAG Regional Transportation Plan as a "Vision Project", which means it is unfunded and likely would not be implemented until sometime after 2030. The route would follow the rail line located east of I-15 that UTA owns in Lehi, American Fork, Pleasant Grove, Lindon and Vineyard. From Vineyard the route is located in the FrontRunner right-of-way. In Pleasant Grove the route generally parallels and is adjacent to State Street.

Commuter Rail Transit

FrontRunner commuter rail is currently under construction between downtown Salt Lake City and Provo (approximately 100 West/1800 South). The FrontRunner commuter rail is anticipated to be completed and operational sometime in the year 2013. Stations that are planned that are near Pleasant Grove (but not in Pleasant Grove) are American Fork, and Vineyard.

Intermodal Center

There is a possibility of developing an intermodal center that would accommodate light rail, the Intercity Connector, and local/express bus in downtown Pleasant Grove at about 200 West and 200 South. Approximately one acre of vacant land is located here (behind the post office) on which a light rail station and some parking facilities could be built. However, there has been some thought that this site may be too small and that a larger site may be needed to accommodate the TRAX station, the Intercity Connector, local/express bus, and a compliment of parking. Coordination between the City and UTA will take place in the near future on this site.

Bicycle and Pedestrian Facilities Plan

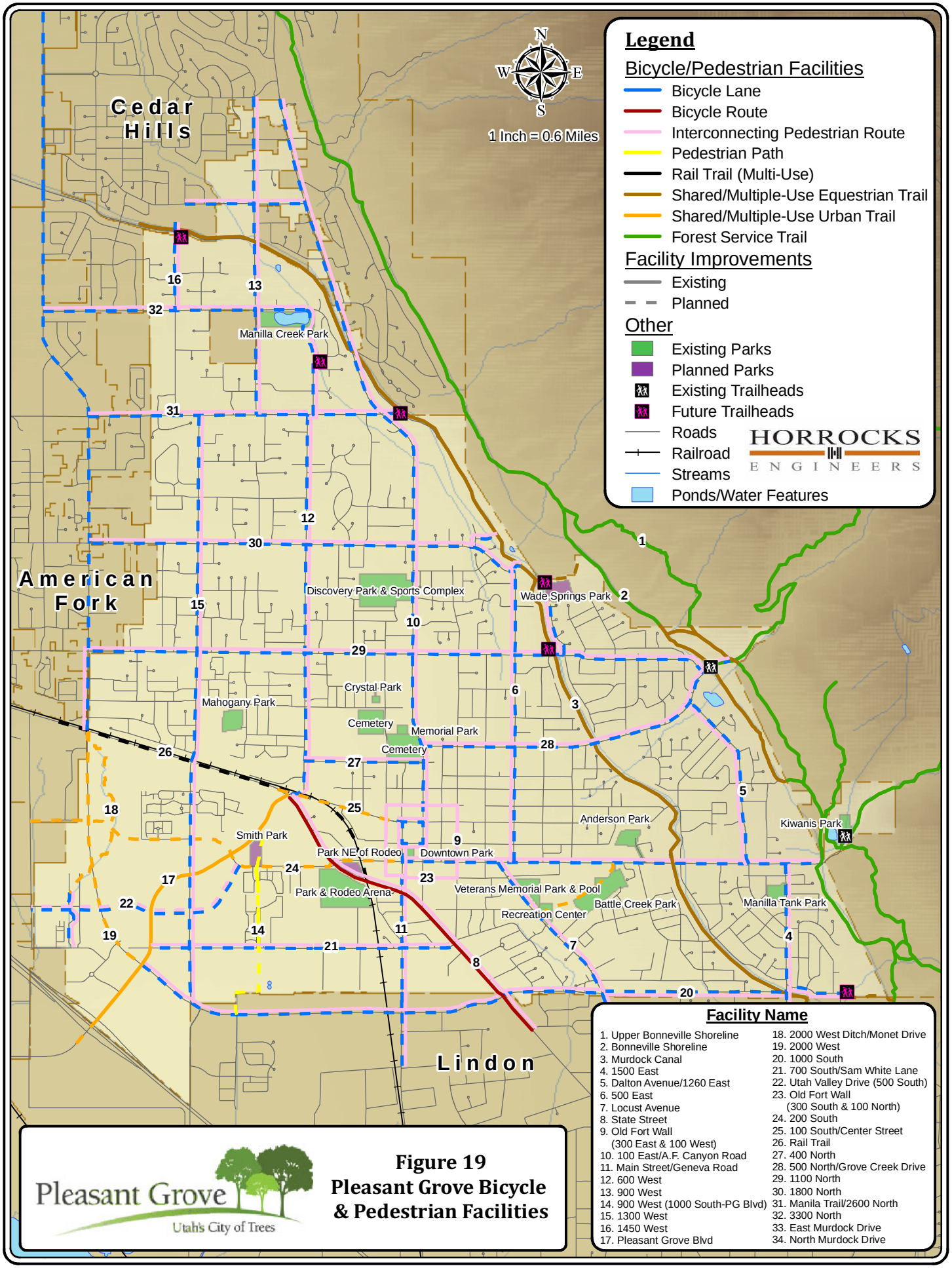
Pleasant Grove City's current Trails plan is shown in Figure 19. Trails are an important element to the transportation system and improve the overall quality of life for the community. Trails throughout the City generally parallel roadways but may also follow canals, rivers, utility corridors, and natural drainage channels. Pedestrians, bicyclists, and equestrians (in rural areas) could share these routes. The trails plan shows the location and types of trails to be installed. Table 11 outlines the different trails by number as shown in Figure 19.

Trail Priorities

The City has indicated that it will continue with its recreational trails priorities of the past plan, which are: Battle Creek Trailhead Park; Bonneville Shoreline Trail and Trailhead Parks (upper and lower); Wetlands in the Grove (connect trail systems in current developments and adjacent cities); bike paths (city-wide along existing collectors and some arterials); and Murdock Canal Trail.

Table 11 Trail Descriptions

No. in Map (Figure 19)	Name/Location
Pleasant Grove Trails – North/South	
1	Upper Bonneville Shoreline Trail – unimproved hiking, mountain bike, and equestrian trail
2	Bonneville Shoreline Trail – unimproved hiking/mountain bike trail (regional)
3	Murdock Canal Trail – multi-use trail (existing canal (regional) with equestrian)
4	1500 East – pedestrian route/bike lane
5	Dalton Ave/1260 East – pedestrian route/ bike lane
6	500 East – pedestrian route/bike lane
7	Locust Avenue – pedestrian route/bike lane
8	State Street – pedestrian route/bike route
9	Old Fort Wall (300 East to 100 West) – pedestrian route
10	100 East/A. F. Canyon Road Trail – pedestrian route/bike lane
11	Main Street/Geneva Road – pedestrian route/bike lane
12	600 West – pedestrian route/bike lane
13	900 West (2600 North to city limits) – pedestrian route/bike lane
14	900 West (1000 South to Pleasant Grove Boulevard) – pedestrian path
15	1300 West (city limits to 2600 North) – pedestrian route/bike lane
16	1450 West (2600 North to Murdoch Canal Road) – pedestrian route/bike lane
17	Pleasant Grove Boulevard – multi-use trail (regional)
18	2000 West Ditch Trail/Monet Drive – multi-use trail
19	2000 West Trail – multi-use trail (regional)
Pleasant Grove Trails – East/West	
20	1000 South – pedestrian route/bike lane (regional)
21	700 South (Sam White Lane) – pedestrian route/bike lane
22	Utah Valley Drive (500 South) – pedestrian route/bike lane
23	Old Fort Wall (300 South to 100 North) – pedestrian route
24	200 South (200 South/220 South/100 South) – pedestrian route/bike lane
25	100 South/Center Street – pedestrian route/bike lane
26	Rail Trail – UTA rail right-of-way next to State Street(regional) multi-use
27	400 North – pedestrian route/bike lane
28	500 North/Grove Creek Drive – pedestrian route/bike lane
29	1100 North – pedestrian route/bike lane
30	1800 North – pedestrian route/bike lane
31	2600 North – pedestrian route/bike lane
32	3300 North – pedestrian route/bike lane



Pleasant Grove
Utah's City of Trees

Figure 19
Pleasant Grove Bicycle & Pedestrian Facilities

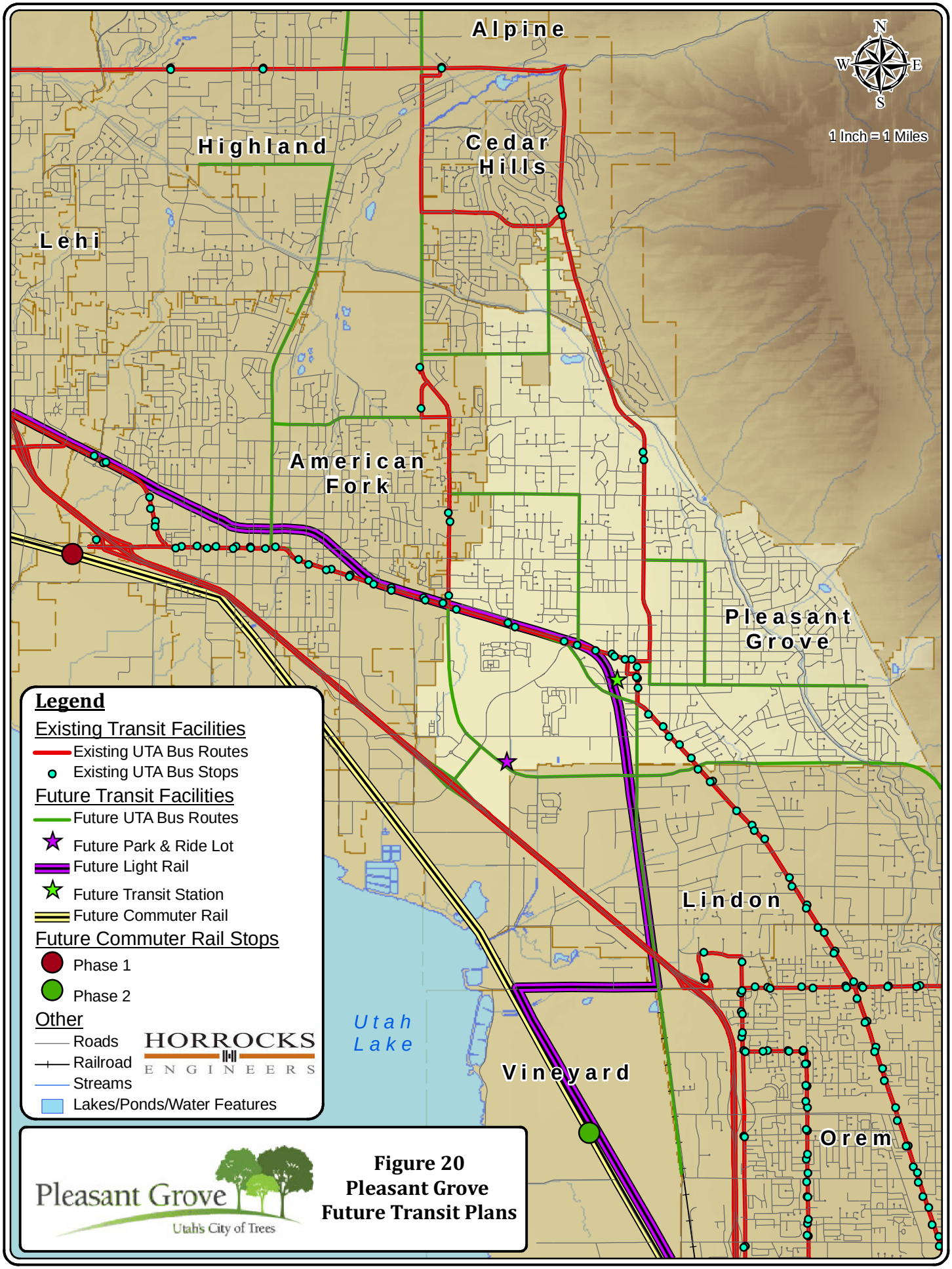


Figure 20
Pleasant Grove
Future Transit Plans

Bicycle and Pedestrian Improvements

There are a number of observations about bicycle and pedestrian transportation that were made during the development of this transportation master plan. As a consequence, the City will seek to:

- Install painted bike Lanes – 4 to 5 feet wide next to the outside general purpose lane.
- Construct multi-use trails – Minimum of 10 feet wide, but when possible and if there is enough room the trail can be 12 feet wide.
- Separate equestrian facilities from bike/pedestrian facilities, however both can be accommodated within the same corridor.
- Provide connection between parks/schools and bike/pedestrian facilities.
- Connect mass transit facilities with bike/pedestrian facilities.
- Join sidewalks where gaps exist, particularly on busy, high-speed roads, and roads that have been designated as pedestrian routes.
- Develop priorities for providing sidewalks on streets where gaps exist throughout the City.
- Coordinate and inter connect trails with adjacent cities (Lindon, American Fork, Highland, and Cedar Hills), the County, and the Forest Service.
- Avoid placing bicycle facilities on high speed and busy roads.
- Conduct planning/engineering studies with regards to bike, pedestrian, and other trail facilities for purposes of locating, designing, and acquiring ROW for the trails.
- Make plans to implement the "Trails" Plan (include the facilities in various street projects, as it is much more difficult to retrofit facilities).
- Develop multi-use trails in the urban environment.
- Maintain street pavement in good condition and pave roadway shoulders where bike lanes have been identified.
- Coordinate with UDOT relative to pedestrian and bike facilities on state roads (i.e. State Street, Geneva Road, 100 East, etc.)
- Execute and finalize an agreement with the Murdock Canal Company as soon as possible to formally make available the canal road as a trail to the public. The Canal Company is committed to piping or covering the canal and the City has indicated desire to pave a trail of 15 feet or more over the top within the next three years. The Canal Company expects to start work during the summer of 2009. A multi-use trail with an equestrian facility is planned within this corridor.
- Note that bicycles are permitted on all roads in the State of Utah, with the exception of access-controlled freeways. The designation of certain roads as Class II (bike lane) or Class III (bike route) facilities is not intended to imply that these are the only roadways intended for bicycle use. Rather, the designation of a network of Class II and III on-street bikeways recognizes that certain roadways are optimal bicycle routes, for reason such as directness or access to significant destinations.

New Trails

After evaluating the existing bicycle and pedestrian facilities it was noted that the southeastern quadrant and other miscellaneous locations of the City could use some facilities in order to make the bicycle/pedestrian facilities network more complete and interconnect them with other planned facilities. The list below reflects the planned additions to the network:

- 1300 East/Dalton Drive (200 South-Grove Creek Drive)

- Grove Creek Drive (100 East-1100 North, approximately 1050 East)
- 500 East (200 South-Murdock Drive, approximately 1800 North)
- 400 North (100 East-600 West)
- State Street (south of Pleasant Grove Boulevard)
- 700 South (1300 West-Pleasant Grove Blvd.)

Inter-jurisdiction Coordination

During the evaluation of the existing and planned bicycle/pedestrian facilities, it was noted that several facilities planned by Pleasant Grove City did not connect with facilities in neighboring jurisdictions and essentially they simply ended. Coordination will take place between Pleasant Grove City and the adjacent jurisdictions in an effort to make it possible for the bicycle/pedestrian facilities to be continuous across city boundaries.

The following Pleasant Grove bicycle and pedestrian facilities do not connect with a comparable counterpart in one of the neighboring cities:

Bike/Pedestrian Facilities that do not connect with Lindon City's Facilities

- 1500 East
- Locust Avenue
- Main Street (PG)/Geneva Road (Lindon)

Bike/Pedestrian Facilities that do not connect with American Fork City's Facilities

- 700 South/Sam White Lane Trail
- "220 South" Trail
- 1100 North Trail
- 1800 North Trail
- 2600 North Trail

Bike/Pedestrian Facilities that do not connect with Highland City's Facilities

- 3300 North Trail

Bike/Pedestrian Facilities that do not connect with Cedar Hills City's Facilities

- American Fork Canyon Trail
- 900 West Trail

Definitions of Bicycle and Pedestrian Facilities

To assist the City in planning and discussing bicycle and pedestrian facilities, and so that there can be a common understanding of what these facilities entail, some definitions of these facilities are provided below:

- **Bike Lane:** A portion of a roadway that has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

- **Bikeway or Bike Route:** A generic term for any road, street, path or way, which in some manner is specifically designated for bicycle travel regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

- **Bicycle Route system:** A system of bikeways designated by the jurisdiction having authority with appropriate directional and information route markers, with or without specific bicycle route numbers. Bike routes establish a continuous routing, but may be a combination of any and all types of bikeways.

- **Rail-Trail:** A shared use path, either paved or unpaved, built within the right-of-way of an existing or former railroad.

- **Roadway:** The portion of the highway, including shoulders, intended for vehicular use.

- **Shared Roadway:** A roadway without a bikeway designation that allows both bicycle and motor vehicle travel and may have wide curb lanes or paved shoulders.

- **Shared or Multiple Use Path or Trail:** A pathway that is physically separated from motorized vehicular traffic by open space or a barrier and which is either within the highway right-of-way or within an independent right-of-way that is open for use by bicyclists, pedestrians, skaters, wheelchair users, joggers, and other non-motorized users.

- **Signed Shared Roadway:** A roadway that has been identified by signing as a preferred bike route.

- **Shoulder:** The portion of the roadway (paved or unpaved) contiguous with the traveled way for accommodation of bicycle travel, stopped vehicles, for emergency use and for lateral support of sub-base, base and surface courses.

- **Sidewalk:** The portion of a street or highway right-of-way designed for preferential or exclusive use by pedestrians.

References for Bicycle and Pedestrian Facilities

The City will obtain and use the following references for planning and design bicycle and pedestrian facilities:

- AASHTO Guide for the Development of Bicycle facilities, 1999

- UDOT's Guide for Bicycle and Pedestrian Accommodations

- Portland Pedestrian Design Guide, June 1998

- City of Portland, Office Transportation, Bicycle Master Plan, July 8, 1998

- Victoria Transport Policy Institute, Pedestrian and Bicycle Planning: A guide to Best Practices, April, 2006

Signal Inventory

The location of both existing and future traffic signals is shown in Figure 21. All the intersection improvements shown on this map are based on future traffic projections; actual implementation of a future traffic signal or roundabout will require a detailed traffic study documenting the need for such improvements. All future signal locations shown in Figure 21 are pending warrants being met as outlined in the MUTCD.

One signal is expected at the realignment of Center Street and 600 West. Because this signal is in close proximity to the existing signal at State Street and Pleasant Grove Boulevard, the two will require coordinated timing. Three other future signals fall on 2000 West, one on 700 North, and two on 100 East. At major intersections in place of or where traffic signals are not warranted, the City considers roundabouts to be a viable alternative.

Safety

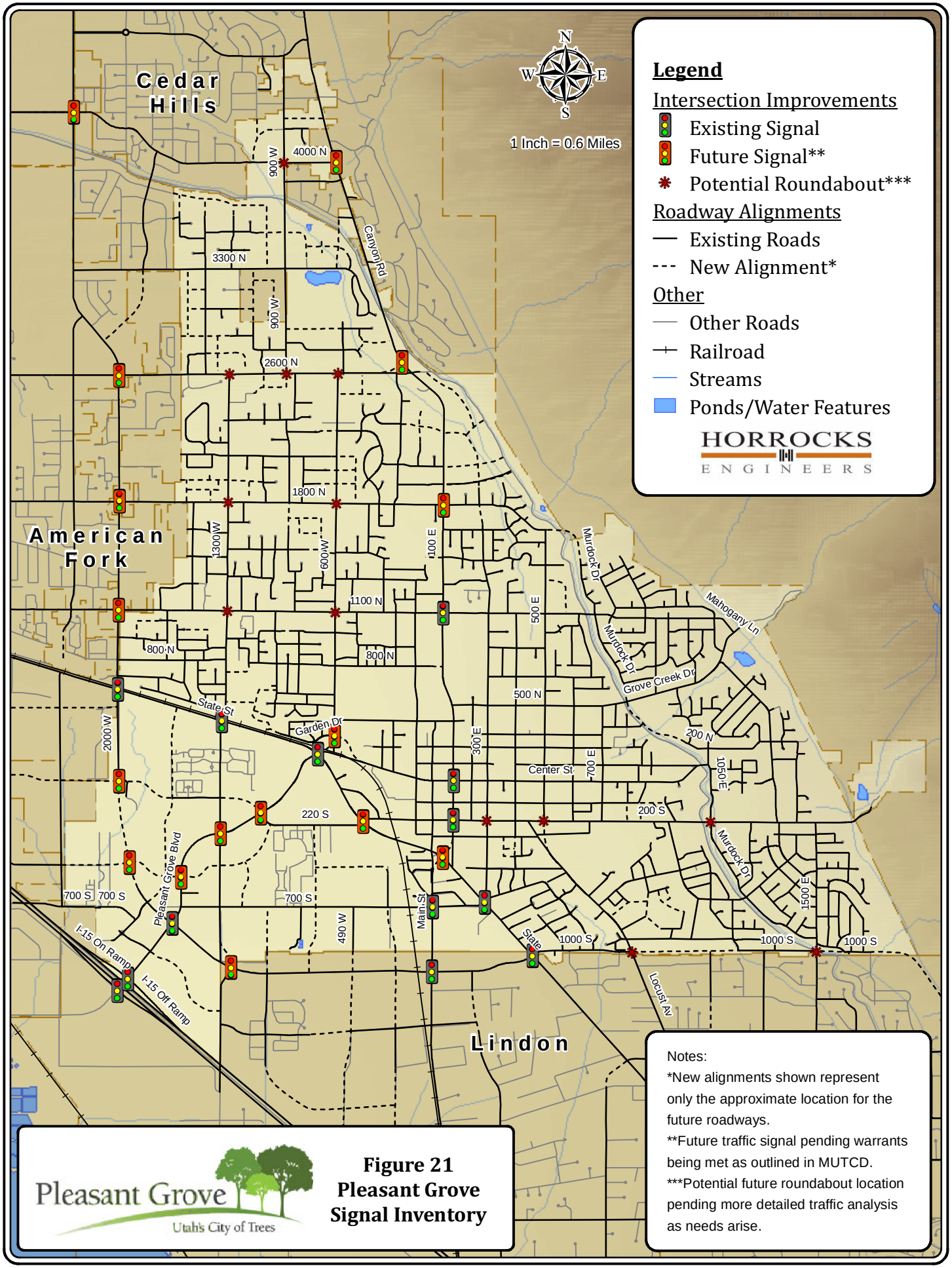
One of the main goals of the TMP and long term transportation planning in general is to envision traffic growth and provide for adequate facilities as the need arises. Constructing these future facilities to make possible safe operations is of equal importance. As a result, the City will construct and maintain these facilities to applicable design and engineering standards such as those set forth in Pleasant Grove City ordinances, the American Association of State Highway Transportation Officials (AASHTO) "Policy on Geometric Design of Highways and Streets," and the Manual on Uniform Traffic Control Devices (MUTCD). This includes implementing applicable Americans with Disabilities Act (ADA) standards and school zone treatments.

Driveways

One safety item that deserves attention is the interaction of driveways on collector and arterial streets. Where accesses do exist on these roadways, the City will require that sufficient space be provided to allow vehicles to turn around on site so that they always exit the driveway facing the street. For example, private residences ought to have circular type driveways in order to safely enter and exit the driveway with ease. Backing maneuvers into busy streets are very dangerous as this is not a typical action drivers expect. Where on-street parking is permitted on busy streets, the City will require that parking stalls be parallel as opposed to perpendicular to traffic to avoid dangerous backing maneuvers into oncoming through traffic.

Offset Intersections

Offset intersections often have negative impacts on traffic flow and can potentially create capacity problems at intersections where the left turn storage areas overlap, forcing queued vehicles into through traffic lanes. Aligning access on both sides of the street will minimize conflict points in the roadway and provided safer and more efficient traffic flow.



Pleasant Grove
Utah's City of Trees

Figure 21
Pleasant Grove
Signal Inventory

Intersection Traffic Controls

Stop signs and traffic signals should not be used where not warranted. Studies have shown that in areas where these forms of control have been installed, and not warranted, that the motoring public will disregard the control measure and therefore the right-of-way assignments at that location. This disregard for traffic control devices creates hazardous locations and a general disregard for other traffic control measures in the area.

Stop Sign Warrants

The City will use the MUTCD as the standard for determining how and when a stop sign is installed. As stated in the MUTCD, "Stop signs should be used if engineering judgment indicates that one or more of the following conditions exist:

- Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
- Street entering a through highway or street;
- Unsignalized intersection in a signalized area; and
- High speeds, restricted view, or crash records indicate a need for control by the stop sign."

The City will minimize the number of vehicles required to stop if at all possible to preserve capacity and functionality of the roadway network; therefore, the City will determine which road to stop by verifying the street carrying the lowest volume of traffic. Less restrictive traffic control such as a yield sign will be used as an alternative to stop signs if at all possible to minimize delays. The City will also install yield signs in compliance with the MUTCD guidelines. Stop signs should not be used to control speed, but to designate right-of-way at intersecting roadways. Multi-way stop control may be used as a safety measure at intersections where the volume of traffic is approximately equal for all approaches and where safety is of concern, or as an interim measure where a traffic signal is justified and has yet to be installed. City Staff will use engineering judgment and the guidelines outlined in the MUTCD to determine the appropriate application of stop and yield signs.

Traffic Signal Warrants

The City will not install traffic signals unless at least one or more of the eight traffic signal warrants (as outlined in the MUTCD) have been met. Even if warrants are met for a particular intersection, City Staff will need to base the decision of installing a traffic signal based on information obtained through engineering studies and comparisons with the requirements set forth in the MUTCD. As stated in the MUTCD, "the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal." The eight warrants outlined in the MUTCD include the following:

- Warrant 1: Eight-Hour Vehicular Volume
- Warrant 2: Four-Hour Vehicular Volume

- Warrant 3: Peak Hour
- Warrant 4: Pedestrian Volume
- Warrant 5: School Crossing
- Warrant 6: Coordinated Signal System
- Warrant 7: Crash Experience
- Warrant 8: Roadway Network

Roundabouts

Many communities in the United States are beginning to embrace the concept of roundabouts. A roundabout is an intersection control measure used successfully in Europe and Australia for many years. A roundabout is composed of a circular, raised, center island with deflecting islands on the intersecting streets to direct traffic movement around the circle. Traffic circulates in a counter-clockwise direction making right turns onto the intersecting streets. There are no traffic signals; rather, entering traffic yields to vehicles already in the roundabout.

Advantages of roundabouts include reduced traffic delays, increased safety and reduced right-of-way requirements. They can reduce delays compared to a signalized intersection due to the stop phase being eliminated. At the same time, roundabouts can improve safety because the number of potential impact points, and the number of conflict points the driver must monitor, are both substantially reduced over a conventional four-way intersection. Properly designed roundabouts can also accommodate emergency vehicles, trucks, and snow plowing equipment.

Unlike the typical New England “traffic circle” or “rotary,” design standards for roundabouts are very specific and the Federal Highway Administration (FHWA) has prepared a design guide for modern roundabouts in the United States. Development of a roundabout will only occur as a result of an intersection study performed by a qualified Traffic Engineer and when the minimum capacity and design criteria are met. The FHWA has determined that the maximum flow rate that a roundabout can accommodate depends on the geometric elements (circle diameter, number of lanes, etc.), the circulating flow (vehicles going around the circle), and entry flow (vehicles entering the circle). A single lane roundabout can accommodate up to 1,800 vehicles per hour and a double lane roundabout can accommodate up to 3,400 vehicles per hour. Figure 22 shows an example of a typical single lane roundabout design.

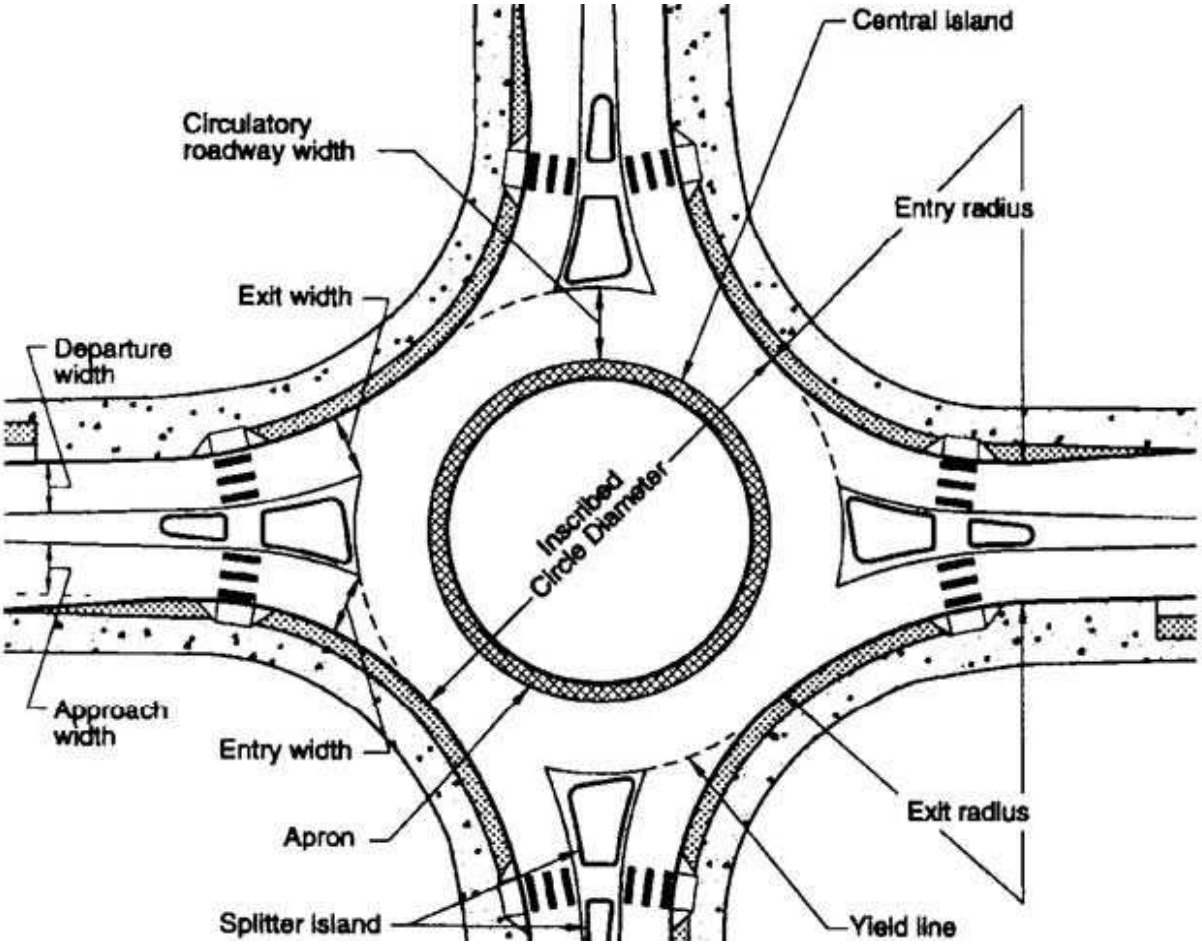


Figure 22 Typical Roundabout Design

The National Transportation Research Board examined traffic delays before and after roundabouts were installed at eight intersections in the United States. The study determined that delays (the time spent stopped and moving up to the intersection) decreased on average by 78 percent and 76 percent during the AM Peak Hour and PM Peak Hour, respectively. The results indicate that roundabouts can reduce congestion in certain circumstances. In addition, the FHWA studied safety characteristics of a sample of eleven roundabouts in the United States. The agency determined that the number of personal injury accidents and property damage-only accidents decreased 51 percent and 29 percent, respectively, after roundabouts replaced conventional intersections. Roundabouts are an appropriate solution for certain problem intersections in the region.

Potential future roundabout locations are shown in Figure 7. The City will build roundabouts at these locations pending more detailed traffic analysis as needs arise.

Traffic Calming

Street patterns are typically developed in response to the desires of the community at the time of construction. In Utah, the history of using a grid system of large blocks and wide roads for planning and development purposes started long ago and has proven efficient for moving people and goods throughout a network of surface streets. However, the nature of a grid system with wide and often long, straight roads can result in excessive speeds. For that reason, the City will implement traffic calming measures (TCM's) where appropriate to reduce speeds on residential roadways.

The Institute of Transportation Engineers (ITE) has established a definition for traffic calming that reads: "Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users." Altering driver behavior includes lowering of speeds, reducing aggressive driving, and increasing respect for non-motorized street users.

Types of Traffic Calming Measures

There are several types of TCM's which are grouped into three categories depending on the level of control or effect on traffic flow and speeds. Category One measures are the least restrictive, while Category Three are the most dramatic. These categories are outlined in further detail below. Several factors can influence the choice of TCM's used including the location, street classification, street geometry, adjacent land uses, public transit needs, budget, climate, aesthetics, and community preferences.

Category One – Traffic Control Devices

Traffic control devices consist of signs, signals, and pavement markings to regulate, warn, guide, and provide information to drivers. Examples include regulator signs (i.e., speed limit signs), warning signs (i.e., pedestrian warning signs), traffic signals, etc. Often traffic control devices are overused as TCM's. Though the function of traffic calming devices is often similar to that of TCM's, specific traffic control devices should not be overused to communicate different purposes. One of the primary purposes of traffic control devices is to inform drivers of traffic laws and specific right-of-ways in order to maintain order and safety. Overuse of such traffic control devices diminishes their intended purpose. For example, the MUTCD states that "stop signs should not be used for speed control." When used following the guidelines outlined in the MUTCD, traffic control devices can assist as part of roadway/intersection designs to calm traffic where necessary.

Category Two – Street Modification

Street modification TCM's include actions that physically alter the vertical or horizontal alignment of the roadway. Vertical changes include speed humps, speed tables, raised intersections, etc. Horizontal changes include chicanes and lateral shifts. Other street modifications TCM's include constrictions (i.e., narrowing, pinch points, islands, chokers, etc.), narrow pavement widths (i.e., medians, edge treatments, bulb-outs, etc.), entrance features,

roundabouts, small corner radii, street closures, and streetscaping (i.e., surface textures and colors, landscaping, street trees, street furniture, etc.).

Category Three – Route Modification

Route modifications consist of altering available routes of traffic flow. Examples include one-way streets, diverters, closures, and turn prohibitions. Instead of attempting to altering drivers' behavior (Categories One and Two), route modification TCM's attempt to alter drivers' routes altogether.

Streetscaping

Streetscaping includes the planning and placement of items such as street furniture, lighting, art, trees, landscaping, and side treatments along streets and intersections. Although streetscaping can be implemented without traffic calming, TCM's need a certain element of streetscaping to be functional. Streetscaping softens the appearance of speed humps or tables and enhances the aesthetics of roundabouts and constrictions, etc. Landscaping and other roadside treatments make street closures more effective and safer by highlighting the presence of the measure.

Other Considerations

Spacing is an important consideration for TCM's. If TCM's are too far apart (greater than 600 to 1000 feet), speeding can occur between the measures. TCM's need to be spaced 200 to 300 feet apart so vehicles will not have sufficient distance to accelerate between measures.

Other considerations when deciding which TCM's to install include snow removal maintenance and emergency vehicle access. Some TCM's may decrease the efficiency of both snow removal and/or emergency vehicle access, for example speed humps or tables, etc.

Installation of Traffic Calming Measures

The City will base its decision to implement TCM's on engineering merits of a TCM application, as opposed to the results of a TCM popularity contest between neighborhoods. An engineering study documenting the need for such measures and the nature of the traffic problem via speed and volume measurements will be the determining factor.

The City will then determine if any TCM's are capable of solving the problem and matching the terrain, climate, and nature of the street in question. Based on need and the tools available, the City will implement one or several measures on a temporary basis subject to performance evaluations and neighborhood review. Before implementing these improvements on a more permanent basis, the City will compare the before and after results for speed and volume changes to see if the TCM's have performed as expected.

In order to make any of the TCM's effective, traffic calming must be community based and as wide spread as possible. For example, the repercussions of traffic calming on one street can result in higher speeds on adjacent streets due to a shift in travel patterns. The need for a community based traffic

calming plan is fundamental to the quality of life for the citizens of the community; hence, the City will produce a more detailed and formal traffic calming plan as needs arise to more specifically address appropriate applications, obtain warrants for the installation of different TCM's, and outline suitable installation procedures of different TCM's.

As Pleasant Grove City develops a traffic calming plan and implements TCM's, it will consult the latest engineering information available to ensure that the plan contains the latest and best guidelines. ITE is the definitive resource on traffic calming issues and produces a significant amount of literature on the subject. A complete discussion on the latest TCM's and related issues are found at http://www.ite.org/traffic/index.asp.

Access Management

Access management is the practice of coordinating the location, number, spacing, and design of access points to minimize site access conflicts and maximize the traffic capacity and safety of a roadway. Uncoordinated growth along major travel corridors often results in strip development and a proliferation of access points. In many of these instances, each individual development along the corridor has its own access driveway. Numerous access points along major travel corridors create unnecessary conflicts between turning and through traffic which causes delays and accidents. Numerous benefits are derived from controlling the location and number of access points to a roadway. Those benefits include:

- Improving overall roadway safety
- Reducing the total number of vehicle trips
- Decreasing interruptions in traffic flow
- Minimizing traffic delays and congestion
- Maintaining roadway capacity
- Extending the useful life of roads
- Avoiding costly highway projects
- Improving air quality
- Encouraging compact development patterns
- Improving access to adjacent land uses
- Enhancing pedestrian and bicycle facilities

Guidelines regarding access management throughout Pleasant Grove are referenced in the Appendix.

Corridor Preservation

Corridor preservation is an important transportation planning tool that agencies should use and apply to all future transportation corridors. Several new transportation facilities have been identified in this plan. In planning for these future facilities, corridor preservation techniques will be employed. The main purposes of corridor preservation are to:

- Preserve the viability of future options,
- Reduce the cost of these options, and
- Minimize environmental and socio-economic impacts of future implementation.

Corridor Preservation seeks to preserve the right-of-way needed for future transportation facilities and prevent development which might be incompatible with these facilities. This is primarily accomplished by the community's ability to apply land use controls such as zoning and approval of developments. Adoption of the TMP by Pleasant Grove City is a commitment to citizens and future leaders in the community that the identified future corridors will be the ultimate location for transportation facilities.

Perhaps, the most important elements of corridor preservation are ensuring that the corridors are preserved in the correct location and that they meet the applicable design and right-of-way standards for the type of facility being preserved. As the master plan does not define the exact alignment of each future corridor, it becomes the responsibility of the City to make sure that the corridors are correctly preserved. This will have to be accomplished through the engineering and planning reviews done within the City as development and annexation requests are approved that involve properties within or adjacent to the future corridors.

Corridor Preservation Techniques

Some examples of specific corridor preservation techniques that may be most beneficial and easily implemented include the following:

- Developer Incentives and Agreements: Public agencies can offer incentives in the form of tax abatements, density credits, or timely site plan approvals to developers who maintain property within planned transportation corridors in an undeveloped state.

- Exactions: As development proposals are submitted to the City for review, efforts can be made to exact land identified within the future corridors. Exactions are similar to impact fees, except they are paid with land rather than cash.

- Fee Simple Acquisitions: This will most likely consist of hardship purchases or possible city acquisition of property identified within the corridors. Parcels obtained in fee title can later be sold at market value to the owner of the transportation facility when construction begins.

- Transfer of Development Rights and Density Transfers: Government entities can provide incentives for developers and landowners to participate in corridor preservation programs using the transfer of development rights and density transfers. This is a powerful tool in that there seldom is any capital cost to local governments.

- Land Use Controls: This method allows government entities to use police power to regulate intensity and types of land use. Zoning ordinances are the primary controls over land use and the most important land use tools available for use in corridor preservation programs.

- Purchase of Options and Easements: Options and easements allow government agencies to purchase interests in property that lies within highway corridors without obtaining full title of the land. Usually, easements are far less expensive than fee title acquisitions.

Traffic Impact Studies

As growth occurs, the City needs to evaluate the impacts of future developments on the surrounding transportation networks prior to giving approval to build. This can be accomplished by requiring that a Traffic Impact Study (TIS) be performed for any development that will generate in excess of 100 peak-hour trips. Examples of different land uses that will generate in excess of 100 peak-hour trips can be seen in Table 1. A TIS will allow the City to determine the site specific impacts of a development including internal site circulation, access issues, and adjacent roadway and intersection impacts. In addition, a TIS will assist in defining possible impacts to the overall transportation system in the vicinity of the development. The area and items to be evaluated in a TIS include key intersections and roads as determined by the City Engineer on a case by case basis. Other items that need to be included in a TIS include:

- A description of the project site and study area boundaries including a site plan and study area map showing the future project access locations and connections to the adjacent road network.
- A description of existing and planned land uses within the study area including a discussion of the project land use.
- A description of existing and future key roadways and intersections in the study area including lane configurations and traffic controls.
- A discussion of trip generation, distribution, and assignment methodologies and assumptions.
- A level of service (LOS) and capacity analysis of existing traffic levels and conditions for key roadway segments and intersections.
- A LOS and capacity analysis of background traffic levels and conditions (existing traffic plus additional traffic projected from normal growth rates and from other known developments in the study area at the time of completion) for key roadway segments and intersections.
- A LOS and capacity analysis of background plus project traffic levels and conditions (background traffic plus projected traffic associated with the new project) for key roadway segments and intersections.
- A safety analysis for key roadways and intersections including applicable accident histories.
- Any applicable yield sign, stop sign, multi-way stop signs, and traffic signal warrant analyses.
- A determination of the street system's ability to accommodate projected traffic levels.

- An identification of impacts to the existing street system as a result of the project.
- A discussion of improvements to be implemented as part of the project to accommodate project traffic such as roadway and intersection widening to provide exclusive turn lanes or modifications to traffic controls.
- A discussion of mitigation measures to be implemented to restore or improve traffic operations to an acceptable LOS on any key roadway segments or at key intersections within the study area.

Each TIS will be conducted by a qualified Traffic Engineer chosen by the City at the developer's cost. The City Engineer will determine the scope of each TIS and review its contents once complete and provide comments. Upon receiving approval from the City Engineer, the TIS requirement related to the development will be satisfied. If a developer feels that his or her project does not meet the requirements to have a TIS completed, then the developer will need to provide documentation stating his or her case which will be reviewed by the City Engineer.

A TIS may be required for developments that do not meet the trip generation threshold (≥ 100 peak-hour trips) if there are unique or controversial issues associated with the project that the City feels needs to be addressed. These projects will be identified and evaluated on a case by case basis.

Agency Coordination

As many of the roads in Pleasant Grove City are either owned by or connect into roads that are owned by other agencies such as UDOT, neighboring cities, and Utah County, a close working relationship needs to be maintained between these different jurisdictions and the City to ensure that roadway projects are not only coordinated but consistent.

Impact Fees

Impact fees are a way for a community to obtain funds to assist in the constructions of infrastructure improvements that are needed to serve new growth. The premise behind impact fees is that if no new development was allowed, the existing infrastructure would adequately serve the existing level of development in the City. Therefore, new development should pay for the fraction of improvements that are required because of new growth. Impact fees are assessed for many types of infrastructure and facilities that are provided by a community such as roads, sewer, water, parks, and trails. According to state law, impact fees cannot be used to correct existing deficiencies in a system, only to fund growth related capital improvements.

There are many ways to quantify the impact of new growth on the transportation system in Pleasant Grove City. One way to assess the impact is to consider all the needed transportation improvements and then eliminate the cost of those improvements that are necessary to correct existing deficiencies. Another way to assess the impacts of new growth is to estimate the amount of total traffic growth on

each road which is projected to occur due to new development and then apply this percentage to the total cost of all needed improvements thus identifying the cost of the improvements that are eligible for funding through impact fees. The improvements outlined in the TMP can be used to identify growth related improvements and form the basis for a comprehensive impact fee program.

Planned Roadway Improvements

A number of roadway improvements will occur between now and the year 2040. These planned improvements are based on travel demand volume predictions and available capacity of each roadway. Each of these improvements needs to be implemented as a result of increasing traffic volumes due to future development. A citywide Transportation Improvement Program (TIP) summarizing the intersection and roadway improvements will be discussed in a later chapter. The TIP will outline the type, extent, jurisdiction(s) and estimated timeline for each of the new improvements.

Public Involvement Process

Public involvement is a key element to producing an effective and worthwhile transportation master plan for the City to implement and follow. Collecting and responding to public input allows City staff and decision-makers to consider all the issues and to address them appropriately. An intensive effort was put forth to collect public comment regarding this particular update of the City's transportation master plan, including the following actions:

- Posted a draft of the transportation master plan document on the City's website for anyone to download and review.
- Held a public open house on Wednesday, May 13th, 2009. Approximately 80 residents signed in at the open house, of which some included couples; as a result the project team estimated that upwards of 100 people attended the open house.
- Advertized the public open house by placing announcements on utility bills and the City's newsletter, posting details on the City's website, and mailing individual postcard invitations to any property owners whose property lied within 200 feet of a planned roadway widening or new roadway alignment (over 1,300 postcards were mailed).
- Provided a comment form at the public open house for residents to communicate their concerns and approval of specific elements of the new plan.
- Presented a progress report of the transportation master plan update process at both City Council and Planning Commission Meetings on May 26th and May 28th, respectively.
- Held final public hearing June 23rd, 2009 at a joint session of City Council and Planning Commission.

Public involvement has proven to be a critical element of the transportation planning process. Details of the public involvement effort for this update of the City's transportation master plan can be found in the appendix of this report. Lastly, as the City updates this plan in the future, public input will be collected and taken into account as this plan evolves.

6.0 Potential Funding Sources

Funding sources for transportation are essential if Pleasant Grove City's planned improvements are to be built. Presently there are three main sources of revenue available to Pleasant Grove City: federal funding, state funding, and local general funding. The following paragraphs further describe these various transportation funding sources available to the City.

Federal Funding

Federal monies are available to cities and counties through the federal-aid program. The funds are administered by the Utah Department of Transportation (UDOT). In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) funds projects for any roadway with a functional classification of a collector street or higher. STP funds can be used for both rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State in urban areas. Another portion of the STP funds can be used for projects in any area of the State at the discretion of the State Transportation Commission. Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Committee reviews the applications and then a portion of those are passed to the State Transportation Commission. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities, and water runoff mitigation. Other federal and state trails funds are available from the Utah State Parks and Recreation Program.

State Funding

The distribution of State Class B and C Program monies is established by State Legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Seventy-five percent of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities.

Class B and C funds are allocated to each city and county by a formula based on population, road mileage, and land area. Class B funds are given to counties, and Class C funds are given to cities and towns. Class B and C funds can be used for maintenance and construction projects; however, thirty

percent of those funds must be used for construction or maintenance projects that exceed $40,000. The remainder of these funds can be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

Local Funding

Most cities utilize general fund revenues for their transportation programs. Another option for transportation funding includes the creation of special improvement districts. These districts are organized for the purpose of funding a single specific project that benefits an identifiable group of properties. Another source of funding used by cities includes revenue bonding for projects felt to benefit the entire community.

Private interests often provide resources for transportation improvements. Developers construct the local streets within subdivisions and often dedicate right-of-way and participate in the construction of collector/arterial streets adjacent to their developments. Developers can also be considered a possible source of funds for projects through the use of impact fees. These fees are assessed as a result of the impacts a particular development will have on the surrounding roadway system, such as the need for traffic signals or street widening.

7.0 Transportation Improvement Program

One of the main purposes of the TMP is to plan a street classification system that will serve Pleasant Grove City's transportation needs for the next 20 years. Designating a roadway functional classification system allows the City to preserve the necessary right-of-way along individual roadway corridors for the future upgrade of the existing infrastructure to the master planned standard. After evaluating the roadway network and projecting future travel demands on each of those roadways, a roadway functional classification was developed (Figure 14).

After evaluating the projected travel demand and future deficiencies on the City's roadway network, a transportation improvement program (TIP) was developed. The TIP indicates which improvements will be needed at particular times, provides a planning level cost estimate for each improvement, and identifies potential funding sources (see Table 12 and Figure 23). If used correctly, this can be a valuable tool for City officials in the budgeting and planning process as the TIP outlines the anticipated timing, costs, and potential funding sources for transportation improvements.

Improvements are separated into the following categories: short range (0 to 5 years); medium range (5 to 10 years); and long range (10 to 20 years). Regardless of improvements or enhancements to alter transportation modes, private single-occupant vehicles will remain as the predominant form of transportation in Pleasant Grove City for the foreseeable future. As such, most of the upcoming improvements involve roadway infrastructure that are anticipated to accommodate future traffic demand projections and maintain acceptable operating conditions.

Several projects do not include planning level cost estimates. These projects are either already funded, currently under construction, anticipated to be constructed by other jurisdictions or private developers and not require local funds, or are not far enough into the conceptual design stages to determine costs.

As development continues throughout Pleasant Grove City, the TMP and TIP will be consulted to identify improvements that may benefit from work or funds required by individual developers. This would ensure that the correct amount of right-of-way is preserved. In addition, this would assist in identifying projects that the developer may be required to construct or contribute to as part of his or her required on- and/or off-site improvements. However, several projects are not anticipated to be part of any new developments or will not be able to wait for development to occur before the improvements are needed. These projects may not be able to benefit from private funding sources and the City will have to come up with other funding alternatives for these projects.

Finally, the TIP must be reviewed and updated on a continual basis in order to work as designed. The TIP will be modified by deleting projects that have been completed or are no longer considered a priority, as well as adding new projects that were not previously identified. A good time for an annual review and update is in January as this provides sufficient time for any changes to the TIP to be incorporated into the budget planning process for that year. Continual maintenance is critical for the TIP to remain effective over time.

Table 12 Pleasant Grove City Transportation Improvement Program

Pleasant Grove City Transportation Improvement Program (TIP)					
Type of Improvement[1]	**Roadway or Location**	**From**	**To**	**Jurisdiction(s)**	**Potential Funding Source[2]**
0-5 Year Improvements					
Widen to 3 Lanes	100 East	2600 North	State Street	Pleasant Grove/ UDOT	F, S, C, O
Widen to 5 Lanes/ New Traffic Signal	PG Boulevard	2000 West	100 South	Pleasant Grove	C, O
Widen to 3 Lanes/ Intersection Realignment/ New Traffic Signal	600 West	Center Street	1100 North	Pleasant Grove	C, O
Widen to 5 Lanes/ New Traffic Signal	2000 West	State Street	1100 North	Pleasant Grove/ American Fork	C, O
Widen to 7 Lanes/ New Traffic Signal	State Street	American Fork	Lindon	UDOT	F, S, C, O
New Alignment	750 West	220 South	1000 South	Pleasant Grove	C, O
New Alignment	500 S	750 West	250 West	Pleasant Grove	C, O
Alignment Extension	800 North	Main Street	100 East	Pleasant Grove	C, O
Alignment Extension	1000 South	Locust Ave	1150 East	Pleasant Grove/ Lindon	C, O
Alignment Extension/ New Railroad Crossing	Garden Dr	State Street	1000 West	Pleasant Grove	C, O

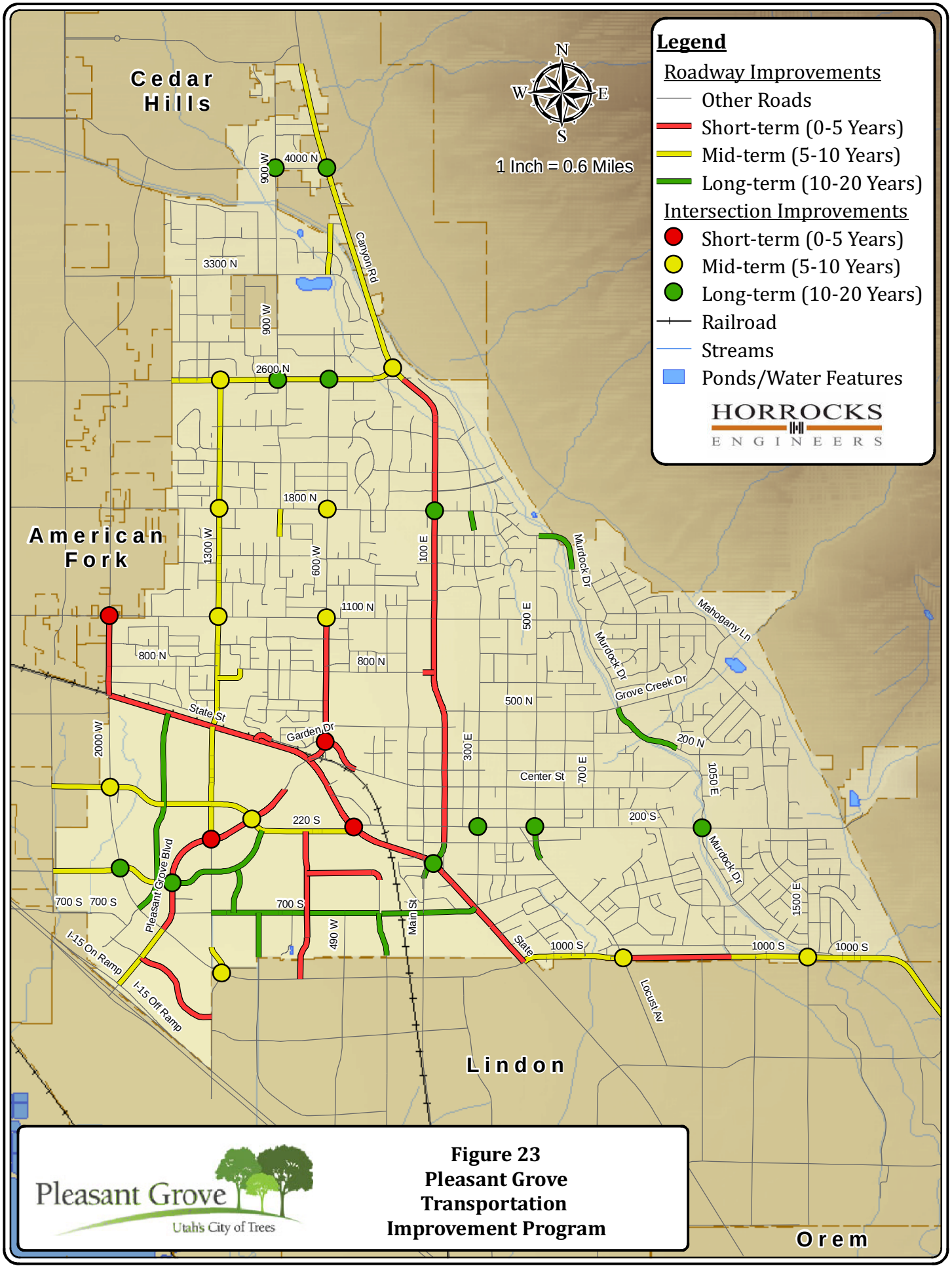
Pleasant Grove City Transportation Improvement Program (TIP)					
Type of Improvement[1]	**Roadway or Location**	**From**	**To**	**Jurisdiction(s)**	**Potential Funding Source[2]**
New Alignment	Granite Way	PG Boulevard	1300 West	Pleasant Grove	C, O
5-10 Year Improvements					
Restriping/ Realignment/ Widening to 3 Lanes/ Potential Roundabouts	1000 South	State Street	Lindon	Pleasant Grove/ Lindon	C, O
Widen to 3 Lanes	100 East	2600 North	Cedar Hills	UDOT	F, S, C, O
Widen to 3 Lanes/ New Alignment/ New Traffic Signals	220 South (Battle Creek Drive)	American Fork	State Street	Pleasant Grove	C, O
Widen to 3 Lanes/ Potential Roundabouts	1300 West	2600 North	PG Boulevard	Pleasant Grove	C, O
Widen to 3 Lanes/ Intersection Realignment/ New Traffic Signal	2600 North	American Fork	100 East	Pleasant Grove	C, O
Widen to 7 Lanes	PG Boulevard	2000 West	I-15 Interchange	Pleasant Grove	F, S, C, O
Alignment Extension	800 North	1300 West	1100 West	Pleasant Grove	C, O
Alignment Extension	500 South	American Fork	PG Boulevard	Pleasant Grove	C, O
Realignment/ New Traffic Signal	1300 West	700 South	1000 S (PG)/ 700 N (Lindon)	Pleasant Grove/Lindon	C, O
Alignment Extension	900 West	1800 North	1600 North	Pleasant Grove	C, O
New Alignment	Mill Creek Road	3300 North	3700 N (PG)/ Avanyu Dr (Cedar Hills)	Pleasant Grove	C, O

Pleasant Grove City Transportation Improvement Program (TIP)					
Type of Improvement[1]	**Roadway or Location**	**From**	**To**	**Jurisdiction(s)**	**Potential Funding Source[2]**
Potential Roundabout	600 West/ 1800 North			Pleasant Grove	C, O
Potential Roundabout	600 West/ 1100 North			Pleasant Grove	C, O
10-20 Year Improvements					
Widen to 3 Lanes	700 South	1300 West	State Street	Pleasant Grove	C, O
Alignment Extension	300 East	1700 North	1800 North	Pleasant Grove	C, O
Alignment Extension	Murdock Dr	500 East	1400 North	Pleasant Grove	C, O
Alignment Extension	Murdock Dr	500 North	300 North	Pleasant Grove	C, O
Alignment Extension	250 West	700 South	1000 South	Pleasant Grove	C, O
New Alignment	1000 West	700 South	1000 South	Pleasant Grove	C, O
New Alignment	1100 West	500 South	700 South	Pleasant Grove	C, O
New Alignment/ New Traffic Signal	500 South	PG Boulevard	220 South	Pleasant Grove	C, O
New Alignment	1700 West	State Street	2000 West	Pleasant Grove	C, O
Widen to 5 Lanes/ New Traffic Signal	100 East	State Street	Cedar Hills	Pleasant Grove/ UDOT	F, S, C, O
New Alignment/ Potential Roundabout	Locust Ave Realignment			Pleasant Grove	C, O
Intersection Realignment/ New Traffic Signal	100 E/Geneva Rd/State St			Pleasant Grove/ UDOT	F, S, C, O
Potential Signal	500 S/2000 W			Pleasant Grove	C, O
Potential Roundabout	900 West/ 2600 North			Pleasant Grove	C, O

Pleasant Grove City Transportation Improvement Program (TIP)					
Type of Improvement[1]	**Roadway or Location**	**From**	**To**	**Jurisdiction(s)**	**Potential Funding Source[2]**
Potential Roundabout	600 West/ 2600 North			Pleasant Grove	C, O
Potential Roundabout	300 East/200 South			Pleasant Grove	C, O
Potential Roundabout	Murdock Dr/ 200 South			Pleasant Grove	C, O
Potential Roundabout	900 West/ 4000 North			Pleasant Grove	C, O

[1]Miscellaneous local roads have not been included since they will most likely be built by developers as part of their developments.

[2]Potential Funding Sources: F-Federal, S-State, C-City, and O-Other.


Legend
Roadway Improvements
Other Roads
Short-term (0-5 Years)
Mid-term (5-10 Years)
Long-term (10-20 Years)
Intersection Improvements
Short-term (0-5 Years)
Mid-term (5-10 Years)
Long-term (10-20 Years)
Railroad
Streams
Ponds/Water Features
HORROCKS ENGINEERS
N
W
E
S
1 Inch = 0.6 Miles
Cedar Hills
American Fork
Lindon
Orem
4000 N
900 W
3300 N
Canyon Rd
2600 N
1800 N
1300 W
600 W
100 E
1100 N
800 N
500 E
Murdock Dr
Mahogany Ln
Grove Creek Dr
500 N
State St
Garden Dr
2000 W
300 E
700 E
Center St
200 N
1050 E
220 S
200 S
Pleasant Grove Blvd
700 S
490 W
Main St
State
1000 S
1500 E
I-15 On Ramp
I-15 Off Ramp
Locust Av
Pleasant Grove
Utah's City of Trees
Figure 23
Pleasant Grove
Transportation
Improvement Program

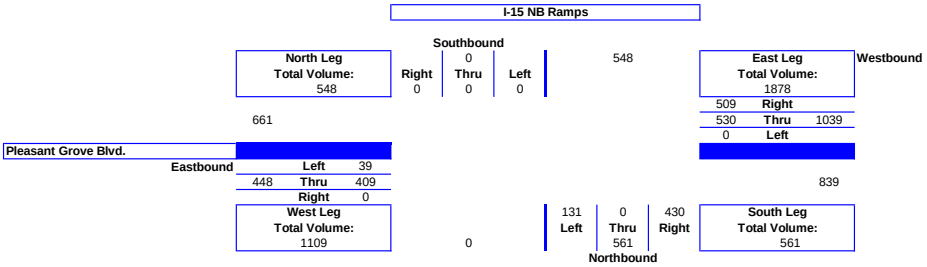
Appendix A: Raw Traffic Data

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **I-15 NB Ramps**
E-W Street: **Pleasant Grove Blvd.**
Date: **Tuesday, August 05, 2008**
Begin Time: **07:00 AM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM	0	0	0	0	155	119	0	14	74	0	31	2	0	99	17	3	514	
07:15 AM	07:30 AM	0	0	0	0	149	155	0	14	93	0	32	1	0	104	9	9	566	
07:30 AM	07:45 AM	0	0	0	0	129	166	0	5	132	0	54	2	0	135	6	8	637	
07:45 AM	08:00 AM	0	0	0	0	132	95	0	24	107	0	23	3	0	100	8	7	499	2216
08:00 AM	08:15 AM	0	0	0	0	126	142	0	20	121	0	29	5	0	91	18	7	559	2261
08:15 AM	08:30 AM	0	0	0	0	134	139	0	10	110	0	19	2	0	94	5	7	520	2215
08:30 AM	08:45 AM	0	0	0	0	132	130	0	11	100	1	33	6	0	121	9	10	553	2131
08:45 AM	09:00 AM	0	0	0	0	101	114	0	11	89	2	15	6	0	93	11	9	451	2083



OPTIONAL Adjustment Factors	
Monthly:	0.95
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	0.95

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	530	509	131	0	430	39	409	0
	0			1039			561			448	
Trucks:		0%	Trucks:		6%	Trucks:		2%	Trucks:		7%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		2048	PHF:		0.85

PG Blvd & NB Ramps AM.xls

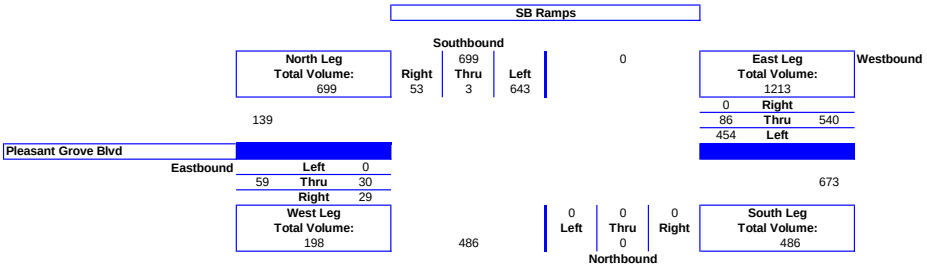
MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **SB Ramps**
E-W Street: **Pleasant Grove Blvd**
Date: **Monday, August 04, 2008**
Begin Time: **07:00 AM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM	13	0	122	5	0	34	104	2	0	0	0	0	4	6	0	2	287	
07:15 AM	07:30 AM	11	0	144	9	0	20	141	0	0	0	0	0	12	14	0	2	344	
07:30 AM	07:45 AM	11	0	116	6	0	16	153	2	0	0	0	0	10	11	0	2	321	
07:45 AM	08:00 AM	13	0	168	4	0	22	137	1	0	0	0	0	8	8	0	1	358	1310
08:00 AM	08:15 AM	12	1	136	8	0	22	141	1	0	0	0	0	10	8	0	0	331	1354
08:15 AM	08:30 AM	18	0	206	6	0	32	63	1	0	0	0	0	2	2	0	1	325	1335
08:30 AM	08:45 AM	13	2	167	4	0	15	137	1	0	0	0	0	11	14	0	3	363	1377
08:45 AM	09:00 AM	5	1	159	1	0	26	119	0	0	0	0	0	10	21	0	8	349	1368



OPTIONAL Adjustment Factors	
Monthly:	0.95
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	0.95

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
643	3	53	454	86	0	0	0	0	0	30	29
	699			540			0			59	
Trucks:		3%	Trucks:		1%	Trucks:		0%	Trucks:		8%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		1298	PHF:		0.94

PG Blvd & SB Ramps AM.xls

MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **700 North Lindon**
E-W Street: **Pleasant Grove Blvd**
Date: **Monday, August 25, 2008**
Begin Time: **07:00 AM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	1	8	3	1	6	211	4	6	3	12	114	11	64	108	12	6	569	
07:30 AM	07:45 AM	1	3	4	1	3	207	41	7	1	16	96	5	82	156	25	3	650	
07:45 AM	08:00 AM	6	9	2	0	10	210	9	1	5	18	88	5	98	197	18	11	687	1906
08:00 AM	08:15 AM	2	13	1	3	2	212	6	4	3	19	71	9	55	139	19	8	563	2469
08:15 AM	08:30 AM	4	10	3	1	3	187	9	3	4	22	83	11	41	135	11	16	542	2442
08:30 AM	08:45 AM	1	10	3	0	11	219	11	9	5	11	86	2	47	138	20	11	584	2376
08:45 AM	09:00 AM	2	4	8	0	10	176	8	5	1	17	93	8	64	139	16	6	557	2246

700 North Lindon

Southbound: North Leg Total Volume: 213 — Right 10, Thru 53, Left 33
Westbound: East Leg Total Volume: 1543 — Right 21, Thru 840, Left 60
Eastbound: West Leg Total Volume: 2192 — Left 74, Thru 973, Right 299
Northbound: South Leg Total Volume: 838 — Left 369, Thru 65, Right 12

1219 | 160 | 622 | 392 | 446

Pleasant Grove Blvd

OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
10	33	10	60	840	21	369	65	12	74	600	299
	53			921			446			973	
Trucks:	9%		Trucks:	2%		Trucks:	7%		Trucks:	3%	
Peak Hour:	07:15 AM to 8:15 AM					Peak Vol:	2393		PHF:	0.87	

PG Blvd & 700 N Lindon AM.xls

MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **700 S**
E-W Street: **Pleasant Grove Blvd**
Date: **Thursday, August 07, 2008**
Begin Time: **07:00 AM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM	0	143	0	3	2	0	0	0	21	87	0	1	0	0	0	0	254	
07:15 AM	07:30 AM	0	169	0	4	0	0	0	0	19	82	0	2	0	0	0	0	272	
07:30 AM	07:45 AM	0	224	0	1	2	0	0	1	18	80	0	8	0	0	0	0	333	
07:45 AM	08:00 AM	0	183	0	2	2	0	0	0	37	120	0	4	0	0	0	0	346	1205
08:00 AM	08:15 AM	0	138	0	2	3	0	0	0	16	95	0	2	0	0	0	0	254	1205
08:15 AM	08:30 AM	0	195	0	4	3	0	0	0	25	103	0	6	0	0	0	0	332	1265
08:30 AM	08:45 AM	0	211	0	3	9	0	0	0	19	121	0	6	0	0	0	0	366	1298
08:45 AM	09:00 AM	0	195	0	6	2	0	0	0	15	119	0	5	0	0	0	0	336	1288

700 S

Southbound: North Leg Total Volume: 1183 — Right 0, Thru 727, Left 0
Westbound: East Leg Total Volume: 114 — Right 17, Thru 0, Left 0
Eastbound: West Leg Total Volume: 0 — Left 0, Thru 0, Right 0
Northbound: South Leg Total Volume: 1263 — Left 0, Thru 439, Right 97

0 | 456 | 17 | 97 | 727 | 536

Pleasant Grove Blvd

OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	727	0	0	0	17	0	439	97	0	0	0
	727			17			536			0	
Trucks:	2%		Trucks:	0%		Trucks:	3%		Trucks:	0%	
Peak Hour:	07:45 AM to 8:45 AM					Peak Vol:	1280		PHF:	0.87	

PG Blvd & 700 S AM.xls

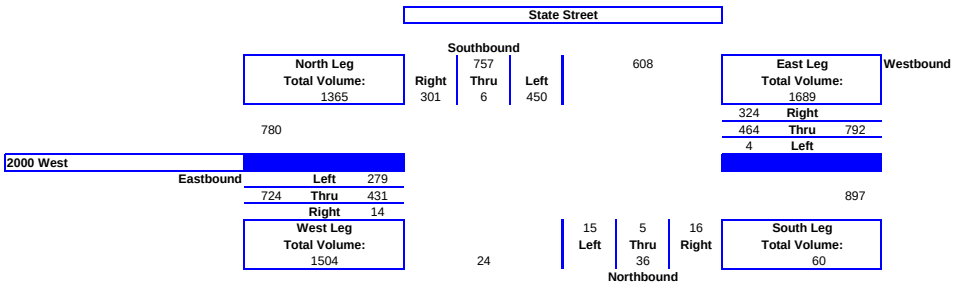
MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **2000 West**
Date: **Thursday, March 05, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM	37	1	67	1	56	93	0	2	1	1	3	0	3	100	41	6	411	
07:45 AM	08:00 AM	85	1	108	3	75	122	0	6	1	1	1	0	5	114	44	6	569	980
08:00 AM	08:15 AM	90	1	143	1	87	134	2	10	1	0	5	0	3	103	73	5	657	1637
08:15 AM	08:30 AM	52	1	102	1	83	103	0	7	5	0	2	0	2	125	65	9	556	2193
08:30 AM	08:45 AM	77	2	116	2	69	103	1	2	4	2	8	3	3	86	74	6	556	2338
08:45 AM	09:00 AM	82	2	89	1	85	124	1	8	6	3	0	1	6	117	67	9	600	2369

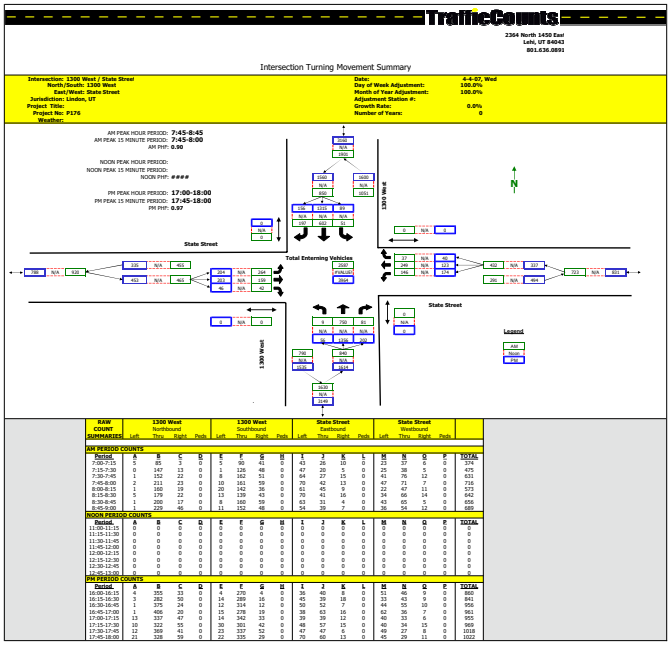


OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
450	6	301	4	464	324	15	5	16	279	431	14
	757			792			36			724	
Trucks:		1%	Trucks:		3%	Trucks:		11%	Trucks:		4%
Peak Hour:		08:00 AM to 9:00 AM				Peak Vol:		2309	PHF:		0.88

State Street & 2000 West AM.xls MCM 6/15/2009

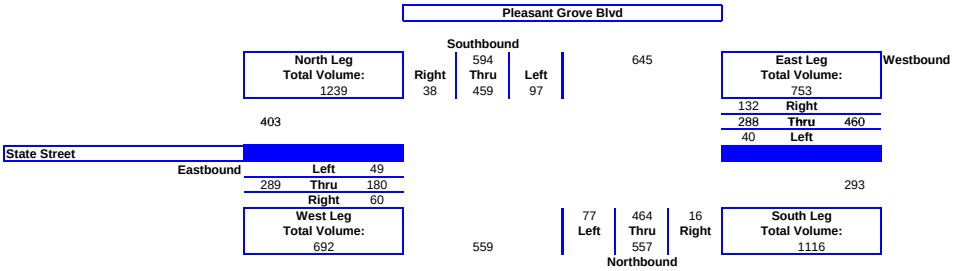


TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Pleasant Grove Blvd**
E-W Street: **State Street**
Date: **Monday, August 04, 2008**
Begin Time: **07:00 AM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM	3	72	18	0	24	79	2	0	1	57	5	0	7	24	9	0	301	
07:15 AM	07:30 AM	3	78	16	0	25	81	9	0	1	61	10	0	21	40	5	0	350	
07:30 AM	07:45 AM	9	130	17	0	17	104	11	0	4	101	13	0	23	29	9	0	467	
07:45 AM	08:00 AM	6	132	19	0	28	83	9	0	6	95	10	0	24	46	10	0	468	1586
08:00 AM	08:15 AM	12	99	19	0	19	55	13	0	3	87	11	0	13	27	9	0	367	1652
08:15 AM	08:30 AM	12	110	19	0	37	78	4	0	3	111	19	0	17	39	8	0	457	1759
08:30 AM	08:45 AM	5	119	23	0	28	89	14	0	8	131	28	0	17	58	12	0	532	1824
08:45 AM	09:00 AM	9	131	36	0	48	66	9	1	2	135	19	0	13	56	20	0	545	1901



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound Left	Southbound Thru	Southbound Right	Westbound Left	Westbound Thru	Westbound Right	Northbound Left	Northbound Thru	Northbound Right	Eastbound Left	Eastbound Thru	Eastbound Right
97	459	38	40	288	132	77	464	16	49	180	60
	594			460			557			289	
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	08:00 AM to 9:00 AM					Peak Vol:	1900		PHF:	0.87	

PG Pleasant Grove Blvd & State St AM.xls

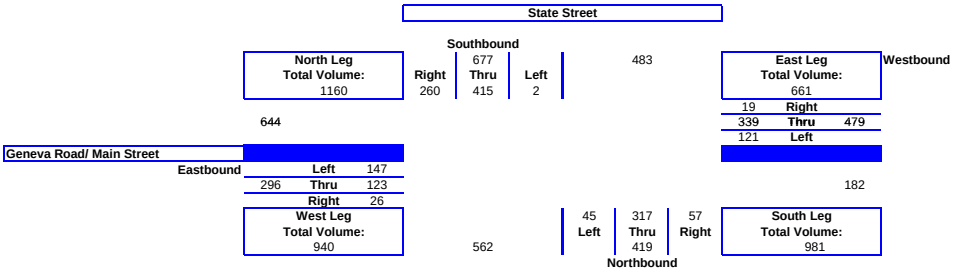
MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street**
E-W Street: **Geneva Road/ Main Street**
Date: **Tuesday, September 09, 2008**
Begin Time: **07:00 AM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM	28	48	0	0	0	27	12	0	11	55	10	0	0	13	22	0	226	
07:15 AM	07:30 AM	29	64	1	0	1	67	14	1	15	59	11	0	2	16	28	0	308	
07:30 AM	07:45 AM	44	103	4	0	2	66	19	0	6	82	13	0	4	16	28	0	387	
07:45 AM	08:00 AM	58	108	1	0	10	104	33	0	17	86	17	0	10	31	46	0	521	1442
08:00 AM	08:15 AM	83	116	0	0	3	89	31	0	12	81	10	0	5	27	32	0	489	1705
08:15 AM	08:30 AM	61	94	0	0	4	74	32	0	16	90	10	0	6	42	38	0	467	1864
08:30 AM	08:45 AM	58	97	1	0	2	72	25	0	12	60	8	0	5	23	31	0	394	1871
08:45 AM	09:00 AM	47	90	1	0	4	63	19	0	17	77	12	0	6	51	25	0	412	1762



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound Left	Southbound Thru	Southbound Right	Westbound Left	Westbound Thru	Westbound Right	Northbound Left	Northbound Thru	Northbound Right	Eastbound Left	Eastbound Thru	Eastbound Right
2	415	260	121	339	19	45	317	57	147	123	26
	677			479			419			296	
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	07:45 AM to 8:45 AM					Peak Vol:	1871		PHF:	0.90	

PG Geneva Rd & State AM.xls

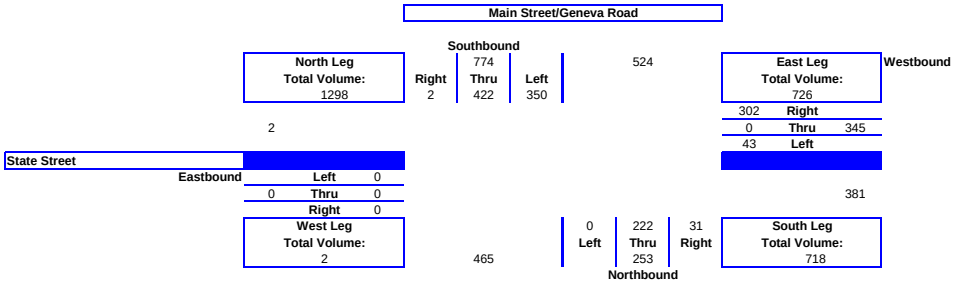
MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street/Geneva Road** E-W Street: **State Street**
Date: **Thursday, March 12, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	0	124	90	9	74	0	10	3	12	59	0	4	0	0	0	0	376	376
08:00 AM	08:15 AM	0	105	86	4	82	0	9	2	9	44	0	1	0	0	0	0	338	714
08:15 AM	08:30 AM	2	110	84	6	81	0	7	3	7	63	0	3	0	0	0	0	360	1074
08:30 AM	08:45 AM	0	83	90	5	65	0	17	3	3	56	0	4	0	0	0	0	321	1395
08:45 AM	09:00 AM																	0	1019



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
350	422	2	43	0	302	0	222	31	0	0	0
	774			345			253			0	
Trucks:		3%	Trucks:		3%	Trucks:		5%	Trucks:		0%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		1372	PHF:		0.91

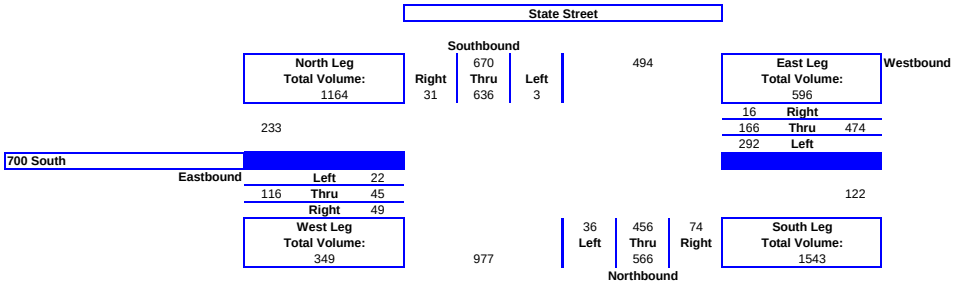
State Street & Main Street AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **700 South**
Date: **Thursday, March 05, 2009**
Begin Time: **07:00 AM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	12	157	0	1	5	44	84	1	21	132	10	1	9	11	7	1	495	495
08:00 AM	08:15 AM	8	155	2	3	3	32	69	0	18	99	10	1	8	13	1	0	419	914
08:15 AM	08:30 AM	6	174	0	0	3	42	76	0	14	103	9	0	14	9	7	0	457	1371
08:30 AM	08:45 AM	5	150	1	2	5	48	63	0	21	122	7	1	18	12	7	0	460	1831
08:45 AM	09:00 AM																	0	1336



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3	636	31	292	166	16	36	456	74	22	45	49
	670			474			566			116	
Trucks:		1%	Trucks:		0%	Trucks:		1%	Trucks:		1%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		1826	PHF:		0.92

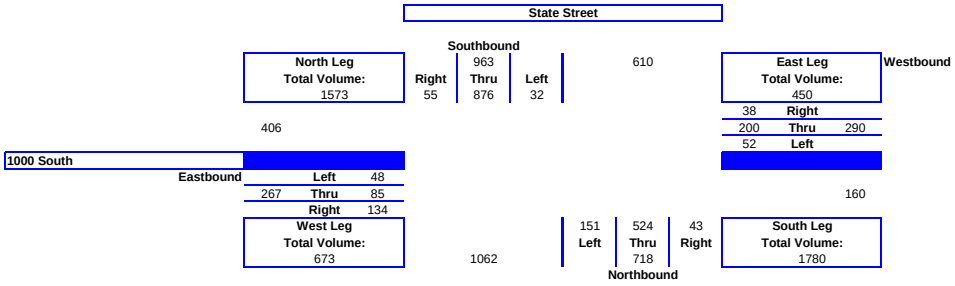
700 S & State Street AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **1000 South**
Date: **Thursday, March 05, 2009**
Begin Time: **07:00 AM** Counted by: **TN & JP**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	10	220	3	3	11	70	15	0	12	146	47	4	32	20	10	1	601	601
08:00 AM	08:15 AM	22	234	11	4	11	38	11	0	13	130	34	4	25	24	10	2	569	1170
08:15 AM	08:30 AM	12	215	12	1	7	50	8	0	7	100	33	3	40	25	16	2	530	1700
08:30 AM	08:45 AM	11	207	6	5	9	42	18	0	11	148	37	3	37	16	12	4	561	2261
08:45 AM	09:00 AM																	0	1660



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
32	876	55	52	200	38	151	524	43	48	85	134
	963			290			718			267	
Trucks:		1%	Trucks:		0%	Trucks:		2%	Trucks:		3%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		2238	PHF:		0.93

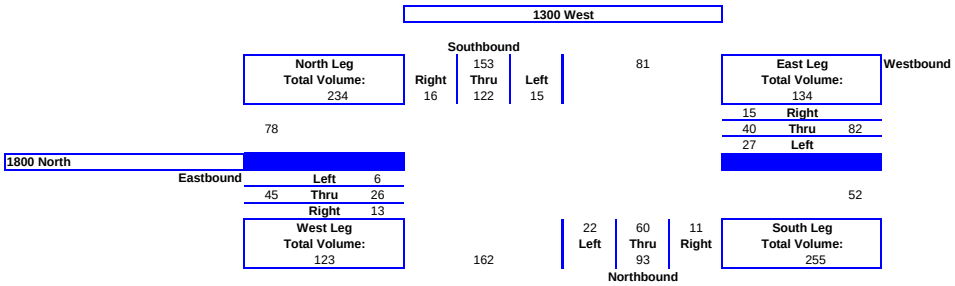
1000 S & State Street AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **1800 North**
Date: **Tuesday, March 10, 2009**
Begin Time: **07:00 AM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM	3	28	3	0	1	8	4	0	0	14	8	0	4	8	1	0	82	
07:45 AM	08:00 AM	7	23	6	0	3	12	9	0	1	20	3	0	1	3	1	0	89	171
08:00 AM	08:15 AM	4	45	6	0	7	14	10	0	6	16	5	0	4	7	1	0	125	296
08:15 AM	08:30 AM	2	26	0	0	4	6	4	0	4	10	6	1	4	8	3	0	78	374
08:30 AM	08:45 AM																	0	292
08:45 AM	09:00 AM																	0	203



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
15	122	16	27	40	15	22	60	11	6	26	13
	153			82			93			45	
Trucks:		0%	Trucks:		0%	Trucks:		1%	Trucks:		0%
Peak Hour:		07:30 AM to 8:30 AM				Peak Vol:		373	PHF:		0.75

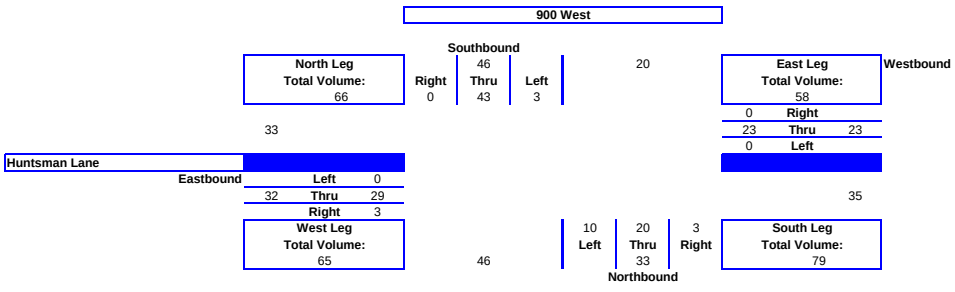
1800 N & 1300 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **900 West** E-W Street: **Huntsman Lane**
Date: **Tuesday, February 24, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM														0.1			0.1	
07:45 AM	08:00 AM														0.2			0.2	0.3
08:00 AM	08:15 AM														0.3			0.3	0.6
08:15 AM	08:30 AM	0	11	1	0	0	1	0	0	0	5	0	0	1	8	0	0	27	27.6
08:30 AM	08:45 AM	0	6	0	0	0	8	0	0	1	3	4	0	0	3	0	0	25	52.5
08:45 AM	09:00 AM																	0	52.3



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.55
Total:	2.55

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3	43	0	0	23	0	10	20	3	0	29	3
	46			23			33			32	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		134	PHF:		0.49

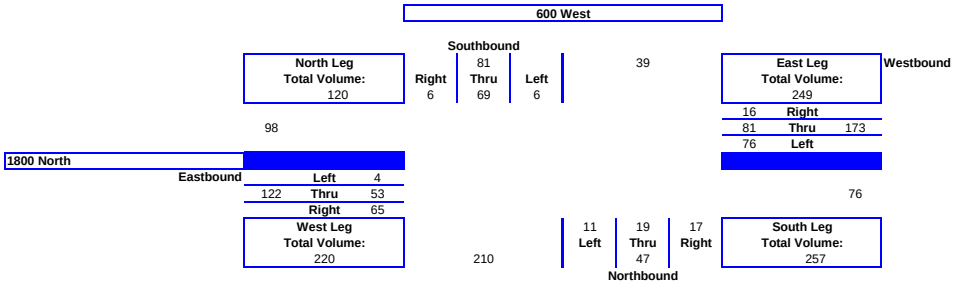
Huntsman Lane & 900 West AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **1800 North**
Date: **Thursday, March 05, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	1	13	2	0	1	11	11	0	3	5	1	0	9	18	3	0	78	
07:30 AM	07:45 AM	2	17	0	0	4	14	23	0	3	5	5	0	18	10	1	0	102	
07:45 AM	08:00 AM	2	26	2	0	9	44	31	0	7	5	3	0	29	22	0	0	180	360
08:00 AM	08:15 AM	1	13	2	0	2	12	11	0	4	4	2	0	9	3	0	0	63	423
08:15 AM	08:30 AM																	0	345
08:30 AM	08:45 AM																	0	243
08:45 AM	09:00 AM																	0	63



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6	69	6	76	81	16	11	19	17	4	53	65
	81			173			47			122	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		423	PHF:		0.59

1800 N & 600 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **800 North**
Date: **Thursday, February 26, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM															0.1		0.1	0.1
08:00 AM	08:15 AM															0.2		0.2	0.3
08:15 AM	08:30 AM															0.3		0.3	0.6
08:30 AM	08:45 AM	1	37	0	0	0	0	3	0	1	12	1	0	3	0	0	0	58	58.6
08:45 AM	09:00 AM	2	63	1	0	1	7	4	0	0	14	1	0	4	3	0	0	100	158.5

600 West

Southbound: 268 — Right 8, Thru 257, Left 3
North Leg Total Volume: 339
71
East Leg Total Volume: 53 — Westbound
3 Right
18 Thru 39
18 Left
31

800 North

Eastbound
Left 1
27 Thru 8
Right 18
West Leg Total Volume: 58
293
14
Northbound: 5 Left, 67 Thru, 3 Right — 75
South Leg Total Volume: 368

OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.57
Total:	2.57

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3	257	8	18	18	3	5	67	3	1	8	18
268			39			75			27		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		08:00 AM to 9:00 AM				Peak Vol:		409	PHF:		0.40

800 N & 600 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **500 North**
Date: **Thursday, February 19, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	0	164	5	0	10	0	6	0	2	79	0	0	0	0	0	0	266	
07:30 AM	07:45 AM	0	205	17	0	21	0	8	0	6	84	0	0	0	0	0	0	341	
07:45 AM	08:00 AM															0.1		0.1	607.1
08:00 AM	08:15 AM															0.2		0.2	607.3
08:15 AM	08:30 AM															0.3		0.3	341.6
08:30 AM	08:45 AM																	0	0.6
08:45 AM	09:00 AM																	0	0.5

100 East

Southbound: 903 — Right 0, Thru 852, Left 51
North Leg Total Volume: 1353
450
East Leg Total Volume: 173 — Westbound
72 Right
0 Thru 104
32 Left
0

500 North

Eastbound
Left 1
1 Thru 0
Right 0
West Leg Total Volume: 1
884
69
Northbound: 0 Left, 377 Thru, 18 Right — 395
South Leg Total Volume: 1279

OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.31
Total:	2.31

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
51	852	0	32	0	72	0	377	18	1	0	0
903			104			395			1		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		1403	PHF:		0.45

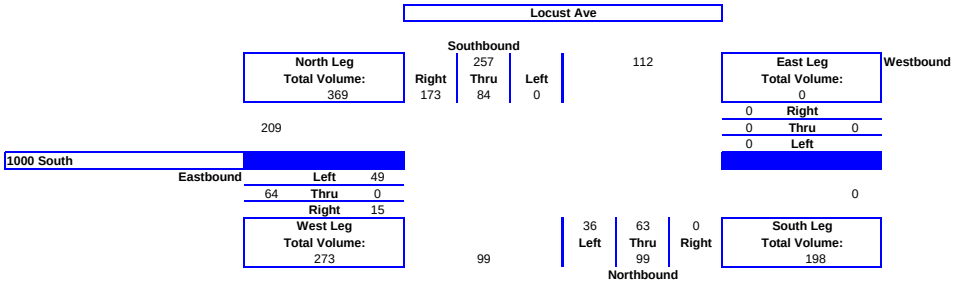
500 N & 100 E AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Locust Ave** E-W Street: **1000 South**
Date: **Thursday, February 26, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	56	28	0	1	0	0	0	0	0	21	10	1	2	0	11	0	129	129
08:00 AM	08:15 AM	31	14	0	0	0	0	0	0	0	25	8	0	4	0	13	0	95	224
08:15 AM	08:30 AM	33	13	0	0	0	0	0	0	0	10	7	1	5	0	19	2	90	314
08:30 AM	08:45 AM	53	29	0	2	0	0	0	0	0	7	11	1	4	0	6	0	111	425
08:45 AM	09:00 AM																	0	296



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	84	173	0	0	0	36	63	0	49	0	15
	257			0			99			64	
Trucks:		1%	Trucks:		0%	Trucks:		3%	Trucks:		3%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		420	PHF:		0.81

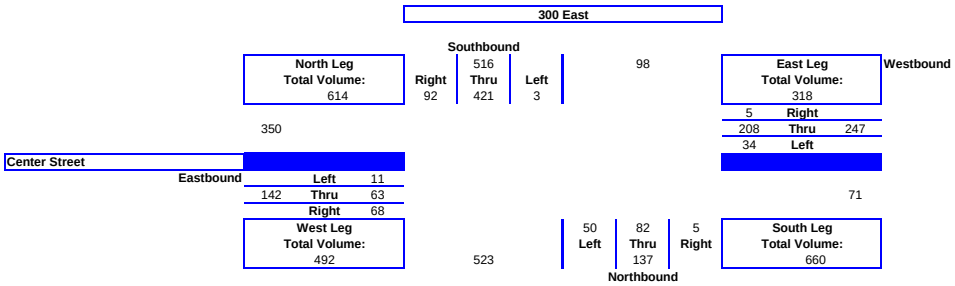
1000 S & Locust AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **300 East** E-W Street: **Center Street**
Date: **Wednesday, February 18, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	15	66	0	0	2	33	6	0	1	14	11	0	8	10	2	0	168	
07:30 AM	07:45 AM	20	94	1	0	0	46	7	0	1	17	8	0	18	14	2	0	228	
07:45 AM	08:00 AM															0.1		0.1	396.1
08:00 AM	08:15 AM															0.2		0.2	396.3
08:15 AM	08:30 AM															0.3		0.3	228.6
08:30 AM	08:45 AM																	0	0.6
08:45 AM	09:00 AM																	0	0.5



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.63
Total:	2.63

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3	421	92	34	208	5	50	82	5	11	63	68
	516			247			137			142	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		1042	PHF:		0.43

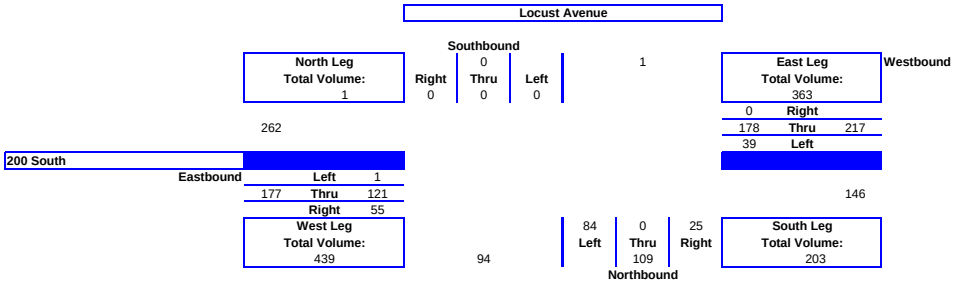
Center St & 300 E AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Locust Avenue** E-W Street: **200 South**
Date: **Wednesday, February 18, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM															0.1		0.1	0.1
08:00 AM	08:15 AM															0.2		0.2	0.3
08:15 AM	08:30 AM															0.3		0.3	0.6
08:30 AM	08:45 AM	0	0	0	0	0	36	10	0	6	0	23	0	9	21	0	0	105	105.6
08:45 AM	09:00 AM	0	0	0	0	0	51	9	0	6	0	18	0	18	38	0	0	140	245.5



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.05
Total:	2.05

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	39	178	0	84	0	25	1	121	55
	0			217			109			177	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		08:00 AM to 9:00 AM				Peak Vol:		503	PHF:		0.44

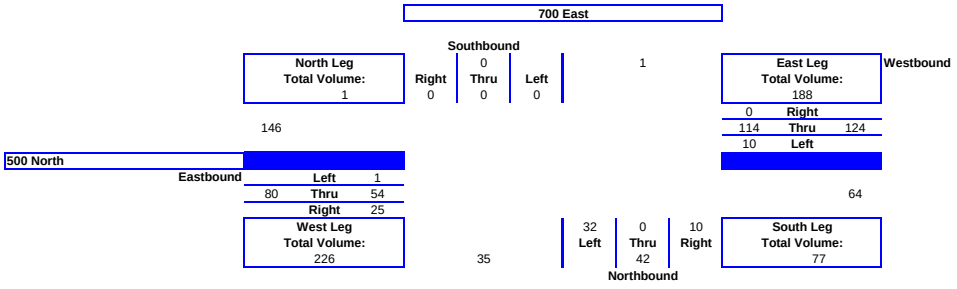
200 S & Locust AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **700 East** E-W Street: **500 North**
Date: **Wednesday, March 04, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM															0.1		0.1	
07:45 AM	08:00 AM															0.2		0.2	0.3
08:00 AM	08:15 AM															0.3		0.3	0.6
08:15 AM	08:30 AM	0	0	0	0	0	17	3	0	1	0	4	0	5	14	0	0	44	44.6
08:30 AM	08:45 AM	0	0	0	0	0	29	1	0	3	0	9	0	5	8	0	0	55	99.5
08:45 AM	09:00 AM																	0	99.3



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.47
Total:	2.47

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	10	114	0	32	0	10	1	54	25
	0			124			42			80	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		246	PHF:		0.45

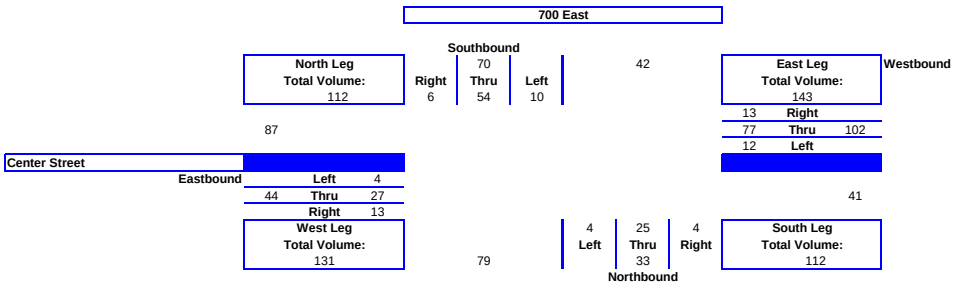
700 E & 500 N AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **700 East** E-W Street: **Center Street**
Date: **Wednesday, February 18, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks		
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	2	19	3	0	6	21	3	0	1	6	2	0	4	9	1	0	77	77
08:00 AM	08:15 AM	1	9	2	0	1	19	3	0	1	7	0	0	3	5	1	0	52	129
08:15 AM	08:30 AM															0.1		0.1	129.1
08:30 AM	08:45 AM															0.2		0.2	129.3
08:45 AM	09:00 AM															0.3		0.3	52.6



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.92
Total:	1.92

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
10	54	6	12	77	13	4	25	4	4	27	13
	70			102			33			44	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		249	PHF:		0.42

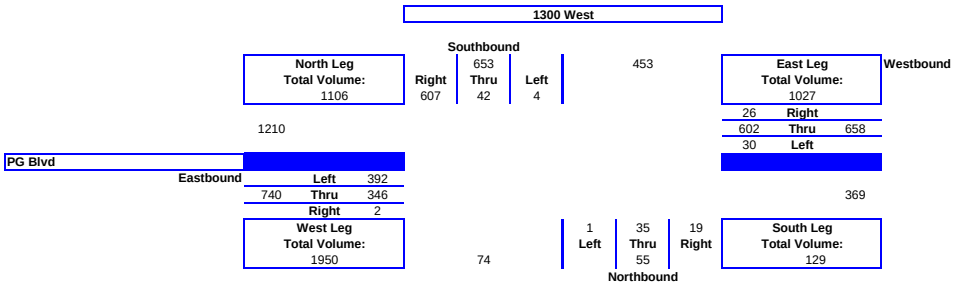
Center St & 700 E AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **PG Blvd**
Date: **Wednesday, March 04, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks		
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM	98	5	0	1	1	103	1	6	1	5	0	1	0	66	48	6	341	
07:15 AM	07:30 AM	136	2	0	0	1	148	5	2	3	4	0	1	0	77	54	5	438	
07:30 AM	07:45 AM	171	7	0	0	4	162	10	2	1	3	0	0	0	79	56	2	497	
07:45 AM	08:00 AM	208	8	1	1	3	180	10	3	4	7	0	1	0	97	87	3	612	1888
08:00 AM	08:15 AM	163	9	0	2	6	149	11	2	0	8	0	0	0	76	100	2	526	2073
08:15 AM	08:30 AM	147	11	1	0	6	116	3	3	3	4	0	0	0	83	115	3	495	2130
08:30 AM	08:45 AM	135	15	2	1	5	150	6	3	6	8	0	1	1	88	69	3	492	2125
08:45 AM	09:00 AM	162	7	1	1	9	187	10	3	10	15	1	2	1	99	108	3	618	2131



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4	42	607	30	602	26	1	35	19	392	346	2
	653			658			55			740	
Trucks:		1%	Trucks:		2%	Trucks:		5%	Trucks:		1%
Peak Hour:		08:00 AM to 9:00 AM				Peak Vol:		2106	PHF:		0.85

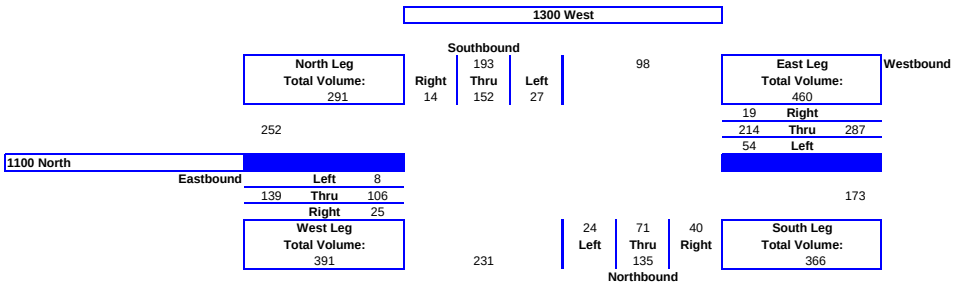
PG Blvd & 1300 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **1100 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **07:00 AM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total	Hourly
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	4	39	10	0	3	55	6	0	6	16	5	0	6	19	3	0	172	
07:30 AM	07:45 AM	6	29	7	0	6	45	10	0	7	15	5	0	13	26	1	2	172	
07:45 AM	08:00 AM	3	52	4	0	7	59	16	1	15	19	8	0	2	29	1	0	216	560
08:00 AM	08:15 AM	1	32	6	0	3	55	22	0	12	21	6	0	4	32	3	1	198	758
08:15 AM	08:30 AM																	0	586
08:30 AM	08:45 AM																	0	414
08:45 AM	09:00 AM																	0	198



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
27	152	14	54	214	19	24	71	40	8	106	25
	193			287			135			139	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		2%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		754	PHF:		0.87

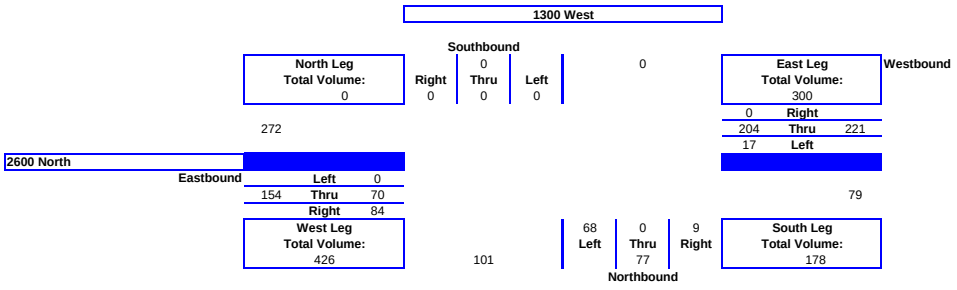
1100 N & 1300 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **2600 North**
Date: **Wednesday, February 25, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total	Hourly
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	0	0	0	0	0	38	1	0	0	0	9	0	10	17	0	0	75	
07:30 AM	07:45 AM	0	0	0	0	0	60	3	0	3	0	13	0	15	17	0	0	111	
07:45 AM	08:00 AM	0	0	0	0	0	65	5	0	2	0	22	0	29	19	0	0	142	328
08:00 AM	08:15 AM	0	0	0	0	0	41	8	0	4	0	24	0	30	17	0	0	124	452
08:15 AM	08:30 AM																	0	377
08:30 AM	08:45 AM																	0	266
08:45 AM	09:00 AM																	0	124



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	17	204	0	68	0	9	0	70	84
	0			221			77			154	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		452	PHF:		0.80

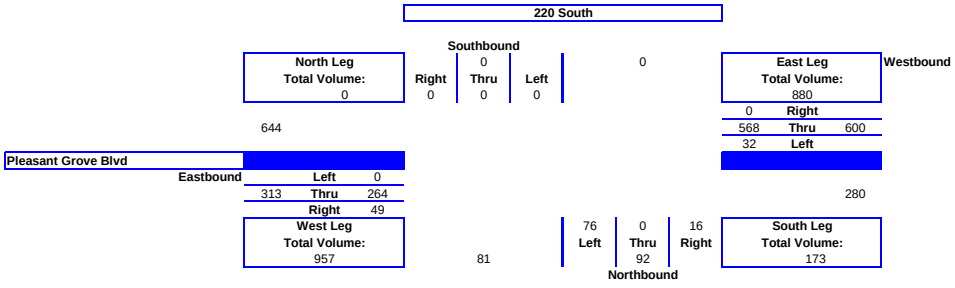
2600 N & 1300 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **220 South** E-W Street: **Pleasant Grove Blvd**
Date: **Tuesday, March 03, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM	0	0	0	0	0	150	6	4	7	0	17	1	13	66	0	0	264	
07:45 AM	08:00 AM	0	0	0	0	0	149	8	2	2	0	21	0	7	72	0	2	263	527
08:00 AM	08:15 AM	0	0	0	0	0	148	9	4	5	0	25	0	15	72	0	3	281	808
08:15 AM	08:30 AM	0	0	0	0	0	126	8	4	3	0	12	2	6	55	0	2	218	1026
08:30 AM	08:45 AM	0	0	0	0	0	145	7	5	6	0	18	0	21	65	0	6	273	1035
08:45 AM	09:00 AM																	0	772



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	32	568	0	76	0	16	0	264	49	
	0			600			92			313		
Trucks:		0%	Trucks:		3%	Trucks:		2%	Trucks:		4%	
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		1005	PHF:		0.89	

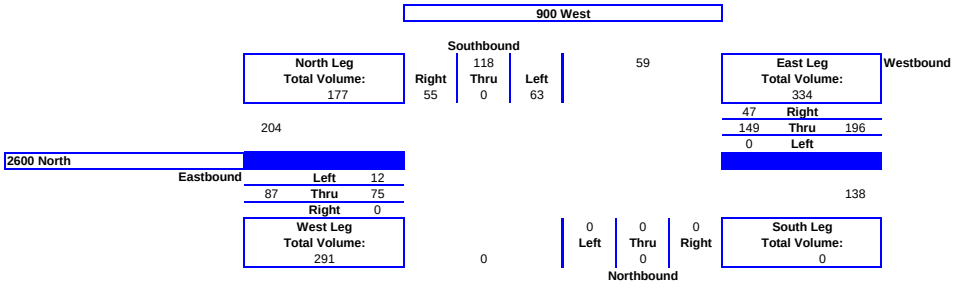
PG Blvd & 220 S AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **900 West** E-W Street: **2600 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	17	0	10	0	6	33	0	0	0	0	0	0	0	19	2	0	87	
07:30 AM	07:45 AM	18	0	9	0	18	47	0	0	0	0	0	0	0	21	5	0	118	
07:45 AM	08:00 AM	9	0	26	0	17	39	0	0	0	0	0	0	0	21	1	0	113	318
08:00 AM	08:15 AM	11	0	18	0	6	30	0	0	0	0	0	0	0	14	4	0	83	401
08:15 AM	08:30 AM																	0	314
08:30 AM	08:45 AM																	0	196
08:45 AM	09:00 AM																	0	83



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
63	0	55	0	149	47	0	0	0	12	75	0	
	118			196			0			87		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%	
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		401	PHF:		0.85	

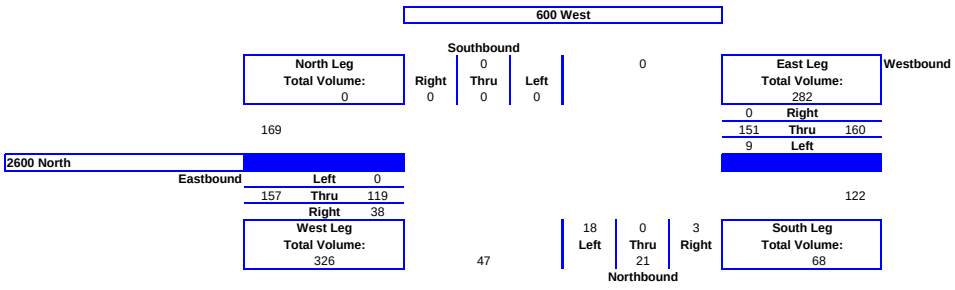
2600 N & 900 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **2600 North**
Date: **Thursday, February 19, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	0	0	0	0	0	27	2	0	0	0	3	0	5	28	0	0	65	
07:30 AM	07:45 AM	0	0	0	0	0	42	0	0	1	0	3	0	8	26	0	0	80	
07:45 AM	08:00 AM	0	0	0	0	0	51	6	0	2	0	8	0	12	33	0	0	112	257
08:00 AM	08:15 AM	0	0	0	0	0	31	1	0	0	0	4	0	13	32	0	0	81	338
08:15 AM	08:30 AM																	0	273
08:30 AM	08:45 AM																	0	193
08:45 AM	09:00 AM																	0	81



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	9	151	0	18	0	3	0	119	38
	0			160			21			157	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		338	PHF:		0.75

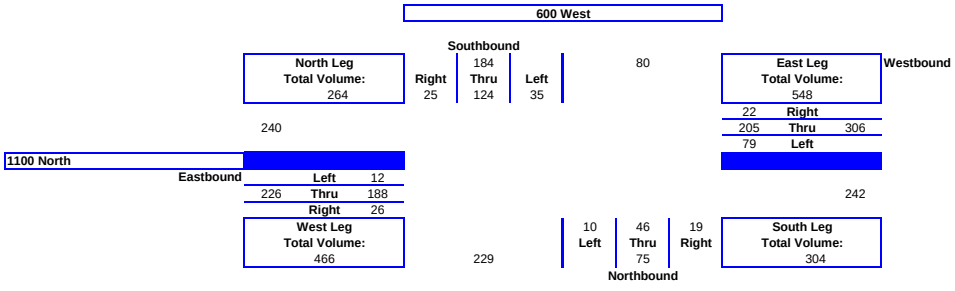
2600 N & 600 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **1100 North**
Date: **Thursday, February 26, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	4	17	4	0	3	45	16	0	4	16	2	0	4	35	1	0	151	
07:30 AM	07:45 AM	8	34	7	0	3	43	13	0	4	11	2	0	5	45	5	0	180	
07:45 AM	08:00 AM	8	43	14	0	9	65	25	0	3	14	4	0	8	57	2	0	252	583
08:00 AM	08:15 AM	5	30	10	0	7	52	25	0	8	5	2	0	9	51	4	0	208	791
08:15 AM	08:30 AM																	0	640
08:30 AM	08:45 AM																	0	460
08:45 AM	09:00 AM																	0	208



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
35	124	25	79	205	22	10	46	19	12	188	26
	184			306			75			226	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		791	PHF:		0.78

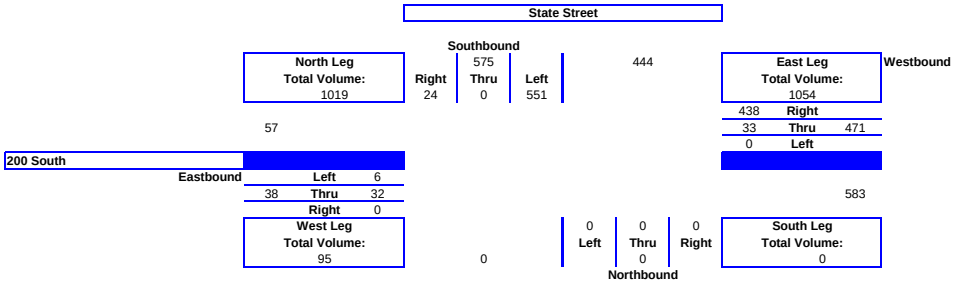
1100 N & 600 W AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **200 South**
Date: **Tuesday, February 24, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM	6	0	134	6	89	5	0	3	0	0	0	0	0	10	2	3	252	
07:45 AM	08:00 AM	3	0	133	5	138	9	0	5	0	0	0	0	0	8	1	1	298	550
08:00 AM	08:15 AM	5	0	143	10	113	12	0	3	0	0	0	0	0	8	3	0	287	837
08:15 AM	08:30 AM	10	0	141	2	98	7	0	2	0	0	0	0	0	6	0	1	265	1102
08:30 AM	08:45 AM	11	0	98	4	94	14	0	3	0	0	0	0	0	5	7	1	233	1083
08:45 AM	09:00 AM																	0	785



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
551	0	24	0	33	438	0	0	0	6	32	0
575			471			0			38		
Trucks:		4%	Trucks:		3%	Trucks:		0%	Trucks:		13%
Peak Hour:		07:30 AM to 8:30 AM				Peak Vol:		1084	PHF:		0.91

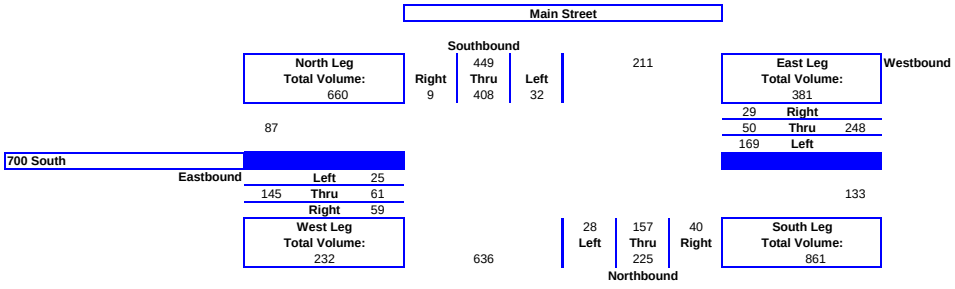
200 S & State Street AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street** E-W Street: **700 South**
Date: **Wednesday, February 25, 2009**
Begin Time: **07:00 AM** Counted by: **KM & DS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	4	127	5	0	4	15	49	0	9	45	11	0	24	12	4	0	309	
07:30 AM	07:45 AM	1	108	6	0	2	13	50	0	12	41	5	0	16	21	8	0	283	
07:45 AM	08:00 AM	3	87	11	0	9	11	33	0	8	29	7	0	7	17	6	0	228	820
08:00 AM	08:15 AM	1	86	10	0	14	11	37	0	11	42	5	0	12	11	7	0	247	1067
08:15 AM	08:30 AM																	0	758
08:30 AM	08:45 AM																	0	475
08:45 AM	09:00 AM																	0	247



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
32	408	9	169	50	29	28	157	40	25	61	59
449			248			225			145		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		1067	PHF:		0.86

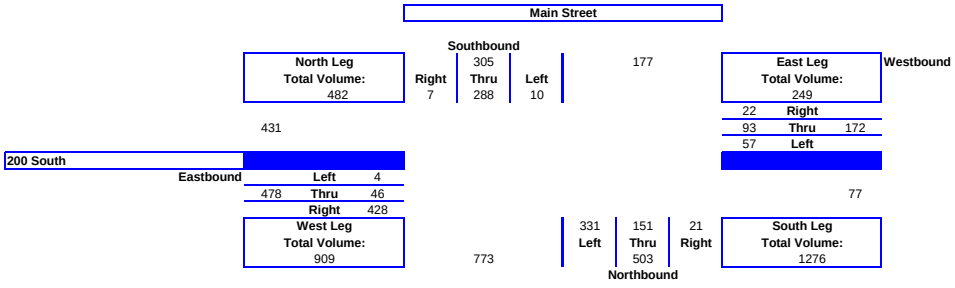
700 S & Main St AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street** E-W Street: **200 South**
Date: **Thursday, February 26, 2009**
Begin Time: **07:00 AM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	0	82	1	0	8	27	14	1	3	42	94	1	124	7	0	2	406	406
08:00 AM	08:15 AM	5	84	1	0	3	18	15	0	5	47	89	1	93	16	0	4	381	787
08:15 AM	08:30 AM	2	62	4	1	4	25	10	1	3	22	69	2	107	19	1	4	335	1122
08:30 AM	08:45 AM	0	60	4	0	7	23	18	0	10	40	79	5	104	4	3	1	358	1480
08:45 AM	09:00 AM																	0	1074



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
10	288	7	57	93	22	331	151	21	4	46	428
305			172			503			478		
Trucks:	0%		Trucks:	1%		Trucks:	2%		Trucks:	2%	
Peak Hour:	07:45 AM to 8:45 AM					Peak Vol:	1458		PHF:	0.90	

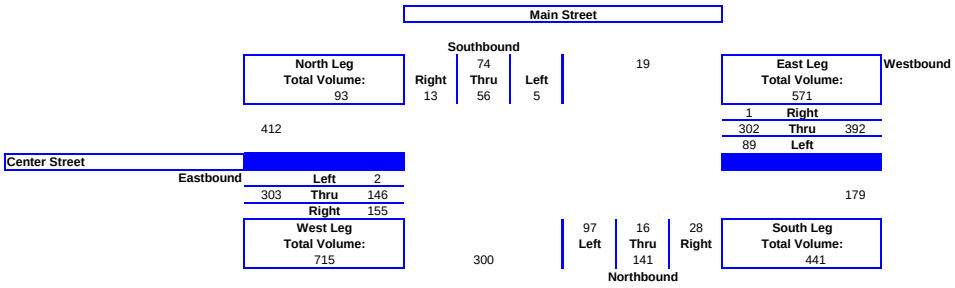
200 S & Main St AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street** E-W Street: **Center Street**
Date: **Wednesday, February 25, 2009**
Begin Time: **07:00 AM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	3	12	0	0	0	82	25	0	8	1	28	0	50	32	1	0	242	242
08:00 AM	08:15 AM	2	13	2	0	1	83	26	0	10	4	21	0	41	40	0	1	244	486
08:15 AM	08:30 AM	5	12	2	0	0	63	17	0	5	8	27	0	45	33	1	0	218	704
08:30 AM	08:45 AM	3	19	1	0	0	74	21	0	5	3	21	0	19	41	0	0	207	911
08:45 AM	09:00 AM																	0	669



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5	56	13	89	302	1	97	16	28	2	146	155
74			392			141			303		
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	07:45 AM to 8:45 AM					Peak Vol:	910		PHF:	0.93	

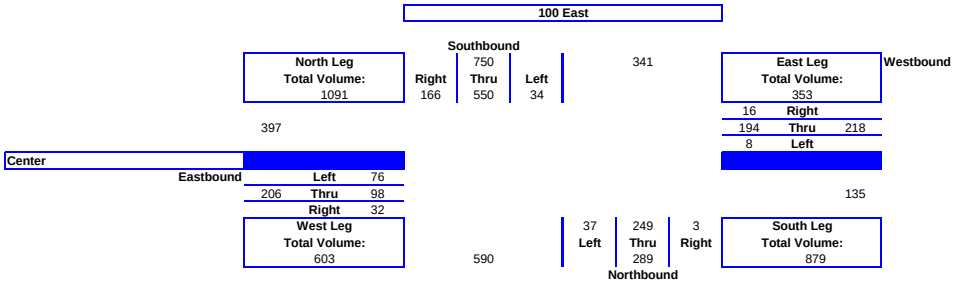
Center St & Main St AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **Center**
Date: **Thursday, February 19, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	41	152	10	0	4	56	3	0	1	67	11	0	7	22	22	0	396	396
08:00 AM	08:15 AM	47	144	11	0	4	57	2	0	0	66	11	0	9	24	17	0	392	788
08:15 AM	08:30 AM	36	125	8	0	2	44	2	0	1	54	10	0	7	22	18	0	329	1117
08:30 AM	08:45 AM	42	129	5	0	6	37	1	0	1	62	5	0	9	30	19	0	346	1463
08:45 AM	09:00 AM																	0	1067



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
34	550	166	8	194	16	37	249	3	76	98	32
	750			218			289			206	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		1463	PHF:		0.92

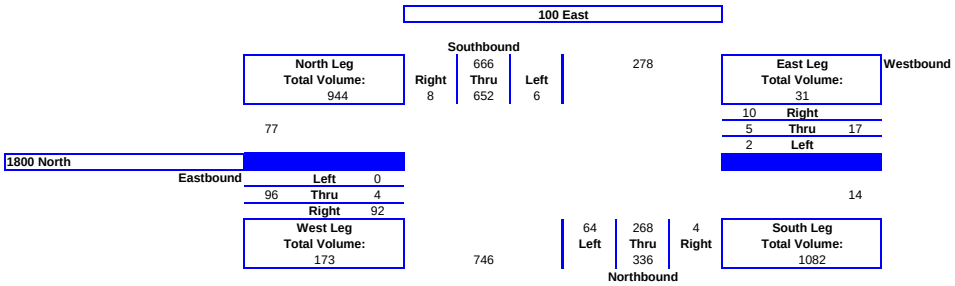
Center & 100 E AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **1800 North**
Date: **Thursday, February 26, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM	3	172	1	0	3	0	1	0	1	84	13	0	25	0	0	0	303	
07:45 AM	08:00 AM	2	162	2	0	3	4	0	0	1	58	27	0	33	1	0	0	293	596
08:00 AM	08:15 AM	1	151	2	0	2	1	1	0	1	67	19	0	20	3	0	0	268	864
08:15 AM	08:30 AM	2	167	1	0	2	0	0	0	1	59	5	0	14	0	0	0	251	1115
08:30 AM	08:45 AM																	0	812
08:45 AM	09:00 AM																	0	519



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6	652	8	2	5	10	64	268	4	0	4	92
	666			17			336			96	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:30 AM to 8:30 AM				Peak Vol:		1115	PHF:		0.92

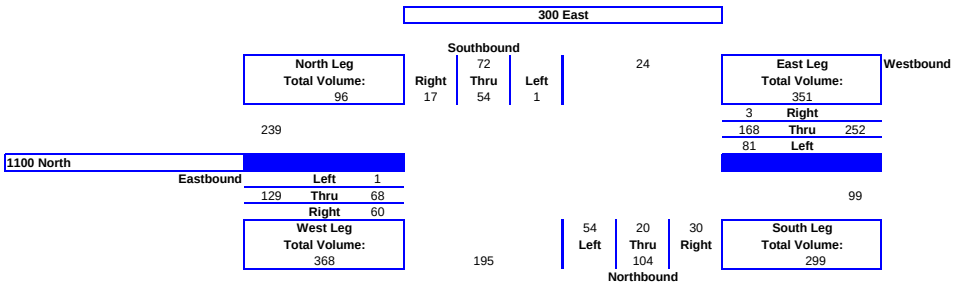
1800 N & 100 E AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **300 East** E-W Street: **1100 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	4	12	1	0	2	50	16	0	5	4	9	0	8	11	0	0	122	
07:30 AM	07:45 AM	3	14	0	0	1	40	20	0	6	4	13	0	13	15	0	0	129	
07:45 AM	08:00 AM	8	22	0	0	0	39	34	0	11	6	23	0	24	18	1	0	186	437
08:00 AM	08:15 AM	2	6	0	0	0	39	11	0	8	6	9	0	15	24	0	0	120	557
08:15 AM	08:30 AM																	0	435
08:30 AM	08:45 AM																	0	306
08:45 AM	09:00 AM																	0	120



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	54	17	81	168	3	54	20	30	1	68	60
	72			252			104			129	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		557	PHF:		0.75

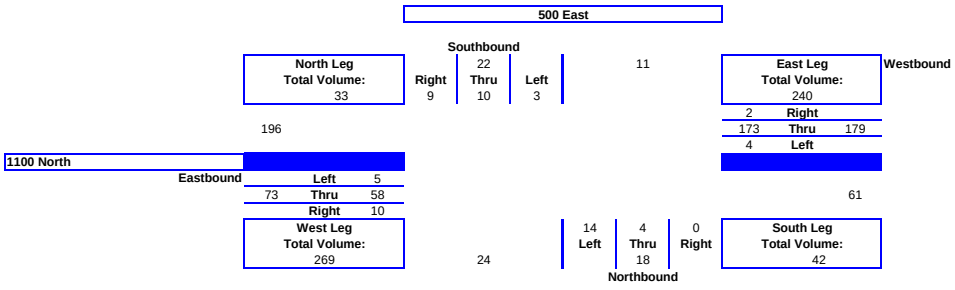
1100 N & 300 E AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **500 East** E-W Street: **1100 North**
Date: **Wednesday, February 25, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	4	6	0	0	1	30	3	0	0	1	6	0	4	4	0	0	59	
07:30 AM	07:45 AM	1	2	0	0	0	43	0	0	0	2	5	0	1	7	0	0	61	
07:45 AM	08:00 AM	4	2	2	0	1	60	0	0	0	0	1	0	3	24	2	0	99	219
08:00 AM	08:15 AM	0	0	1	0	0	40	1	0	0	1	2	0	2	23	3	0	73	292
08:15 AM	08:30 AM																	0	233
08:30 AM	08:45 AM																	0	172
08:45 AM	09:00 AM																	0	73



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3	10	9	4	173	2	14	4	0	5	58	10
	22			179			18			73	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		292	PHF:		0.74

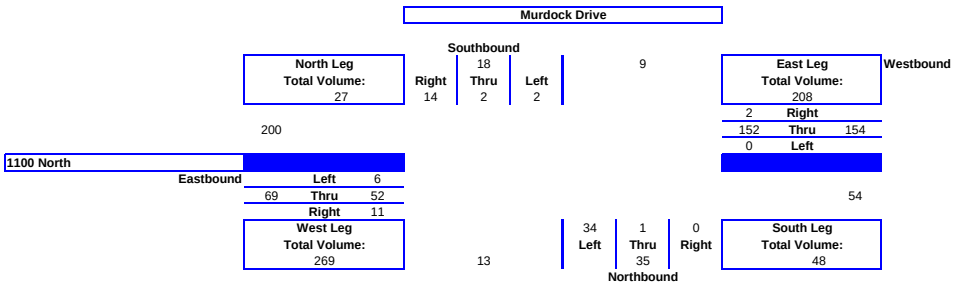
1100 N & 500 East AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Murdock Drive** E-W Street: **1100 North**
Date: **Wednesday, March 04, 2009**
Begin Time: **07:00 AM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	1	0	0	0	0	30	0	0	0	0	8	0	1	7	0	0	47	
07:30 AM	07:45 AM	6	1	0	0	1	42	0	0	0	0	11	0	2	6	2	0	71	
07:45 AM	08:00 AM	4	0	1	0	0	47	0	0	0	1	10	0	3	17	2	0	85	203
08:00 AM	08:15 AM	3	1	1	0	1	33	0	0	0	0	5	0	5	22	2	0	73	276
08:15 AM	08:30 AM																	0	229
08:30 AM	08:45 AM																	0	158
08:45 AM	09:00 AM																	0	73



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	2	14	0	152	2	34	1	0	6	52	11
	18			154			35			69	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:			07:15 AM to 8:15 AM			Peak Vol:		276	PHF:		0.81

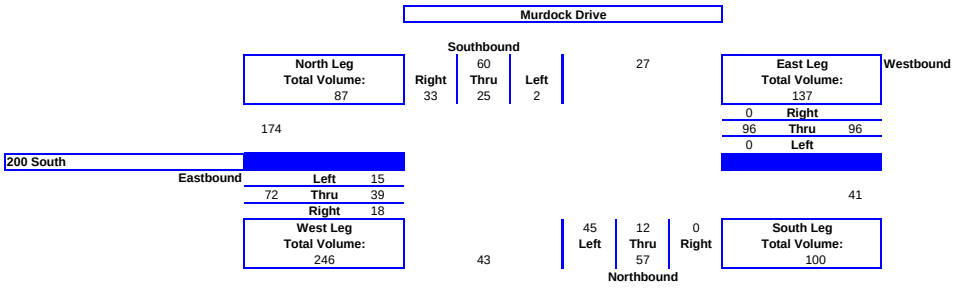
1100 N & Murdock AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Murdock Drive** E-W Street: **200 South**
Date: **Wednesday, February 25, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM															0.1		0.1	0.1
08:00 AM	08:15 AM															0.2		0.2	0.3
08:15 AM	08:30 AM															0.3		0.3	0.6
08:30 AM	08:45 AM	10	4	1	0	0	22	0	0	0	2	10	3	8	11	4	2	77	77.6
08:45 AM	09:00 AM	6	8	0	0	0	25	0	0	0	4	12	0	1	8	3	1	68	145.5



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.05
Total:	2.05

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	25	33	0	96	0	45	12	0	15	39	18
	60			96			57			72	
Trucks:		0%	Trucks:		0%	Trucks:		11%	Trucks:		8%
Peak Hour:			08:00 AM to 9:00 AM			Peak Vol:		285	PHF:		0.45

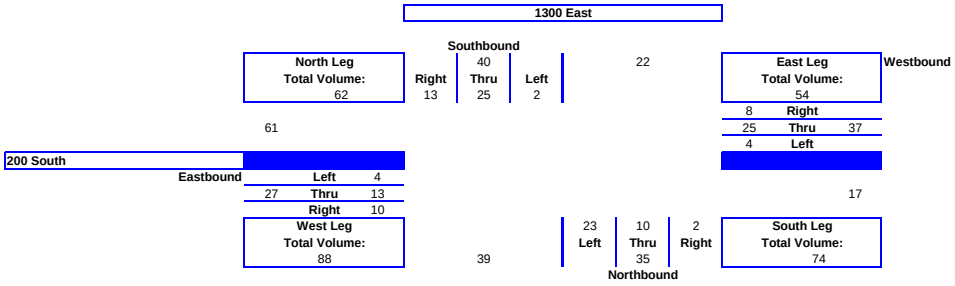
200 S & Murdock AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 East** E-W Street: **200 South**
Date: **Wednesday, February 25, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM																	0	
07:30 AM	07:45 AM																	0	
07:45 AM	08:00 AM	6	7	1	0	3	8	0	2	0	1	4	0	1	3	0	0	36	36
08:00 AM	08:15 AM	1	6	0	1	1	5	2	0	1	4	8	0	4	4	2	1	39	75
08:15 AM	08:30 AM															0.1		0.1	75.1
08:30 AM	08:45 AM															0.2		0.2	75.3
08:45 AM	09:00 AM															0.3		0.3	39.6



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.92
Total:	1.92

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

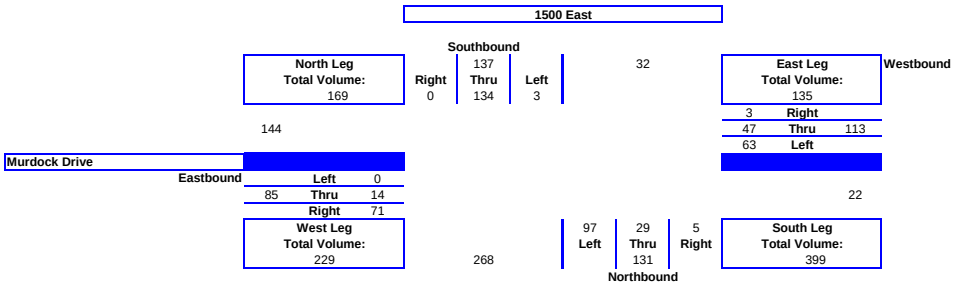
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	25	13	4	25	8	23	10	2	4	13	10
	40			37			35			27	
Trucks:		5%	Trucks:		11%	Trucks:		0%	Trucks:		7%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		139	PHF:		0.46

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1500 East** E-W Street: **Murdock Drive**
Date: **Wednesday, February 25, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
07:00 AM	07:15 AM																	0	
07:15 AM	07:30 AM	0	24	0	0	1	6	11	0	0	0	15	1	13	3	0	1	75	
07:30 AM	07:45 AM	0	27	1	0	0	12	13	0	2	11	22	2	14	2	0	0	106	
07:45 AM	08:00 AM														0.1			0.1	181.1
08:00 AM	08:15 AM														0.2			0.2	181.3
08:15 AM	08:30 AM														0.3			0.3	106.6
08:30 AM	08:45 AM																	0	0.6
08:45 AM	09:00 AM																	0	0.5



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.63
Total:	2.63

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

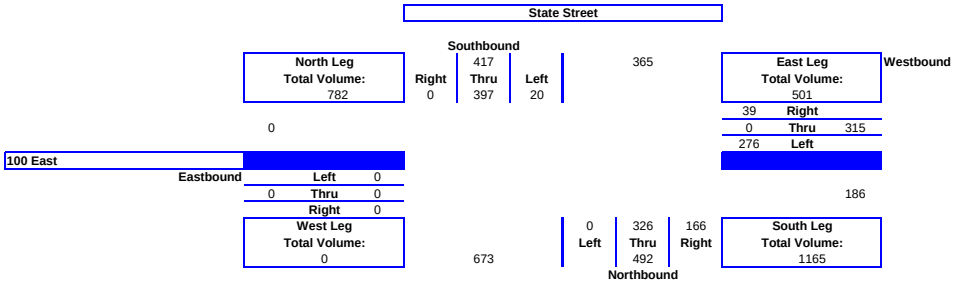
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3	134	0	63	47	3	97	29	5	0	14	71
	137			113			131			85	
Trucks:		0%	Trucks:		0%	Trucks:		6%	Trucks:		3%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		466	PHF:		0.42

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **100 East**
Date: **Tuesday, February 17, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks		
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM	0	53	5	0	13	0	44	0	44	49	0	0	0	0	0	0	208	
07:15 AM	07:30 AM	0	61	7	0	14	0	54	0	41	53	0	0	0	0	0	0	230	
07:30 AM	07:45 AM	0	79	8	0	10	0	55	0	37	47	0	0	0	0	0	0	236	
07:45 AM	08:00 AM	0	112	2	0	13	0	69	0	47	84	0	0	0	0	0	0	327	1001
08:00 AM	08:15 AM	0	94	9	0	12	0	89	0	36	71	0	0	0	0	0	0	311	1104
08:15 AM	08:30 AM	0	89	3	0	6	0	60	0	39	84	0	0	0	0	0	0	281	1155
08:30 AM	08:45 AM	0	102	6	0	8	0	58	0	44	87	0	0	0	0	0	0	305	1224
08:45 AM	09:00 AM	0	103	5	0	9	0	66	0	47	62	0	0	0	0	0	0	292	1189



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
20	397	0	276	0	39	0	326	166	0	0	0
417			315			492			0		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		1224	PHF:		0.94

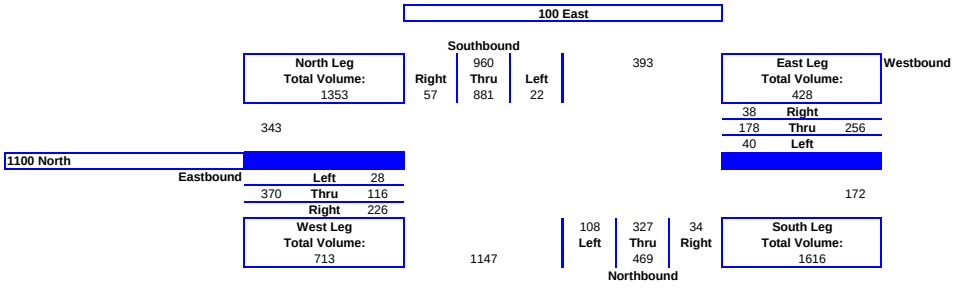
State Street & 100 East (Post detour) AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **1100 North**
Date: **Thursday, February 19, 2009**
Begin Time: **07:00 AM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks		
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM	10	95	7	0	7	31	7	1	3	45	14	1	23	10	1	3	258	
07:15 AM	07:30 AM	6	204	1	2	10	36	2	1	1	82	14	4	57	21	6	1	446	
07:30 AM	07:45 AM	14	211	4	1	11	34	9	1	4	70	21	0	52	16	5	1	453	
07:45 AM	08:00 AM	12	240	7	2	10	59	16	0	9	76	23	2	60	40	6	4	564	1721
08:00 AM	08:15 AM	25	226	10	0	7	49	13	1	20	99	50	3	57	39	11	3	613	2076
08:15 AM	08:30 AM	12	218	3	4	6	28	17	0	9	61	21	2	34	21	9	1	442	2072
08:30 AM	08:45 AM	7	187	9	5	8	28	22	1	10	48	24	0	27	15	10	2	398	2017
08:45 AM	09:00 AM	6	152	4	2	16	54	24	6	6	66	20	5	21	18	11	1	410	1863



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
22	881	57	40	178	38	108	327	34	28	116	226
960			256			469			370		
Trucks:		1%	Trucks:		1%	Trucks:		2%	Trucks:		2%
Peak Hour:		07:15 AM to 8:15 AM				Peak Vol:		2055	PHF:		0.84

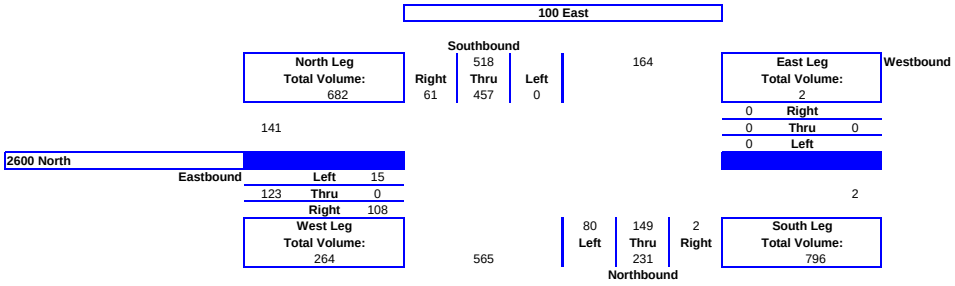
1100 N & 100 E AM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East**
E-W Street: **2600 North**
Date: **Tuesday, February 17, 2009**
Begin Time: **07:00 AM**
Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
07:00 AM	07:15 AM	14	76	0	1	0	0	0	0	1	31	15	0	9	2	4	0	152	
07:15 AM	07:30 AM	18	104	0	0	0	0	0	0	0	50	16	0	19	0	5	0	212	
07:30 AM	07:45 AM	23	135	0	0	0	0	0	0	2	36	25	0	24	0	3	0	248	
07:45 AM	08:00 AM	10	120	0	0	0	0	0	0	0	31	22	0	38	0	1	0	222	834
08:00 AM	08:15 AM	10	98	0	0	0	0	0	0	0	32	17	0	27	0	6	0	190	872
08:15 AM	08:30 AM	6	88	0	0	0	0	0	0	1	34	13	0	24	0	2	0	168	828
08:30 AM	08:45 AM	13	77	0	0	0	0	0	0	0	34	18	0	28	0	4	0	174	754
08:45 AM	09:00 AM	15	90	0	0	0	0	0	0	0	42	24	0	21	0	8	0	200	732



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound Left	Southbound Thru	Southbound Right	Westbound Left	Westbound Thru	Westbound Right	Northbound Left	Northbound Thru	Northbound Right	Eastbound Left	Eastbound Thru	Eastbound Right
0	457	61	0	0	0	80	149	2	15	0	108
	518			0			231			123	
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	07:15 AM to 8:15 AM					Peak Vol:	872		PHF:	0.88	

2600 N & 100 E AM.xls

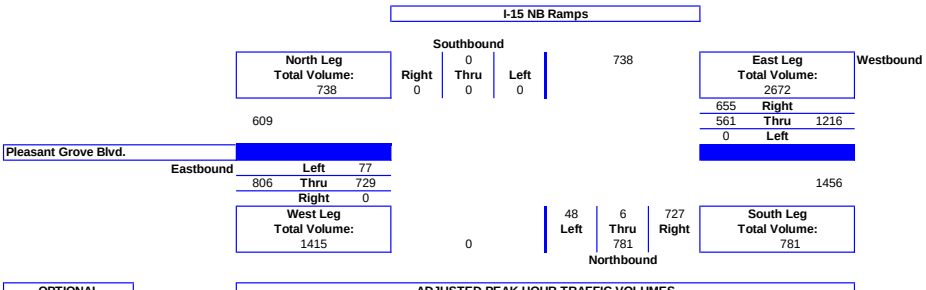
MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **I-15 NB Ramps**
E-W Street: **Pleasant Grove Blvd.**
Date: **Monday, August 04, 2008**
Begin Time: **04:00 PM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
04:00 PM	04:15 PM	0	0	0	0	137	77	0	33	129	0	16	4	0	140	15	7	558	
04:15 PM	04:30 PM	0	0	0	0	87	100	0	6	128	0	23	7	0	152	18	9	530	
04:30 PM	04:45 PM	0	0	0	0	139	119	0	8	125	1	9	1	0	175	12	6	595	
04:45 PM	05:00 PM	0	0	0	0	134	103	0	4	154	0	11	1	0	152	15	4	578	2261
05:00 PM	05:15 PM	0	0	0	0	179	124	0	11	174	3	10	5	0	172	33	7	718	2421
05:15 PM	05:30 PM	0	0	0	0	167	176	0	7	220	0	11	4	0	177	18	6	786	2677
05:30 PM	05:45 PM	0	0	0	0	177	130	0	6	171	2	10	1	0	194	23	6	720	2802
05:45 PM	06:00 PM	0	0	0	0	145	142	0	2	177	1	18	2	0	201	5	3	696	2920



OPTIONAL Adjustment Factors	
Monthly:	0.98
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	0.98

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound Left	Southbound Thru	Southbound Right	Westbound Left	Westbound Thru	Westbound Right	Northbound Left	Northbound Thru	Northbound Right	Eastbound Left	Eastbound Thru	Eastbound Right
0	0	0	0	561	655	48	6	727	77	729	0
	0			1216			781			806	
Trucks:	0%		Trucks:	2%		Trucks:	2%		Trucks:	3%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	2803		PHF:	0.91	

PG Blvd & NB Ramps PM.xls

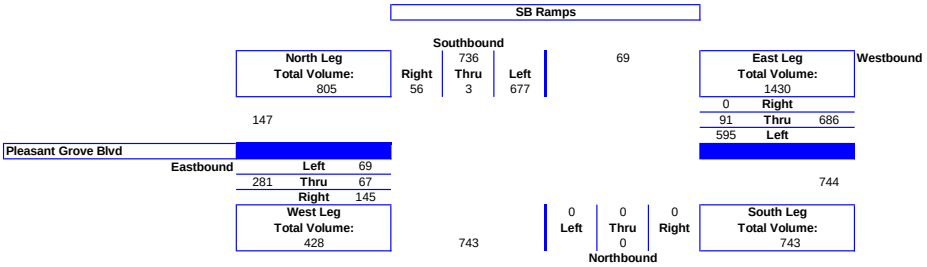
MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **SB Ramps**
E-W Street: **Pleasant Grove Blvd**
Date: **Thursday, July 31, 2008**
Begin Time: **04:00 PM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM	13	0	122	5	0	34	123	2	0	0	0	0	30	25	13	2	364	
04:15 PM	04:30 PM	11	0	144	9	0	20	126	0	0	0	0	0	32	13	7	1	354	
04:30 PM	04:45 PM	11	0	116	6	0	16	111	2	0	0	0	0	30	16	21	3	326	
04:45 PM	05:00 PM	13	0	168	4	0	22	126	1	0	0	0	0	30	12	11	2	385	1429
05:00 PM	05:15 PM	12	1	136	8	0	22	154	1	0	0	0	0	57	20	35	2	440	1505
05:15 PM	05:30 PM	18	0	206	6	0	32	179	1	0	0	0	0	26	18	8	0	488	1639
05:30 PM	05:45 PM	13	2	167	4	0	15	136	1	0	0	0	0	32	17	15	3	401	1714
05:45 PM	06:00 PM	5	1	159	1	0	26	108	0	0	0	0	0	22	14	11	1	347	1676



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
677	3	56	595	91	0	0	0	0	69	67	145
	736			686			0			281	
Trucks:		3%	Trucks:		1%	Trucks:		0%	Trucks:		2%
Peak Hour:		04:45 PM to 5:45 PM				Peak Vol:		1703	PHF:		0.87

PG Blvd & SB Ramps PM.xls

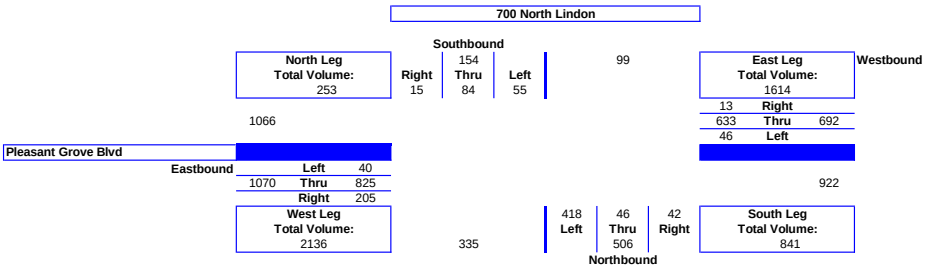
MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **700 North Lindon**
E-W Street: **Pleasant Grove Blvd**
Date: **Wednesday, August 27, 2008**
Begin Time: **04:00 PM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM	2	13	7	0	4	139	11	3	5	17	102	1	57	253	10	2	626	
04:15 PM	04:30 PM	5	14	11	0	4	175	8	3	8	18	78	0	54	231	6	0	615	
04:30 PM	04:45 PM	5	19	14	0	3	166	8	2	15	17	111	0	59	242	14	2	677	
04:45 PM	05:00 PM	3	18	14	0	2	131	9	2	8	9	114	1	46	194	12	0	563	2481
05:00 PM	05:15 PM	4	20	18	1	2	158	12	1	10	8	108	0	56	174	9	2	582	2437
05:15 PM	05:30 PM	3	29	10	0	6	191	18	2	10	13	94	0	48	232	6	0	662	2484
05:30 PM	05:45 PM	6	18	10	0	2	179	5	1	7	14	107	3	37	216	5	0	610	2417
05:45 PM	06:00 PM	1	16	8	1	5	144	14	0	8	13	58	0	53	236	7	0	563	2417



OPTIONAL Adjustment Factors	
Monthly:	0.98
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	0.98

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
55	84	15	46	633	13	418	46	42	40	825	205
	154			692			506			1070	
Trucks:		1%	Trucks:		1%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:30 PM to 5:30 PM				Peak Vol:		2422	PHF:		0.91

PG Blvd & 700 N Lindon PM.xls

MCM 6/15/2009

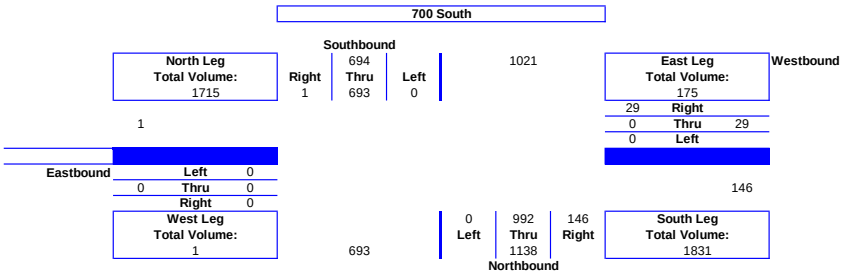
TRAFFIC COUNT SUMMARY

Pleasant Grove
700 South
Thursday, August 07, 2008
04:00 PM
15 min

E-W Street: **Pleasant Grove Blvd**

HORROCKS ENGINEERS

SB				WB				NB				EB					
Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Total	Hourly
2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
																0	
0	124	0	0	2	0	0	0	34	235	0	2	0	0	0	0	397	
0	151	0	2	12	0	0	0	31	211	0	3	0	0	0	0	408	
0	206	0	3	10	0	0	0	52	271	0	1	0	0	0	0	540	1345
0	169	0	2	5	0	0	0	30	256	0	3	0	0	0	0	463	1808
0	171	0	2	8	0	0	1	34	219	0	3	0	0	0	0	436	1847
1	161	0	2	7	0	0	0	33	266	0	2	0	0	0	0	470	1909
																0	1369



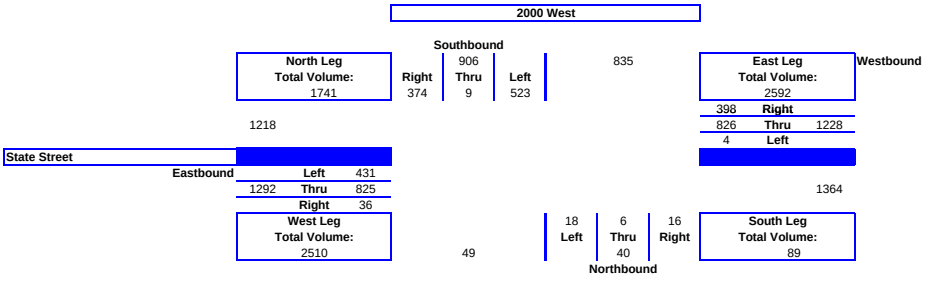
ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	693	1	0	0	29	0	992	146	0	0	0	
694			29			1138			0			
Trucks:		1%	**Trucks:**		3%	**Trucks:**		1%	**Trucks:**		0%	
Peak Hour:		04:45 PM to 5:45 PM				**Peak Vol:**		1861	**PHF:**		0.88	

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **2000 West**
E-W Street: **State Street**
Date: **Wednesday, March 04, 2009**
Begin Time: **04:00 PM**
Counted by: **MCM**
Interval Length: **15 min**

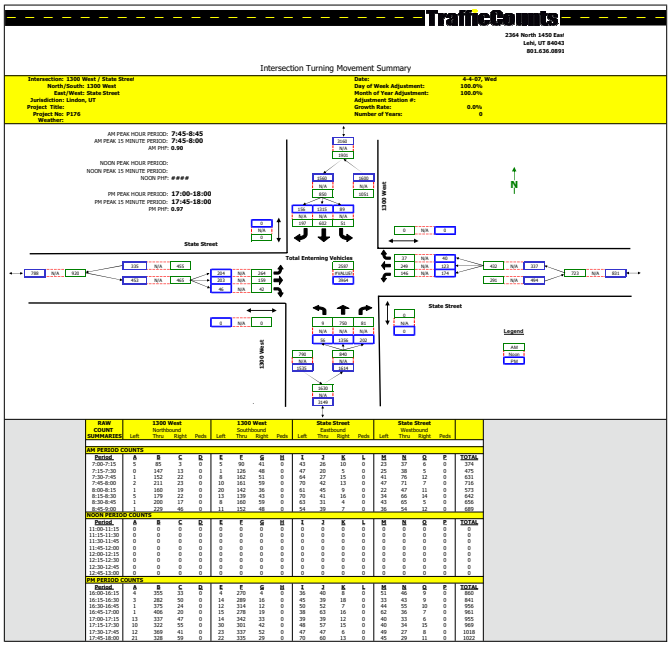
HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB					
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Total	Hourly
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13	All Moves	Totals
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM	75	1	129	1	92	219	3	2	4	3	6	0	1	204	122	3	864	864
05:00 PM	05:15 PM	120	4	153	2	81	192	1	1	5	1	7	0	4	238	106	1	914	1778
05:15 PM	05:30 PM	101	1	148	1	119	202	0	8	4	1	3	0	21	180	93	1	882	2660
05:30 PM	05:45 PM	78	3	93	0	106	213	0	2	3	1	2	0	10	203	110	1	825	3485
05:45 PM	06:00 PM																	0	2621



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
523	9	374	4	826	398	18	6	16	431	825	36	
906			1228			40			1292			
Trucks:		0%	**Trucks:**		1%	**Trucks:**		0%	**Trucks:**		0%	
Peak Hour:		04:45 PM to 5:45 PM				**Peak Vol:**		3466	**PHF:**		0.95	

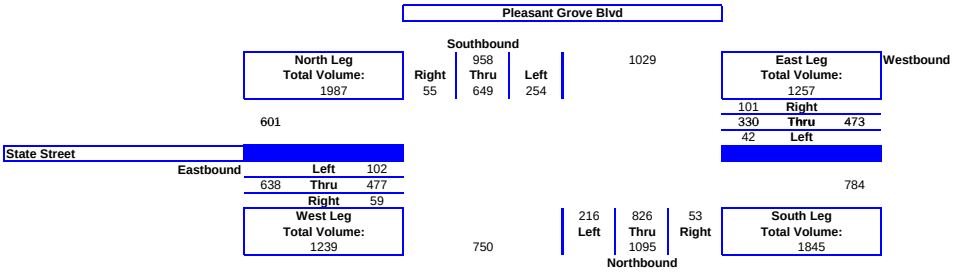


TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Pleasant Grove Blvd**
E-W Street: **State Street**
Date: **Monday, August 04, 2008**
Begin Time: **04:00 PM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM	16	141	66	0	26	62	8	0	4	166	51	0	15	81	18	0	654	
04:15 PM	04:30 PM	20	164	52	0	11	38	12	0	11	182	43	0	12	84	27	0	656	
04:30 PM	04:45 PM	13	155	48	1	15	51	14	0	10	164	45	0	17	73	20	0	625	
04:45 PM	05:00 PM	13	158	53	0	35	89	9	0	10	190	51	0	14	136	29	0	787	2722
05:00 PM	05:15 PM	16	180	69	0	9	69	16	0	22	234	59	0	19	112	29	0	834	2902
05:15 PM	05:30 PM	11	148	70	0	27	79	8	0	14	198	50	0	13	111	21	0	750	2996
05:30 PM	05:45 PM	15	163	62	0	30	93	9	0	7	204	56	0	13	118	23	0	793	3164
05:45 PM	06:00 PM	13	195	69	0	30	62	9	0	3	202	63	0	22	86	24	1	779	3156



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

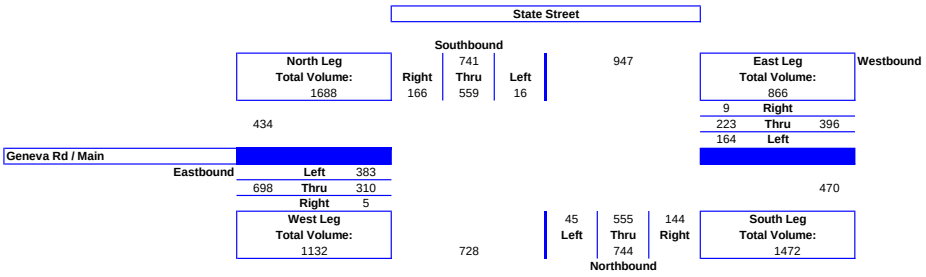
ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
254	649	55	42	330	101	216	826	53	102	477	59	
	958			473			1095			638		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%	
Peak Hour:			04:45 PM to 5:45 PM			Peak Vol:		3164	PHF:		0.95	

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street**
E-W Street: **Geneva Rd / Main**
Date: **Monday, August 11, 2008**
Begin Time: **04:00 PM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM	37	133	3	3	3	46	32	4	33	101	11	1	0	75	59	1	539	
04:15 PM	04:30 PM	45	124	0	2	3	47	47	2	26	132	13	0	0	41	59	4	543	
04:30 PM	04:45 PM	37	134	0	1	6	40	29	1	31	125	12	3	0	57	76	1	552	
04:45 PM	05:00 PM	36	139	2	3	1	49	42	0	36	117	13	2	0	58	72	3	570	2204
05:00 PM	05:15 PM	55	142	5	4	1	47	42	4	38	124	12	0	0	82	94	1	647	2312
05:15 PM	05:30 PM	46	149	8	1	2	75	45	3	42	166	13	1	4	94	105	0	753	2522
05:30 PM	05:45 PM	32	127	3	0	6	54	48	1	28	116	13	0	1	85	98	0	612	2582
05:45 PM	06:00 PM	33	141	0	0	0	47	29	0	36	149	7	1	0	49	86	3	581	2593



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

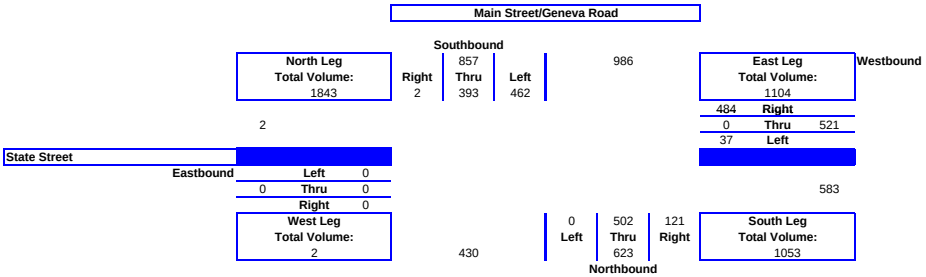
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
16	559	166	164	223	9	45	555	144	383	310	5
741			396			744			698		
Trucks:		1%	Trucks:		2%	Trucks:		0%	Trucks:		1%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		2579	PHF:		0.86

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street/Geneva Road**
E-W Street: **State Street**
Date: **Wednesday, March 11, 2009**
Begin Time: **04:00 PM**
Counted by: **LS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	0	109	123	5	108	0	9	1	31	136	0	1	0	0	0	0	518	518
05:15 PM	05:30 PM	2	107	127	9	128	0	10	2	29	135	0	2	0	0	0	0	542	1060
05:30 PM	05:45 PM	0	91	106	5	124	0	14	2	31	122	0	1	0	0	0	0	491	1551
05:45 PM	06:00 PM	0	86	106	4	124	0	4	2	30	109	0	2	0	0	0	0	463	2014



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
462	393	2	37	0	484	0	502	121	0	0	0
857			521			623			0		
Trucks:		3%	Trucks:		1%	Trucks:		1%	Trucks:		0%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		2001	PHF:		0.92

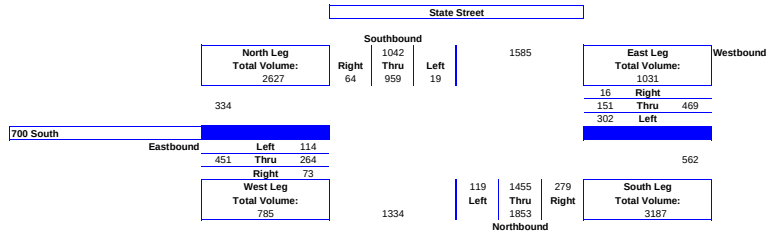
TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **700 South**
Date: **Tuesday, October 16, 2007**
Begin Time: **04:45 PM**
Interval Length: **5 min**

HORROCKS ENGINEERS

Time Interval		SB Trucks	SB Right	SB Thru	SB Left	WB Trucks	WB Right	WB Thru	WB Left	NB Trucks	NB Right	NB Thru	NB Left	EB Trucks	EB Right	EB Thru	EB Left	Total All Moves	15 Min Totals	Hourly Totals
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	All Moves	Totals	Totals
04:45 PM	04:50 PM	0	3	65	2									0	7	25	9	111		
04:50 PM	04:55 PM	0	4	64	3	0	4	10	24	1	17	121	8	0	5	23	9	291.5		
04:55 PM	05:00 PM	0	5	63	4	0	3	15	28	1	16	102	7	0	3	21	8	274	676.5	
05:00 PM	05:05 PM	2	5	74	4	0	2	20	31	1	14	83	6	1	6	20	7	270		
05:05 PM	05:10 PM	3	5	84	3	0	2	14	27	1	20	107	8	1	8	18	6	301		
05:10 PM	05:15 PM	2	6	76	2	0	1	8	22	1	26	131	10	1	7	18	10	316	887	
05:15 PM	05:20 PM	0	7	68	0	1	2	13	23	1	25	123	9	1	5	18	14	306		
05:20 PM	05:25 PM	1	6	76	2	1	2	18	24	0	24	114	8	1	5	23	11	310.5		
05:25 PM	05:30 PM	1	5	83	3	1	2	17	26	0	26	131	9	0	4	27	7	339	955.5	
05:30 PM	05:35 PM	1	6	79	2	0	1	15	28	0	28	148	10	0	7	23	10	355.5		
05:35 PM	05:40 PM	0	6	75	1	0	1	11	26	0	24	125	10	0	9	18	13	318		
05:40 PM	05:45 PM	0	5	86	1	0	0	7	23	0	20	102	10	1	8	20	10	290.5	964	3483
05:45 PM	05:50 PM	0	4	97	1	0	1	8	23	1	22	116	12	1	6	21	6	315.5		
05:50 PM	05:55 PM	0	4	80	0.5	0	2	9	22	1	23	130	13	1	5	25	8	321.5		
05:55 PM	06:00 PM	0	4	63	0	0	1	8	22	1	22	116	12	0	4	29	10	291	928	3734.5
06:00 PM	06:05 PM																	0		
06:05 PM	06:10 PM																	0		
06:10 PM	06:15 PM																	0	0	2847.5
06:15 PM	06:20 PM																	0		
06:20 PM	06:25 PM																	0		
06:25 PM	06:30 PM																	0	0	1892
06:30 PM	06:35 PM																	0		
06:35 PM	06:40 PM																	0		
06:40 PM	06:45 PM																	0	0	928

Note: Shaded areas are interpolated volumes.



OPTIONAL Adjustment Factors	
Monthly:	1.02
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1.02

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound Left	Thru	Right	Westbound Left	Thru	Right	Northbound Left	Thru	Right	Eastbound Left	Thru	Right
19	959	64	302	151	16	119	1455	279	114	264	73
	1042			469			1853			451	
Trucks:	1%		Trucks:	0%		Trucks:	0%		Trucks:	1%	
Peak Hour:	05:00 PM to 06:00 PM					Peak Vol:	3815		PHF:	0.97	

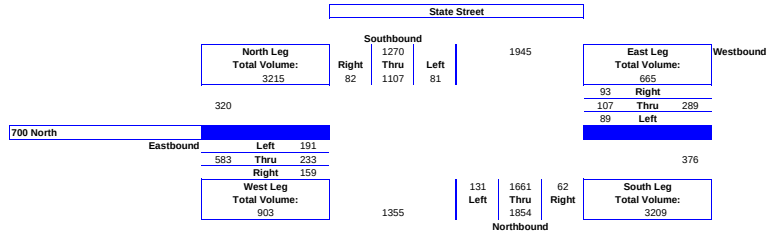
TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **700 North**
Date: **Wednesday, October 17, 2007**
Begin Time: **04:45 PM**
Interval Length: **5 min**

HORROCKS ENGINEERS

Time Interval		SB Trucks	SB Right	SB Thru	SB Left	WB Trucks	WB Right	WB Thru	WB Left	NB Trucks	NB Right	NB Thru	NB Left	EB Trucks	EB Right	EB Thru	EB Left	Total All Moves	15 Min Totals	Hourly Totals
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	All Moves	Totals	Totals
04:45 PM	04:50 PM	1	4	101	8	0	7	11	5									136		
04:50 PM	04:55 PM	2	5	94	6.5	0	7	10	5	2	6	113	13	0	9	9	14	290		
04:55 PM	05:00 PM	3	6	86	5	0	6	9	4	1	5	110	10	0.5	10	13	15	279	705	
05:00 PM	05:05 PM	2	7	92	6	0	7	7	9	0	4	107	7	1	11	17	16	288		
05:05 PM	05:10 PM	1	7	97	6	0	8	5	13	0	4.5	128	9	0.5	16	16	18	325		
05:10 PM	05:15 PM	2	9	94	7	0	8	7	9	0	5	148	10	0	20	14	19	348	961	
05:15 PM	05:20 PM	2	10	90	8	0	7	8	5	0	6	136	11	0	18	21	20	339.5		
05:20 PM	05:25 PM	2	7	91	6	0	7	12	6	0	7	124	12	0	16	27	21	334.5		
05:25 PM	05:30 PM	1	3	92	4	0	6	16	6	0	6.5	142	11	0	14	23	19	342	1016	
05:30 PM	05:35 PM	1	5	91	7	0	8	13	7	0	6	160	10	0	12	19	16	352		
05:35 PM	05:40 PM	0	7	89	10	0	9	9	7	0	4.5	151	11	0.5	12	21	12	342.5		
05:40 PM	05:45 PM	0	7	91	7	1	9	7	7	0	3	142	12	1	12	23	8	327	1021.5	3703.5
05:45 PM	05:50 PM	0	7	93	4	1	8	5	6	1	4	135	13	2	10	19	12	315		
05:50 PM	05:55 PM	0	7	87	6	1	8	7	7	1	4	128	14	2	8	15	15	304.5		
05:55 PM	06:00 PM	0	6	80	8	1	8	9	7	1	6	127	8	1	7	14	13	292.5	912	3910.5
06:00 PM	06:05 PM	0	6	80	6	1	8	7	7	1	8	126	2	0	6	13	10	279		
06:05 PM	06:10 PM																	0		
06:10 PM	06:15 PM																	0	279	3228.5
06:15 PM	06:20 PM																	0		
06:20 PM	06:25 PM																	0		
06:25 PM	06:30 PM																	0	0	2212.5
06:30 PM	06:35 PM																	0		
06:35 PM	06:40 PM																	0		
06:40 PM	06:45 PM																	0	0	1191

Note: Shaded areas are interpolated volumes.



OPTIONAL Adjustment Factors	
Monthly:	1.02
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1.02

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

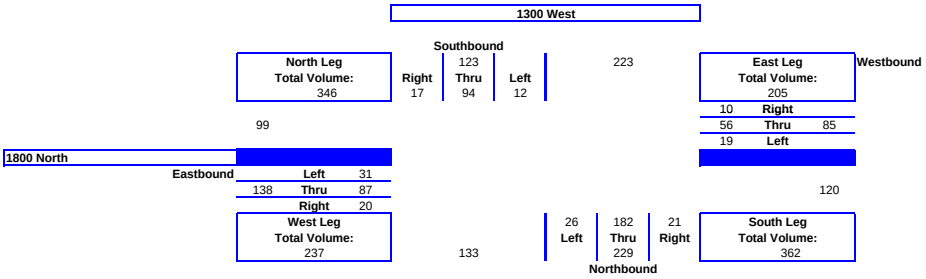
Southbound Left	Thru	Right	Westbound Left	Thru	Right	Northbound Left	Thru	Right	Eastbound Left	Thru	Right
81	1107	82	89	107	93	131	1661	62	191	233	159
	1270			289			1854			583	
Trucks:	1%		Trucks:	1%		Trucks:	0%		Trucks:	1%	
Peak Hour:	05:00 PM to 06:00 PM					Peak Vol:	3996		PHF:	0.96	

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **1800 North**
Date: **Wednesday, March 04, 2009**
Begin Time: **04:00 PM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	4	25	4	0	1	13	6	0	6	44	3	0	5	19	8	0	138	138
05:15 PM	05:30 PM	2	22	2	0	2	12	6	0	2	43	4	0	8	26	8	0	137	275
05:30 PM	05:45 PM	4	23	2	0	5	15	6	0	5	53	9	0	4	24	5	0	155	430
05:45 PM	06:00 PM	7	24	4	0	2	16	1	0	8	42	10	0	3	18	10	0	145	575



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
12	94	17	19	56	10	26	182	21	31	87	20
	123			85			229			138	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		575	PHF:		0.93

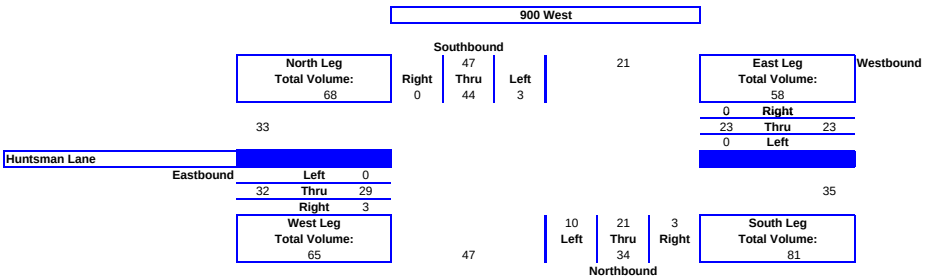
1800 N & 1300 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **900 West** E-W Street: **Huntsman Lane**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM	0	11	1	0	0	1	0	0	0	5	0	0	1	8	0	0	27	
04:45 PM	05:00 PM	0	6	0	0	0	8	0	0	1	3	4	0	0	3	0	0	25	52
05:00 PM	05:15 PM														0.1			0.1	52.1
05:15 PM	05:30 PM														0.2			0.2	52.3
05:30 PM	05:45 PM														0.3			0.3	25.6
05:45 PM	06:00 PM																	0	0.6



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.60
Total:	2.6

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
3	44	0	0	23	0	10	21	3	0	29	3
	47			23			34			32	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:30 PM to 5:30 PM				Peak Vol:		136	PHF:		0.49

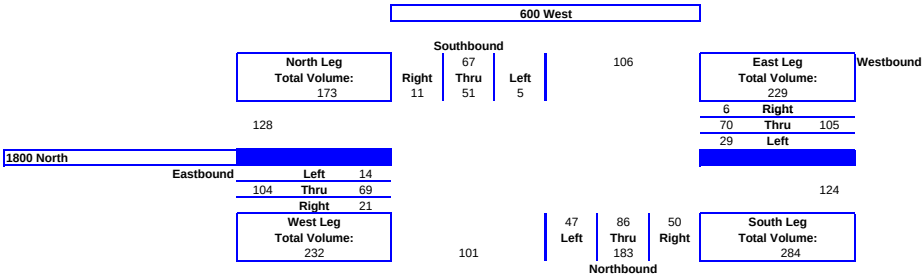
Huntsman Lane & 900 West PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **1800 North**
Date: **Wednesday, February 25, 2009**
Begin Time: **04:00 PM** Counted by: **DS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	3	13	1	0	1	16	3	0	12	25	9	0	6	19	7	0	115	115
05:15 PM	05:30 PM	2	6	1	0	1	13	5	0	7	17	15	0	5	24	3	0	99	214
05:30 PM	05:45 PM	4	13	1	0	2	16	14	0	14	23	10	0	4	9	2	0	112	326
05:45 PM	06:00 PM	2	19	2	0	2	25	7	0	17	21	13	1	6	17	2	0	134	460



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5	51	11	29	70	6	47	86	50	14	69	21
	67			105			183			104	
Trucks:	0%		Trucks:	0%		Trucks:	1%		Trucks:	0%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	459		PHF:	0.86	

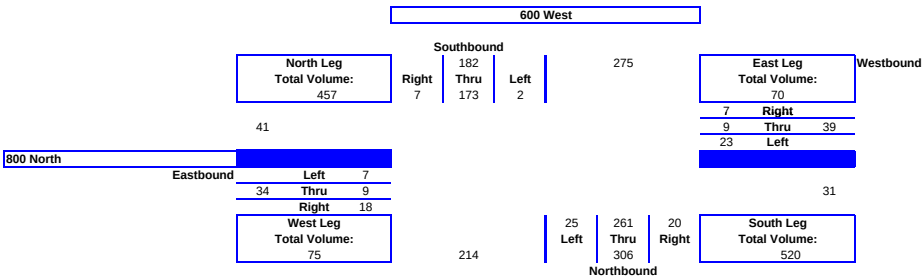
1800 N & 600 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **800 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **LS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM	2	45	0	1	1	2	7	0	3	51	6	0	0	3	2	0	122	
04:15 PM	04:30 PM	1	32	1	0	2	2	3	0	6	65	5	0	8	1	1	0	127	
04:30 PM	04:45 PM															0.1		0.1	
04:45 PM	05:00 PM															0.2		0.2	249.3
05:00 PM	05:15 PM															0.3		0.3	127.6
05:15 PM	05:30 PM																	0	0.6
05:30 PM	05:45 PM																	0	0.5
05:45 PM	06:00 PM																	0	0.3



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.25
Total:	2.25

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	173	7	23	9	7	25	261	20	7	9	18
	182			39			306			34	
Trucks:	1%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	04:00 PM to 5:00 PM					Peak Vol:	561		PHF:	0.49	

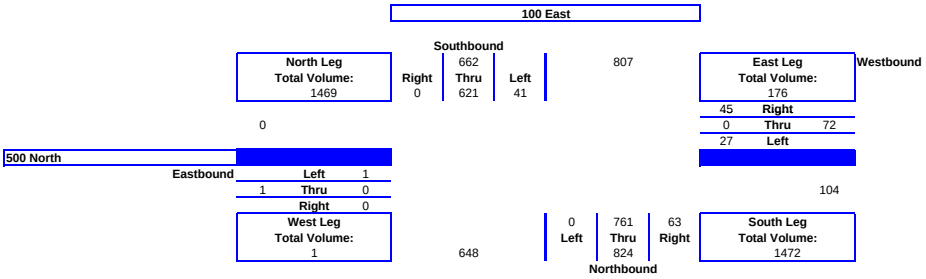
800 N & 600 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **500 North**
Date: **Thursday, February 26, 2009**
Begin Time: **04:00 PM** Counted by: **LS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM	0	132	4	0	12	0	3	1	19	181	0	4	0	0	0	0	356	
04:15 PM	04:30 PM	0	144	14	3	8	0	9	0	9	157	0	3	0	0	0	0	344	
04:30 PM	04:45 PM															0.1		0.1	
04:45 PM	05:00 PM															0.2		0.2	700.3
05:00 PM	05:15 PM															0.3		0.3	344.6
05:15 PM	05:30 PM																	0	0.6
05:30 PM	05:45 PM																	0	0.5
05:45 PM	06:00 PM																	0	0.3



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.25
Total:	2.25

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
41	621	0	27	0	45	0	761	63	1	0	0
	662			72			824			1	
Trucks:	1%		Trucks:	3%		Trucks:	2%		Trucks:	0%	
Peak Hour:	04:00 PM to 5:00 PM					Peak Vol:	1559		PHF:	0.49	

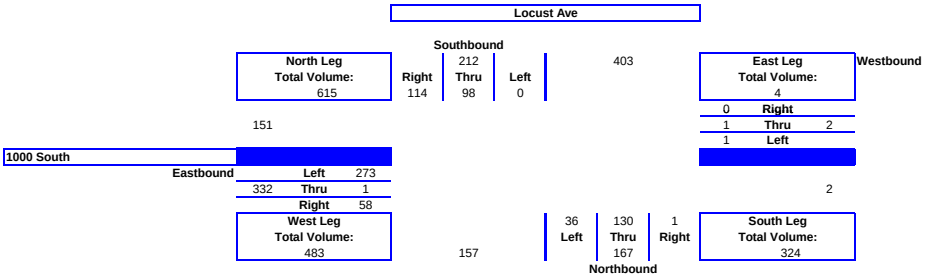
500 N & 100 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Locust Ave** E-W Street: **1000 South**
Date: **Wednesday, February 25, 2009**
Begin Time: **04:00 PM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	22	29	0	0	0	1	0	0	0	38	5	0	17	0	65	1	178	178
05:15 PM	05:30 PM	33	25	0	0	0	0	0	0	0	31	10	0	10	0	74	0	183	361
05:30 PM	05:45 PM	37	15	0	0	0	0	1	0	1	37	12	0	14	0	66	0	183	544
05:45 PM	06:00 PM	22	29	0	0	0	0	0	0	0	24	9	0	17	1	68	0	170	714



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	98	114	1	1	0	36	130	1	273	1	58
	212			2			167			332	
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	713		PHF:	0.97	

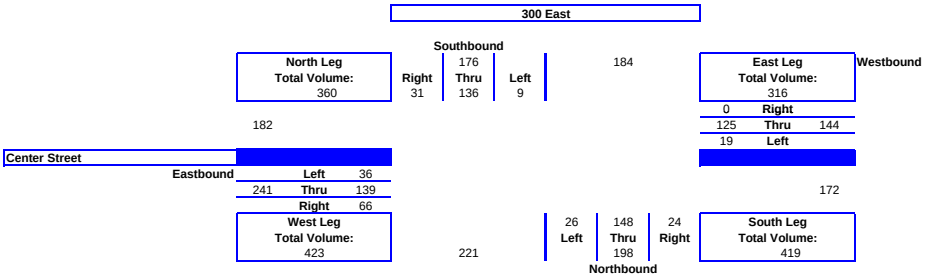
1000 S & Locust PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **300 East** E-W Street: **Center Street**
Date: **Wednesday, February 18, 2009**
Begin Time: **04:00 PM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM	8	31	0	0	0	20	2	0	7	28	5	0	10	30	10	0	151	
04:15 PM	04:30 PM	5	27	4	0	0	33	6	0	3	35	6	0	18	29	5	0	171	
04:30 PM	04:45 PM															0.1		0.1	
04:45 PM	05:00 PM															0.2		0.2	322.3
05:00 PM	05:15 PM															0.3		0.3	171.6
05:15 PM	05:30 PM																	0	0.6
05:30 PM	05:45 PM																	0	0.5
05:45 PM	06:00 PM																	0	0.3



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.35
Total:	2.35

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
9	136	31	19	125	0	26	148	24	36	139	66	
	176			144			198			241		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%	
Peak Hour:		04:00 PM to 5:00 PM				Peak Vol:		759	PHF:		0.47	

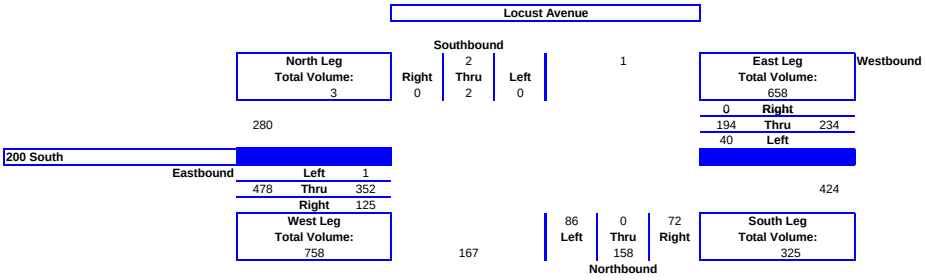
Center St & 300 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Locust Avenue** E-W Street: **200 South**
Date: **Wednesday, February 18, 2009**
Begin Time: **04:00 PM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM															0.1		0.1	
04:45 PM	05:00 PM															0.2		0.2	0.3
05:00 PM	05:15 PM															0.3		0.3	0.6
05:15 PM	05:30 PM	0	1	0	0	0	53	10	0	19	0	20	0	42	91	0	0	236	236.6
05:30 PM	05:45 PM	0	0	0	0	0	49	11	0	19	0	25	0	24	94	0	0	222	458.5
05:45 PM	06:00 PM																	0	458.3



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.90
Total:	1.9

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	2	0	40	194	0	86	0	72	1	352	125	
	2			234			158			478		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%	
Peak Hour:		04:45 PM to 5:45 PM				Peak Vol:		872	PHF:		0.49	

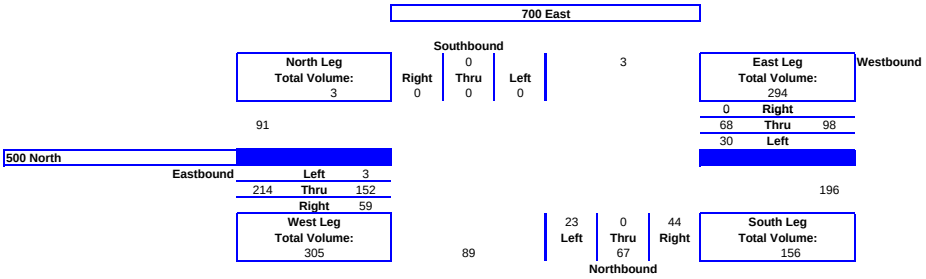
200 S & Locust PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **700 East** E-W Street: **500 North**
Date: **Thursday, February 26, 2009**
Begin Time: **04:00 PM** Counted by: **LS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM	0	0	0	0	0	18	6	0	7	0	6	0	14	34	1	0	86	
04:45 PM	05:00 PM	0	0	0	0	0	11	7	0	12	0	4	0	11	31	0	0	76	162
05:00 PM	05:15 PM															0.1		0.1	162.1
05:15 PM	05:30 PM															0.2		0.2	162.3
05:30 PM	05:45 PM															0.3		0.3	76.6
05:45 PM	06:00 PM																	0	0.6



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.34
Total:	2.34

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	30	68	0	23	0	44	3	152	59
	0			98			67			214	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:30 PM to 5:30 PM				Peak Vol:		379	PHF:		0.47

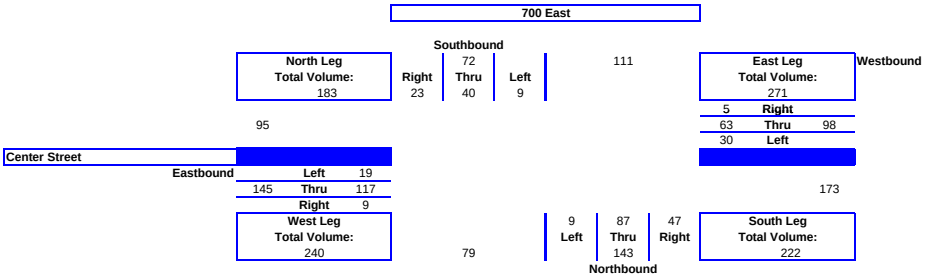
700 E & 500 N PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **700 East** E-W Street: **Center Street**
Date: **Wednesday, February 18, 2009**
Begin Time: **04:00 PM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM	5	5	2	0	2	14	4	0	10	20	1	0	4	28	5	0	100	
04:45 PM	05:00 PM	5	12	2	0	0	13	9	0	10	17	3	0	0	22	3	0	96	196
05:00 PM	05:15 PM															0.1		0.1	196.1
05:15 PM	05:30 PM															0.2		0.2	196.3
05:30 PM	05:45 PM															0.3		0.3	96.6
05:45 PM	06:00 PM																	0	0.6



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.34
Total:	2.34

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
9	40	23	30	63	5	9	87	47	19	117	9
	72			98			143			145	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:30 PM to 5:30 PM				Peak Vol:		458	PHF:		0.49

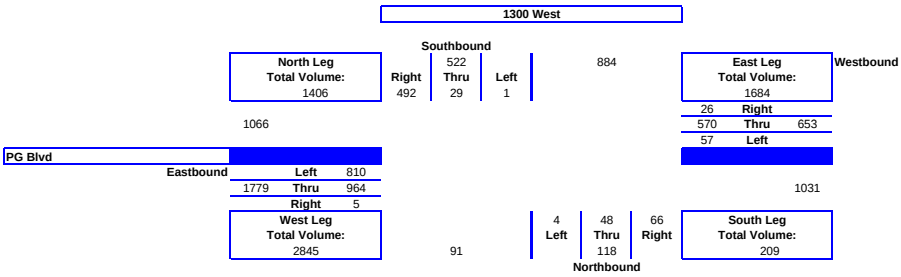
Center St & 700 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **PG Blvd**
Date: **Thursday, February 26, 2009**
Begin Time: **04:00 PM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals	0.5 Hr Factor
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13			
04:00 PM	04:15 PM	89	1	1	5	9	147	24	9	16	10	0	0	26	202	124	5	663		
04:15 PM	04:30 PM	102	7	1	0	2	105	13	6	13	11	0	0	0	176	131	2	569		2.510552
04:30 PM	04:45 PM	87	13	5	1	7	147	11	7	10	5	2	1	1	217	168	3	684		2.468476
04:45 PM	05:00 PM	96	6	0	2	10	147	15	6	6	12	0	0	1	259	168	1	727	2643	2.192062
05:00 PM	05:15 PM	119	10	1	1	6	168	22	4	16	11	1	0	2	218	192	4	774	2754	2.060626
05:15 PM	05:30 PM	153	5	0	0	7	137	17	2	13	10	0	0	1	234	189	1	769	2954	2.004537
05:30 PM	05:45 PM	130	6	0	1	8	147	11	1	20	9	1	0	1	239	221	3	797	3067	1.975096
05:45 PM	06:00 PM	90	8	0	2	5	118	7	4	17	18	2	0	1	273	208	2	753	3093	1.995484



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound Left	Thru	Right	Westbound Left	Thru	Right	Northbound Left	Thru	Right	Eastbound Left	Thru	Right
1	29	492	57	570	26	4	48	66	810	964	5
	522			653			118			1779	
Trucks:	1%		Trucks:	2%		Trucks:	0%		Trucks:	1%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	3072		PHF:	0.96	

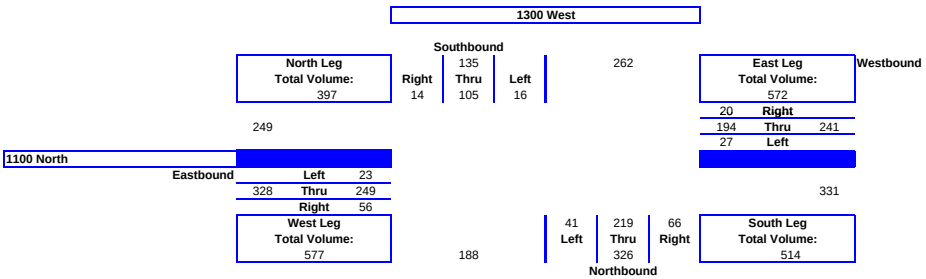
PG Blvd & 1300 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **1100 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	3	26	5	2	4	48	7	0	15	37	9	0	13	63	5	0	235	235
05:15 PM	05:30 PM	4	22	1	0	7	43	7	0	21	61	7	0	20	56	5	0	254	489
05:30 PM	05:45 PM	1	29	5	1	7	52	6	0	15	67	12	0	15	56	4	0	269	758
05:45 PM	06:00 PM	6	28	5	0	2	51	7	0	15	54	13	0	8	74	9	0	272	1030



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound Left	Thru	Right	Westbound Left	Thru	Right	Northbound Left	Thru	Right	Eastbound Left	Thru	Right
16	105	14	27	194	20	41	219	66	23	249	56
	135			241			326			328	
Trucks:	2%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	1030		PHF:	0.95	

1100 N & 1300 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 West** E-W Street: **2600 North**
Date: **Wednesday, February 25, 2009**
Begin Time: **04:00 PM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	0	0	0	0	0	47	4	0	8	0	15	0	12	42	0	0	128	128
05:15 PM	05:30 PM	0	0	0	0	0	43	3	0	5	0	22	0	15	55	0	0	143	271
05:30 PM	05:45 PM	0	0	0	0	0	35	2	0	7	0	23	0	16	40	0	0	123	394
05:45 PM	06:00 PM	0	0	0	0	0	44	1	0	4	0	20	0	18	36	0	0	123	517

1300 West

Southbound

North Leg Total Volume: 0
Right 0 Thru 0 Left 0

0

East Leg Total Volume: 376 — Westbound
0 Right
169 Thru 179
10 Left

249

2600 North

Eastbound
Left 0
234 Thru 173
Right 61

197

West Leg Total Volume: 483

71

80 Left 0 Thru 104 Northbound 24 Right

South Leg Total Volume: 175

OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	10	169	0	80	0	24	0	173	61
	0			179			104			234	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		517	PHF:		0.90

2600 N & 1300 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **220 South** E-W Street: **Pleasant Grove Blvd**
Date: **Tuesday, February 17, 2009**
Begin Time: **04:00 PM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM	0	0	0	0	0	131	9	5	6	0	11	0	11	136	0	1	310	310
05:00 PM	05:15 PM	0	0	0	0	0	110	10	3	16	0	19	0	8	136	0	0	302	612
05:15 PM	05:30 PM	0	0	0	0	0	138	3	0	13	0	15	0	9	145	0	2	325	937
05:30 PM	05:45 PM	0	0	0	0	0	116	11	1	12	0	22	0	11	149	0	0	322	1259
05:45 PM	06:00 PM	0	0	0	0	0	101	14	0	14	0	11	0	7	129	0	1	277	1226

220 South

Southbound

North Leg Total Volume: 0
Right 0 Thru 0 Left 0

0

East Leg Total Volume: 1141 — Westbound
0 Right
495 Thru 528
33 Left

562

Pleasant Grove Blvd

Eastbound
Left 0
605 Thru 566
Right 39

613

West Leg Total Volume: 1167

72

67 Left 0 Thru 114 Northbound 47 Right

South Leg Total Volume: 186

OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	33	495	0	67	0	47	0	566	39
	0			528			114			605	
Trucks:		0%	Trucks:		2%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:45 PM to 5:45 PM				Peak Vol:		1247	PHF:		0.96

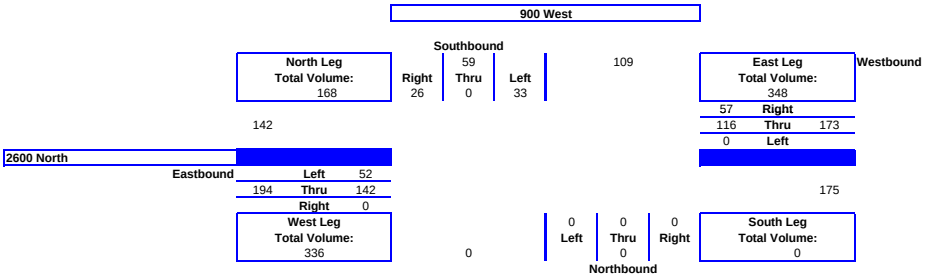
PG Blvd & 220 S PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **900 West** E-W Street: **2600 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	9	0	9	0	17	26	0	0	0	0	0	0	0	32	17	0	110	110
05:15 PM	05:30 PM	6	0	8	0	11	29	0	0	0	0	0	0	0	41	11	0	106	216
05:30 PM	05:45 PM	9	0	10	0	17	28	0	0	0	0	0	0	0	37	13	0	114	330
05:45 PM	06:00 PM	2	0	6	0	12	33	0	0	0	0	0	0	0	32	11	0	96	426



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
33	0	26	0	116	57	0	0	0	52	142	0	
	59			173			0			194		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%	
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		426	PHF:		0.93	

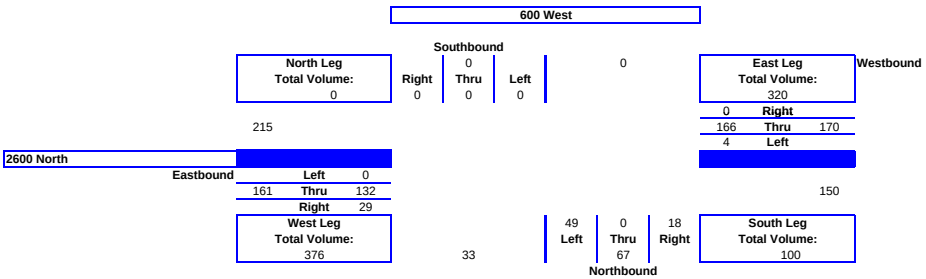
2600 N & 900 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **2600 North**
Date: **Thursday, February 19, 2009**
Begin Time: **04:00 PM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	0	0	0	0	0	23	2	0	5	0	10	0	7	41	0	0	88	88
05:15 PM	05:30 PM	0	0	0	0	0	48	0	0	4	0	13	0	8	26	0	0	99	187
05:30 PM	05:45 PM	0	0	0	0	0	48	2	0	5	0	13	0	8	34	0	0	110	297
05:45 PM	06:00 PM	0	0	0	0	0	47	0	0	4	0	13	0	6	31	0	0	101	398



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	4	166	0	49	0	18	0	132	29	
	0			170			67			161		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%	
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		398	PHF:		0.90	

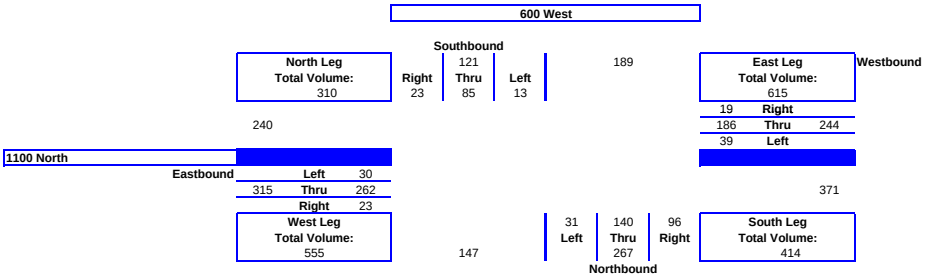
2600 N & 600 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **600 West** E-W Street: **1100 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **LS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	2	18	3	0	5	58	7	0	31	36	12	1	10	64	9	0	256	256
05:15 PM	05:30 PM	7	26	4	1	5	42	11	0	30	32	10	2	1	54	8	1	233	489
05:30 PM	05:45 PM	6	20	3	0	4	54	9	2	21	42	5	0	3	65	4	0	238	727
05:45 PM	06:00 PM	8	21	3	1	5	32	12	0	14	30	4	1	9	79	9	1	228	955



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
13	85	23	39	186	19	31	140	96	30	262	23	
	121			244			267			315		
Trucks:		2%	Trucks:		1%	Trucks:		1%	Trucks:		1%	
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		947	PHF:		0.92	

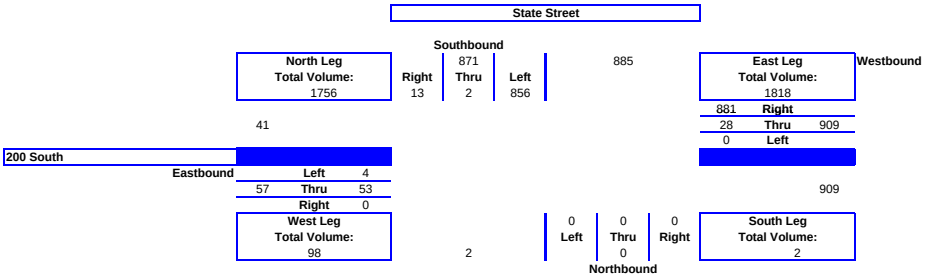
1100 N & 600 W PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **200 South**
Date: **Thursday, February 19, 2009**
Begin Time: **04:00 PM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM	4	0	220	0	178	4	0	1	0	0	0	0	0	13	1	1	422	422
05:00 PM	05:15 PM	3	1	237	0	230	9	0	0	0	0	0	0	0	15	1	0	496	918
05:15 PM	05:30 PM	2	1	205	2	231	9	0	1	0	0	0	0	0	13	2	0	464	1382
05:30 PM	05:45 PM	4	0	194	3	242	6	0	1	0	0	0	0	0	12	0	0	459	1841
05:45 PM	06:00 PM	2	0	142	0	235	11	0	1	0	0	0	0	0	9	0	0	400	1819



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
856	2	13	0	28	881	0	0	0	4	53	0	
	871			909			0			57		
Trucks:		1%	Trucks:		0%	Trucks:		0%	Trucks:		2%	
Peak Hour:		04:45 PM to 5:45 PM				Peak Vol:		1837	PHF:		0.93	

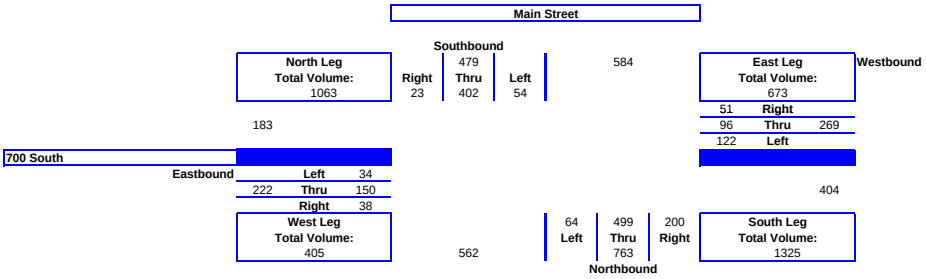
200 S & State Street PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street** E-W Street: **700 South**
Date: **Wednesday, February 25, 2009**
Begin Time: **04:00 PM** Counted by: **KM & DS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	1	100	11	0	15	14	37	0	62	134	16	0	10	41	7	0	448	448
05:15 PM	05:30 PM	5	109	18	0	9	30	30	0	55	133	18	0	10	37	6	0	460	908
05:30 PM	05:45 PM	9	112	13	0	9	21	23	0	50	114	18	7	8	34	15	0	433	1341
05:45 PM	06:00 PM	8	81	12	0	18	31	32	0	33	118	12	0	10	38	6	0	399	1740



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
54	402	23	122	96	51	64	499	200	34	150	38	
	479			269			763			222		
Trucks:		0%	Trucks:		0%	Trucks:		1%	Trucks:		0%	
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		1733	PHF:		0.94	

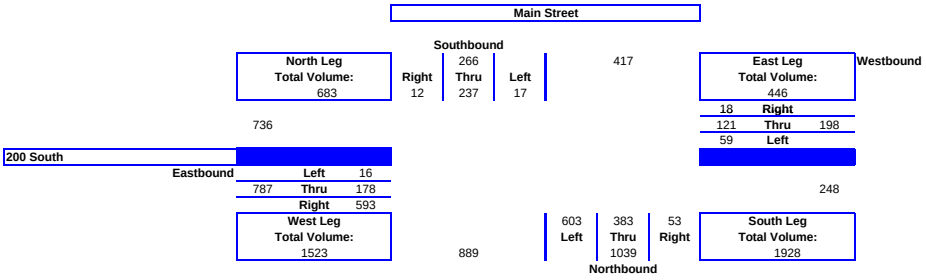
700 S & Main St PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street** E-W Street: **200 South**
Date: **Thursday, February 26, 2009**
Begin Time: **04:00 PM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	2	64	3	0	6	27	13	0	15	87	127	0	148	49	2	0	543	543
05:15 PM	05:30 PM	3	63	6	0	7	33	12	0	9	100	158	1	171	38	7	1	609	1152
05:30 PM	05:45 PM	5	55	4	0	1	31	16	0	18	98	152	2	134	44	1	1	562	1714
05:45 PM	06:00 PM	2	55	4	0	4	30	18	0	11	98	166	1	140	47	6	0	582	2296



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES												
Southbound			Westbound			Northbound			Eastbound			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
17	237	12	59	121	18	603	383	53	16	178	593	
	266			198			1039			787		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%	
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		2290	PHF:		0.94	

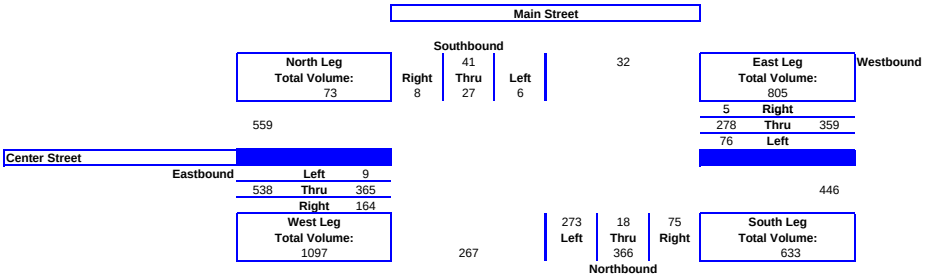
200 S & Main St PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Main Street** E-W Street: **Center Street**
Date: **Wednesday, February 25, 2009**
Begin Time: **04:00 PM** Counted by: **KJ**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM	0	6	1	0	0	72	20	0	12	3	62	0	27	87	0	0	290	
04:45 PM	05:00 PM	5	4	2	0	1	75	16	0	19	3	78	0	39	96	3	0	341	631
05:00 PM	05:15 PM	1	9	3	0	1	71	16	0	20	10	52	0	52	88	1	0	324	955
05:15 PM	05:30 PM	1	9	1	0	2	64	24	0	18	3	74	0	34	97	2	0	329	1284
05:30 PM	05:45 PM	1	5	0	0	1	68	20	0	18	2	69	0	39	84	3	0	310	1304
05:45 PM	06:00 PM	1	7	0	0	0	60	10	0	24	3	87	0	31	97	2	0	322	1285



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6	27	8	76	278	5	273	18	75	9	365	164
	41			359			366			538	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:45 PM to 5:45 PM				Peak Vol:		1304	PHF:		0.96

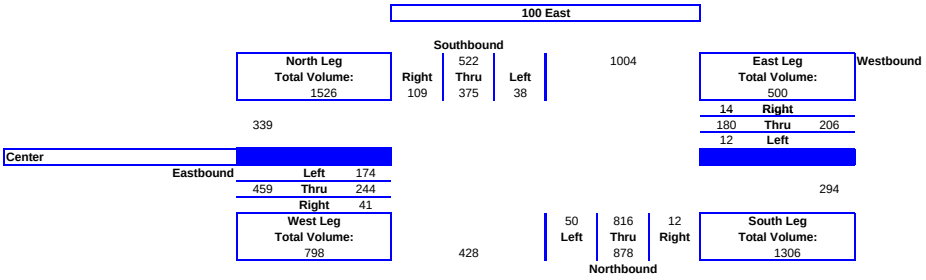
Center St & Main St PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **Center**
Date: **Wednesday, February 25, 2009**
Begin Time: **04:00 PM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	25	86	11	0	2	54	4	0	5	206	16	0	12	66	40	0	527	527
05:15 PM	05:30 PM	40	97	9	0	4	37	1	0	2	216	13	0	6	61	46	0	532	1059
05:30 PM	05:45 PM	24	88	10	0	4	51	1	0	3	207	13	0	9	58	40	0	508	1567
05:45 PM	06:00 PM	20	104	8	0	4	38	6	0	2	187	8	0	14	59	48	0	498	2065



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
38	375	109	12	180	14	50	816	12	174	244	41
	522			206			878			459	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		2065	PHF:		0.97

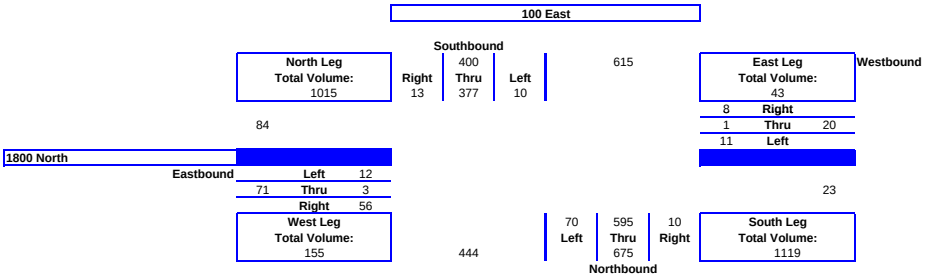
Center & 100 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **1800 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **KM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	5	96	4	0	4	0	3	0	1	126	22	0	17	0	3	0	281	281
05:15 PM	05:30 PM	3	79	2	0	1	0	2	0	1	139	14	0	11	1	2	0	255	536
05:30 PM	05:45 PM	3	96	2	0	0	1	3	0	6	154	16	0	11	1	4	0	297	833
05:45 PM	06:00 PM	2	106	2	0	3	0	3	0	2	176	18	0	17	1	3	0	333	1166



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
10	377	13	11	1	8	70	595	10	12	3	56
	400			20			675			71	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		1166	PHF:		0.88

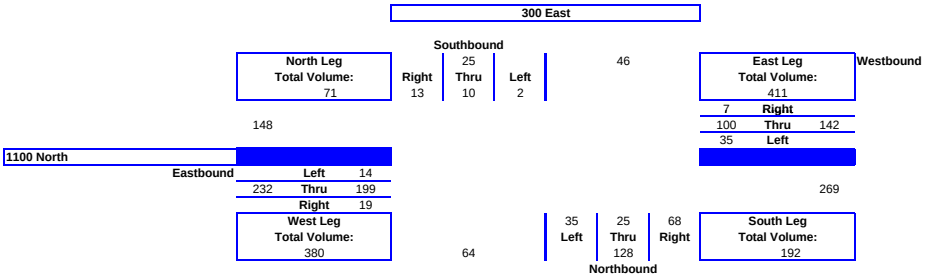
1800 N & 100 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **300 East** E-W Street: **1100 North**
Date: **Wednesday, February 25, 2009**
Begin Time: **04:00 PM** Counted by: **KM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	5	3	0	0	2	22	16	0	18	6	6	0	3	56	3	0	140	140
05:15 PM	05:30 PM	2	1	2	0	2	22	3	0	17	8	11	0	1	64	4	0	137	277
05:30 PM	05:45 PM	2	3	0	0	1	30	11	0	17	7	11	0	5	42	4	0	133	410
05:45 PM	06:00 PM	4	3	0	0	2	26	5	0	16	4	7	0	10	37	3	0	117	527



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES

Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	10	13	35	100	7	35	25	68	14	199	19
	25			142			128			232	
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		527	PHF:		0.94

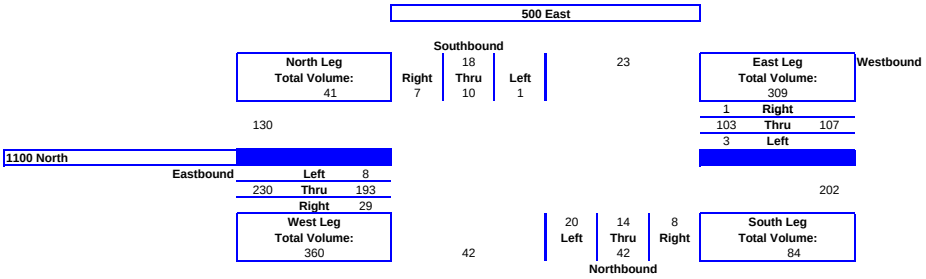
1100 N & 300 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **500 East** E-W Street: **1100 North**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **ZE**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	0	3	0	0	0	24	0	0	3	3	8	0	11	49	2	0	103	103
05:15 PM	05:30 PM	4	1	1	0	0	22	3	0	2	3	4	0	10	49	1	0	100	203
05:30 PM	05:45 PM	2	5	0	0	0	18	0	0	2	6	3	0	7	53	4	0	100	303
05:45 PM	06:00 PM	1	1	0	0	1	39	0	0	1	2	5	0	1	42	1	0	94	397



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	10	7	3	103	1	20	14	8	8	193	29
18			107			42			230		
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	397		PHF:	0.96	

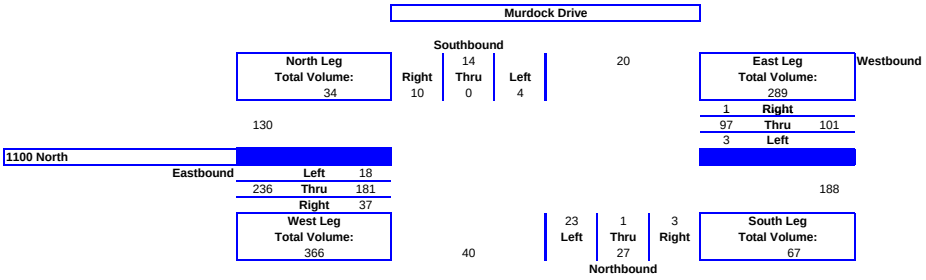
500 E & 1100 N PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Murdock Drive** E-W Street: **1100 North**
Date: **Thursday, February 26, 2009**
Begin Time: **04:00 PM** Counted by: **LS**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM																	0	0
05:00 PM	05:15 PM	2	0	0	0	0	22	0	0	1	0	4	0	8	43	5	1	86	86
05:15 PM	05:30 PM	2	0	2	0	0	15	1	0	0	0	6	0	9	47	4	0	86	172
05:30 PM	05:45 PM	4	0	1	0	1	31	1	1	1	0	8	0	12	43	4	0	107	279
05:45 PM	06:00 PM	2	0	1	0	0	29	1	0	1	1	5	0	8	48	5	0	101	380



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
4	0	10	3	97	1	23	1	3	18	181	37
14			101			27			236		
Trucks:	0%		Trucks:	1%		Trucks:	0%		Trucks:	0%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	378		PHF:	0.88	

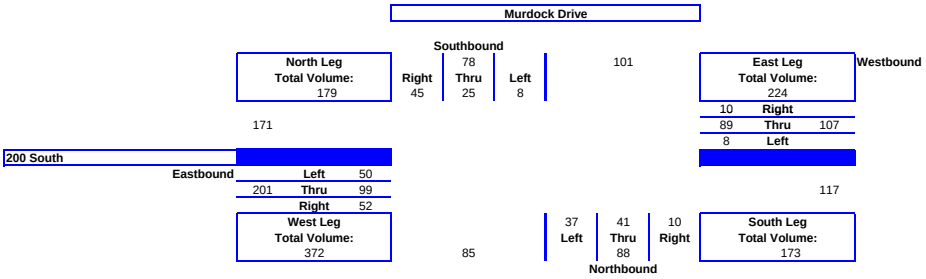
1100 N & Murdock PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **Murdock Drive** E-W Street: **200 South**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM																	0	
04:45 PM	05:00 PM															0.1		0.1	0.1
05:00 PM	05:15 PM															0.2		0.2	0.3
05:15 PM	05:30 PM															0.3		0.3	0.6
05:30 PM	05:45 PM	11	5	1	0	3	20	1	0	2	9	9	0	11	21	14	0	107	107.6
05:45 PM	06:00 PM	11	7	3	0	2	23	3	0	3	11	9	0	14	27	10	0	123	230.5



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.06
Total:	2.06

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
8	25	45	8	89	10	37	41	10	50	99	52
78			107			88			201		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		05:00 PM to 6:00 PM				Peak Vol:		474	PHF:		0.47

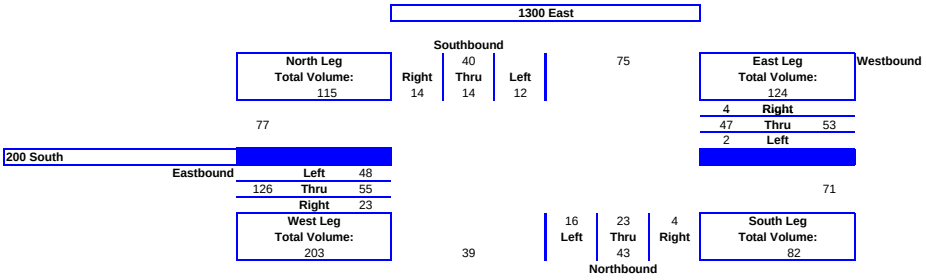
200 S & Murdock PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1300 East** E-W Street: **200 South**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM															0.1		0.1	
04:30 PM	04:45 PM															0.2		0.2	
04:45 PM	05:00 PM															0.3		0.3	0.6
05:00 PM	05:15 PM	5	4	3	0	1	12	1	0	0	5	5	0	6	13	11	0	66	66.6
05:15 PM	05:30 PM	2	3	3	0	1	12	0	0	2	7	3	0	6	15	13	0	67	133.5
05:30 PM	05:45 PM																	0	133.3
05:45 PM	06:00 PM																	0	133



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.95
Total:	1.95

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
12	14	14	2	47	4	16	23	4	48	55	23
40			53			43			126		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:30 PM to 5:30 PM				Peak Vol:		262	PHF:		0.50

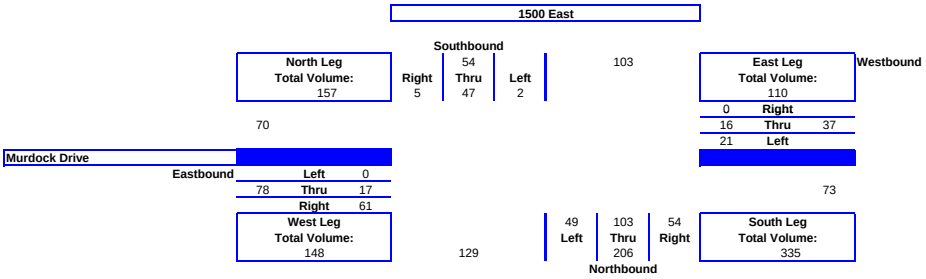
200 S & 1300 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **1500 East** E-W Street: **Murdock Drive**
Date: **Tuesday, February 24, 2009**
Begin Time: **04:00 PM** Counted by: **MCM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13		
04:00 PM	04:15 PM																	0	
04:15 PM	04:30 PM																	0	
04:30 PM	04:45 PM	2	9	1	0	0	2	6	0	10	22	9	0	11	3	0	0	75	
04:45 PM	05:00 PM	0	11	0	0	0	5	3	0	13	22	12	0	15	4	0	0	85	160
05:00 PM	05:15 PM														0.1			0.1	160.1
05:15 PM	05:30 PM														0.2			0.2	160.3
05:30 PM	05:45 PM														0.3			0.3	85.6
05:45 PM	06:00 PM																	0	0.6



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	2.34
Total:	2.34

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	47	5	21	16	0	49	103	54	0	17	61
54			37			206			78		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		04:30 PM to 5:30 PM				Peak Vol:		375	PHF:		0.47

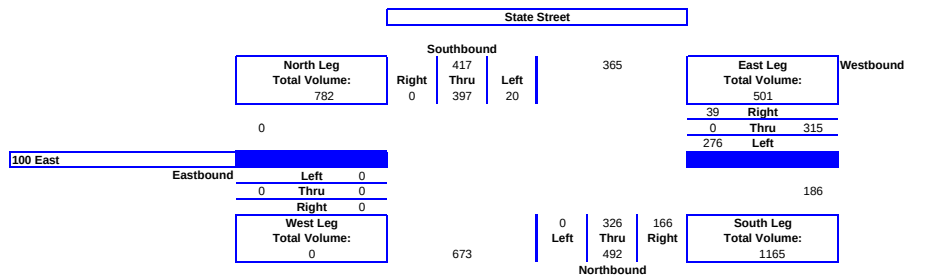
Murdock & 1500 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **State Street** E-W Street: **100 East**
Date: **Tuesday, February 17, 2009**
Begin Time: **07:00 AM** Counted by: **KA**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB				WB				NB				EB				Total	Hourly	0.5 Hr .
		Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	Right	Thru	Left	Trucks	All Moves	Totals	Factor
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13			
07:00 AM	07:15 AM	0	53	5	0	13	0	44	0	44	49	0	0	0	0	0	0	208		
07:15 AM	07:30 AM	0	61	7	0	14	0	54	0	41	53	0	0	0	0	0	0	230		2.794521
07:30 AM	07:45 AM	0	79	8	0	10	0	55	0	37	47	0	0	0	0	0	0	236		2.626609
07:45 AM	08:00 AM	0	112	2	0	13	0	69	0	47	84	0	0	0	0	0	0	327	1001	2.174067
08:00 AM	08:15 AM	0	94	9	0	12	0	89	0	36	71	0	0	0	0	0	0	311	1104	1.918495
08:15 AM	08:30 AM	0	89	3	0	6	0	60	0	39	84	0	0	0	0	0	0	281	1155	2.067568
08:30 AM	08:45 AM	0	102	6	0	8	0	58	0	44	87	0	0	0	0	0	0	305	1224	2.088737
08:45 AM	09:00 AM	0	103	5	0	9	0	66	0	47	62	0	0	0	0	0	0	292	1189	2.050251



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
20	397	0	276	0	39	0	326	166	0	0	0
417			315			492			0		
Trucks:		0%	Trucks:		0%	Trucks:		0%	Trucks:		0%
Peak Hour:		07:45 AM to 8:45 AM				Peak Vol:		1224	PHF:		0.94

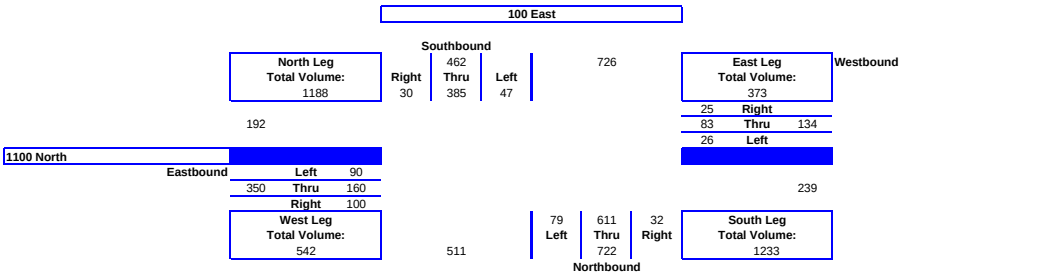
State Street & 100 East (construction) PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **1100 North**
Date: **Wednesday, February 18, 2009**
Begin Time: **04:00 PM** Counted by: **KM**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals	0.5 Hr Factor
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13			
04:00 PM	04:15 PM	9	103	6	0	8	22	6	1	12	118	30	0	35	21	12	0	383		
04:15 PM	04:30 PM	8	84	6	0	2	13	8	0	11	131	21	0	29	32	14	0	359		2.247978
04:30 PM	04:45 PM	9	108	15	0	9	14	4	0	12	112	12	0	30	30	4	0	359		2.32312
04:45 PM	05:00 PM	4	79	8	0	2	23	7	0	14	120	23	0	29	31	15	0	355	1456	2.336134
05:00 PM	05:15 PM	5	87	13	0	3	11	2	0	9	132	13	0	26	36	17	0	354	1427	2.352609
05:15 PM	05:30 PM	4	115	14	0	3	22	9	0	5	162	21	0	21	47	27	0	450	1518	2.074627
05:30 PM	05:45 PM	13	72	13	0	12	18	5	0	15	169	21	0	26	49	22	0	435	1594	1.884746
05:45 PM	06:00 PM	8	111	7	0	7	32	10	0	3	148	24	0	27	28	24	0	429	1668	1.930556



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
47	385	30	26	83	25	79	611	32	90	160	100
462			134			722			350		
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	1668		PHF:	0.93	

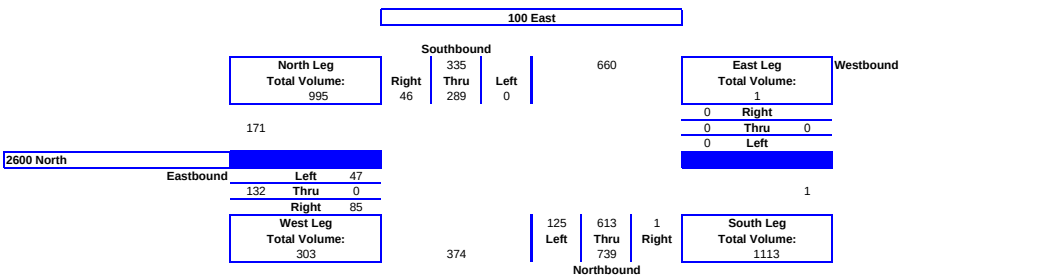
1100 N & 100 E PM.xls MCM 6/15/2009

TRAFFIC COUNT SUMMARY

City: **Pleasant Grove**
N-S Street: **100 East** E-W Street: **2600 North**
Date: **Tuesday, February 17, 2009**
Begin Time: **04:00 PM** Counted by: **TY**
Interval Length: **15 min**

HORROCKS ENGINEERS

Time Interval		SB Right	SB Thru	SB Left	SB Trucks	WB Right	WB Thru	WB Left	WB Trucks	NB Right	NB Thru	NB Left	NB Trucks	EB Right	EB Thru	EB Left	EB Trucks	Total All Moves	Hourly Totals	0.5 Hr Factor
		2	3	4	1	6	7	8	5	10	11	12	9	14	15	16	13			
04:00 PM	04:15 PM	5	99	0	0	0	0	0	0	0	99	22	0	23	0	5	1	254		
04:15 PM	04:30 PM	8	63	0	0	0	0	0	0	0	108	18	0	21	0	5	0	223		2.528302
04:30 PM	04:45 PM	10	66	0	0	0	0	0	0	0	105	13	0	28	0	11	0	233		2.644737
04:45 PM	05:00 PM	7	72	0	0	0	0	0	0	0	91	22	0	23	0	16	0	231	941	2.599138
05:00 PM	05:15 PM	7	76	0	0	0	0	0	0	0	149	29	0	28	0	12	0	301	988	2.266917
05:15 PM	05:30 PM	7	75	0	0	0	0	0	0	1	154	30	0	22	0	13	0	302	1067	2
05:30 PM	05:45 PM	13	70	0	0	0	0	0	0	0	163	39	0	18	0	10	0	313	1147	1.960976
05:45 PM	06:00 PM	19	68	0	0	0	0	0	0	0	147	27	0	17	0	12	0	290	1206	2



OPTIONAL Adjustment Factors	
Monthly:	1.00
Daily:	1.00
Interval:	1.00
Count:	1.00
Total:	1

ADJUSTED PEAK HOUR TRAFFIC VOLUMES											
Southbound			Westbound			Northbound			Eastbound		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	289	46	0	0	0	125	613	1	47	0	85
335			0			739			132		
Trucks:	0%		Trucks:	0%		Trucks:	0%		Trucks:	0%	
Peak Hour:	05:00 PM to 6:00 PM					Peak Vol:	1206		PHF:	0.96	

2600 N & 100 E PM.xls MCM 6/15/2009

Appendix B: Existing (2009) Synchro Model Output

HCM Signalized Intersection Capacity Analysis
9: SR-89 & 2000 West

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	279	431	14	4	494	344	15	5	16	450	6	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1647		1770	1863	1583
Flt Permitted	0.32	1.00	1.00	0.47	1.00	1.00	0.75	1.00		0.74	1.00	1.00
Satd. Flow (perm)	603	5085	1583	883	5085	1583	1403	1647		1384	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	468	15	4	537	374	16	5	17	489	7	327
RTOR Reduction (vph)	0	0	9	0	0	269	0	10	0	0	0	189
Lane Group Flow (vph)	303	468	6	4	537	105	16	12	0	489	7	138
Turn Type	pm+pt		Perm	pm+pt		Perm	Perm			Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)	57.5	50.7	50.7	34.4	33.6	33.6	50.5	50.5		50.5	50.5	50.5
Effective Green, g (s)	57.5	50.7	50.7	34.4	33.6	33.6	50.5	50.5		50.5	50.5	50.5
Actuated g/C Ratio	0.48	0.42	0.42	0.29	0.28	0.28	0.42	0.42		0.42	0.42	0.42
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	463	2148	669	259	1424	443	590	693		582	784	666
v/s Ratio Prot	c0.10	0.09		0.00	0.11			0.01			0.00	
v/s Ratio Perm	c0.22		0.00	0.00		0.07	0.01			c0.35		0.09
v/c Ratio	0.65	0.22	0.01	0.02	0.38	0.24	0.03	0.02		0.84	0.01	0.21
Uniform Delay, d1	20.4	22.0	20.1	30.6	34.8	33.3	20.4	20.3		31.1	20.2	22.0
Progression Factor	1.00	1.00	1.00	0.70	0.66	0.60	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.3	0.2	0.0	0.0	0.7	1.2	0.0	0.0		10.6	0.0	0.2
Delay (s)	23.7	22.3	20.1	21.5	23.7	21.1	20.4	20.3		41.7	20.2	22.2
Level of Service	C	C	C	C	C	C	C	C		D	C	C
Approach Delay (s)		22.8			22.6			20.3			33.8	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM Average Control Delay	26.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	71.6%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
10: SR-89 & 1300 West

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	602	197	9	600	81	264	159	42	146	249	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	4897		1770	4995		1770	1804		1770	1827	
Flt Permitted	0.34	1.00		0.28	1.00		0.45	1.00		0.56	1.00	
Satd. Flow (perm)	626	4897		529	4995		832	1804		1042	1827	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	654	214	10	652	88	287	173	46	159	271	40
RTOR Reduction (vph)	0	33	0	0	10	0	0	13	0	0	7	0
Lane Group Flow (vph)	55	835	0	10	730	0	287	206	0	159	304	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	63.4	63.4		63.4	63.4		44.6	44.6		44.6	44.6	
Effective Green, g (s)	63.4	63.4		63.4	63.4		44.6	44.6		44.6	44.6	
Actuated g/C Ratio	0.53	0.53		0.53	0.53		0.37	0.37		0.37	0.37	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	331	2587		279	2639		309	670		387	679	
v/s Ratio Prot		c0.17			0.15			0.11			0.17	
v/s Ratio Perm	0.09			0.02			c0.35			0.15		
v/c Ratio	0.17	0.32		0.04	0.28		0.93	0.31		0.41	0.45	
Uniform Delay, d1	14.6	16.1		13.6	15.6		36.2	26.8		28.0	28.4	
Progression Factor	1.06	0.95		0.47	0.52		1.01	1.00		1.00	1.00	
Incremental Delay, d2	1.0	0.3		0.2	0.3		32.8	0.3		0.7	0.5	
Delay (s)	16.6	15.6		6.7	8.4		69.2	27.1		28.7	28.9	
Level of Service	B	B		A	A		E	C		C	C	
Approach Delay (s)		15.7			8.3			51.0			28.8	
Approach LOS		B			A			D			C	

Intersection Summary				
HCM Average Control Delay	22.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.57			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	69.3%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
11: SR-89 & Pleasant Grove Blvd

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	695	35	72	559	19	41	139	46	37	390	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	0.97	0.91		0.97	0.91		0.97	0.95		0.97	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	5049		3433	5060		3433	3407		3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	5049		3433	5060		3433	3407		3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	755	38	78	608	21	45	151	50	40	424	193
RTOR Reduction (vph)	0	4	0	0	2	0	0	30	0	0	0	148
Lane Group Flow (vph)	157	789	0	78	627	0	45	171	0	40	424	45
Turn Type	Prot			Prot			Prot			Prot		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												8
Actuated Green, G (s)	10.8	59.6		9.6	58.4		5.9	21.1		5.7	20.9	20.9
Effective Green, g (s)	10.8	59.6		9.6	58.4		5.9	21.1		5.7	20.9	20.9
Actuated g/C Ratio	0.09	0.50		0.08	0.49		0.05	0.18		0.05	0.17	0.17
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	309	2508		275	2463		169	599		163	616	276
v/s Ratio Prot	c0.05	c0.16		0.02	c0.12		0.01	c0.05		0.01	c0.12	
v/s Ratio Perm												0.03
v/c Ratio	0.51	0.31		0.28	0.25		0.27	0.28		0.25	0.69	0.16
Uniform Delay, d1	52.1	18.0		52.0	18.0		55.0	42.9		55.1	46.5	42.1
Progression Factor	0.79	0.75		0.98	0.98		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	0.3		0.6	0.2		0.8	0.3		0.8	3.2	0.3
Delay (s)	42.3	13.8		51.4	17.9		55.8	43.2		55.9	49.7	42.4
Level of Service	D	B		D	B		E	D		E	D	D
Approach Delay (s)		18.5			21.6			45.5			47.9	
Approach LOS		B			C			D			D	

Intersection Summary				
HCM Average Control Delay	29.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.37			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	50.1%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
12: SR-89 & Geneva Road

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	415	260	45	317	57	147	123	26	121	339	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4791		1770	5085	1583	1770	1863	1583	1770	3539	1583
Flt Permitted	0.54	1.00		0.36	1.00	1.00	0.43	1.00	1.00	0.63	1.00	1.00
Satd. Flow (perm)	1000	4791		667	5085	1583	792	1863	1583	1177	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	451	283	49	345	62	160	134	28	132	368	21
RTOR Reduction (vph)	0	49	0	0	0	20	0	0	22	0	0	16
Lane Group Flow (vph)	2	685	0	49	345	42	160	134	6	132	368	5
Turn Type	Perm			Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		6
Actuated Green, G (s)	81.7	81.7		81.7	81.7	81.7	26.3	26.3	26.3	26.3	26.3	26.3
Effective Green, g (s)	81.7	81.7		81.7	81.7	81.7	26.3	26.3	26.3	26.3	26.3	26.3
Actuated g/C Ratio	0.68	0.68		0.68	0.68	0.68	0.22	0.22	0.22	0.22	0.22	0.22
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	681	3262		454	3462	1078	174	408	347	258	776	347
v/s Ratio Prot		c0.14			0.07			0.07			0.10	
v/s Ratio Perm	0.00			0.07		0.03	c0.20		0.00	0.11		0.00
v/c Ratio	0.00	0.21		0.11	0.10	0.04	0.92	0.33	0.02	0.51	0.47	0.01
Uniform Delay, d1	6.1	7.1		6.6	6.6	6.3	45.8	39.4	36.7	41.2	40.8	36.7
Progression Factor	0.47	0.44		0.68	0.73	0.21	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.0	0.1		0.5	0.1	0.1	45.1	0.5	0.0	1.7	0.5	0.0
Delay (s)	2.9	3.3		5.0	4.8	1.4	90.9	39.9	36.7	42.9	41.3	36.7
Level of Service	A	A		A	A	A	F	D	D	D	D	D
Approach Delay (s)		3.3			4.4			65.0			41.5	
Approach LOS		A			A			E			D	

Intersection Summary				
HCM Average Control Delay	23.1	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	54.7%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
14: 700 South & SR-89

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	22	45	49	292	166	16	36	556	74	3	636	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91	1.00	1.00	0.91	
Frt	1.00	0.92		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1718		1770	1839		1770	5085	1583	1770	5050	
Flt Permitted	0.40	1.00		0.66	1.00		0.31	1.00	1.00	0.41	1.00	
Satd. Flow (perm)	745	1718		1238	1839		570	5085	1583	769	5050	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	49	53	317	180	17	39	604	80	3	691	34
RTOR Reduction (vph)	0	36	0	0	4	0	0	0	21	0	3	0
Lane Group Flow (vph)	24	66	0	317	193	0	39	604	59	3	722	0
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.3	10.0		34.8	22.5		66.0	66.0	66.0	62.7	62.7	
Effective Green, g (s)	16.3	10.0		34.8	22.5		66.0	66.0	66.0	62.7	62.7	
Actuated g/C Ratio	0.14	0.08		0.29	0.19		0.55	0.55	0.55	0.52	0.52	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	155	143		442	345		359	2797	871	412	2639	
v/s Ratio Prot	0.01	0.04		c0.11	0.10		0.00	c0.12		0.00	c0.14	
v/s Ratio Perm	0.01			c0.10			0.06		0.04	0.00		
v/c Ratio	0.15	0.46		0.72	0.56		0.11	0.22	0.07	0.01	0.27	
Uniform Delay, d1	50.8	52.4		37.6	44.2		12.9	13.8	12.6	13.7	16.0	
Progression Factor	1.00	1.00		1.00	1.00		0.84	0.82	0.72	0.70	0.67	
Incremental Delay, d2	0.5	2.4		5.5	2.0		0.1	0.2	0.1	0.0	0.3	
Delay (s)	51.3	54.8		43.1	46.2		10.9	11.5	9.3	9.6	11.0	
Level of Service	D	D		D	D		B	B	A	A	B	
Approach Delay (s)		54.1			44.3			11.2			11.0	
Approach LOS		D			D			B			B	

Intersection Summary				
HCM Average Control Delay	21.8	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0	
Intersection Capacity Utilization	54.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
15: 700 North & SR-89

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	48	85	134	52	200	38	151	524	43	32	876	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.37	1.00	1.00	0.70	1.00	1.00	0.28	1.00	1.00	0.43	1.00	1.00
Satd. Flow (perm)	694	1863	1583	1299	1863	1583	528	5085	1583	796	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	92	146	57	217	41	164	570	47	35	952	60
RTOR Reduction (vph)	0	0	122	0	0	18	0	0	12	0	0	16
Lane Group Flow (vph)	52	92	24	57	217	23	164	570	35	35	952	44
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	19.4	19.4	19.4	19.4	19.4	19.4	88.6	88.6	88.6	88.6	88.6	88.6
Effective Green, g (s)	19.4	19.4	19.4	19.4	19.4	19.4	88.6	88.6	88.6	88.6	88.6	88.6
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.16	0.16	0.74	0.74	0.74	0.74	0.74	0.74
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	112	301	256	210	301	256	390	3754	1169	588	3754	1169
v/s Ratio Prot		0.05			c0.12			0.11			0.19	
v/s Ratio Perm	0.07		0.01	0.04		0.01	c0.31		0.02	0.04		0.03
v/c Ratio	0.46	0.31	0.09	0.27	0.72	0.09	0.42	0.15	0.03	0.06	0.25	0.04
Uniform Delay, d1	45.6	44.4	42.8	44.1	47.7	42.8	6.0	4.6	4.2	4.3	5.1	4.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.47	0.06
Incremental Delay, d2	3.0	0.6	0.2	0.7	8.2	0.1	3.3	0.1	0.0	0.2	0.2	0.1
Delay (s)	48.6	44.9	43.0	44.8	56.0	42.9	9.3	4.7	4.2	2.3	2.6	0.3
Level of Service	D	D	D	D	E	D	A	A	A	A	A	A
Approach Delay (s)		44.6			52.2			5.6			2.4	
Approach LOS		D			D			A			A	

Intersection Summary				
HCM Average Control Delay	14.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.47			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	59.2%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
40: 700 South & Geneva Road

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	61	59	169	50	29	28	157	40	32	508	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.93		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1725		1770	1863	1583		3513	1583	1770	3539	1583
Flt Permitted	0.72	1.00		0.67	1.00	1.00		0.85	1.00	0.63	1.00	1.00
Satd. Flow (perm)	1345	1725		1255	1863	1583		2999	1583	1165	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	66	64	184	54	32	30	171	43	35	552	10
RTOR Reduction (vph)	0	43	0	0	0	22	0	0	28	0	0	7
Lane Group Flow (vph)	27	87	0	184	54	10	0	201	15	35	552	3
Turn Type	Perm			Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		6
Actuated Green, G (s)	7.8	7.8		7.8	7.8	7.8		8.5	8.5	8.5	8.5	8.5
Effective Green, g (s)	7.8	7.8		7.8	7.8	7.8		8.5	8.5	8.5	8.5	8.5
Actuated g/C Ratio	0.32	0.32		0.32	0.32	0.32		0.35	0.35	0.35	0.35	0.35
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	432	554		403	598	508		1049	554	408	1238	554
v/s Ratio Prot		0.05			0.03						c0.16	
v/s Ratio Perm	0.02			c0.15		0.01		0.07	0.01	0.03		0.00
v/c Ratio	0.06	0.16		0.46	0.09	0.02		0.19	0.03	0.09	0.45	0.01
Uniform Delay, d1	5.7	5.9		6.6	5.8	5.6		5.5	5.2	5.3	6.1	5.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1		0.8	0.1	0.0		0.1	0.0	0.1	0.3	0.0
Delay (s)	5.8	6.0		7.4	5.8	5.7		5.6	5.2	5.4	6.3	5.2
Level of Service	A	A		A	A	A		A	A	A	A	A
Approach Delay (s)		6.0			6.9			5.5			6.3	
Approach LOS		A			A			A			A	

Intersection Summary				
HCM Average Control Delay	6.2	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	24.3	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	45.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
73: 200 South & 100 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	50	25	25	150	25	25	225	25	75	300	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1770		1770	1863	1583	1770	1835		1770	1830	
Flt Permitted	0.65	1.00		0.70	1.00	1.00	0.54	1.00		0.59	1.00	
Satd. Flow (perm)	1218	1770		1312	1863	1583	1009	1835		1103	1830	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	54	27	27	163	27	27	245	27	82	326	43
RTOR Reduction (vph)	0	21	0	0	0	21	0	7	0	0	9	0
Lane Group Flow (vph)	27	60	0	27	163	6	27	265	0	82	360	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	6.3	6.3		6.3	6.3	6.3	9.3	9.3		9.3	9.3	
Effective Green, g (s)	6.3	6.3		6.3	6.3	6.3	9.3	9.3		9.3	9.3	
Actuated g/C Ratio	0.23	0.23		0.23	0.23	0.23	0.34	0.34		0.34	0.34	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	278	404		299	425	361	340	618		372	617	
v/s Ratio Prot		0.03			c0.09			0.14			c0.20	
v/s Ratio Perm	0.02			0.02		0.00	0.03			0.07		
v/c Ratio	0.10	0.15		0.09	0.38	0.02	0.08	0.43		0.22	0.58	
Uniform Delay, d1	8.4	8.5		8.4	9.0	8.3	6.2	7.1		6.6	7.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.2		0.1	0.6	0.0	0.1	0.5		0.3	1.4	
Delay (s)	8.6	8.7		8.5	9.6	8.3	6.3	7.6		6.9	9.0	
Level of Service	A	A		A	A	A	A	A		A	A	
Approach Delay (s)		8.6			9.3			7.5			8.6	
Approach LOS		A			A			A			A	

Intersection Summary				
HCM Average Control Delay	8.4	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	27.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.6%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
87: 700N & Pleasant Grove Blvd.

Timing Plan: AM Peak

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	10	33	10	369	65	12	74	650	299	20	1000	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3372		3433	3523	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3372		3433	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	36	11	401	71	13	80	707	325	22	1087	34
RTOR Reduction (vph)	0	0	10	0	0	10	0	34	0	0	2	0
Lane Group Flow (vph)	11	36	1	401	71	3	80	998	0	22	1119	0
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2						
Actuated Green, G (s)	1.0	4.6	4.6	17.2	20.8	20.8	6.0	44.2		2.2	40.4	
Effective Green, g (s)	1.0	4.6	4.6	17.2	20.8	20.8	6.0	44.2		2.2	40.4	
Actuated g/C Ratio	0.01	0.05	0.05	0.19	0.23	0.23	0.07	0.49		0.02	0.45	
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	38	180	81	655	816	365	228	1652		84	1578	
v/s Ratio Prot	0.00	c0.01		c0.12	0.02		c0.02	c0.30		0.01	c0.32	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.29	0.20	0.01	0.61	0.09	0.01	0.35	0.60		0.26	0.71	
Uniform Delay, d1	44.2	41.0	40.6	33.4	27.2	26.7	40.2	16.7		43.2	20.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.2	0.5	0.0	1.7	0.0	0.0	0.9	0.6		1.7	1.5	
Delay (s)	48.4	41.6	40.7	35.1	27.3	26.8	41.2	17.3		44.9	21.6	
Level of Service	D	D	D	D	C	C	D	B		D	C	
Approach Delay (s)		42.7			33.8			19.0			22.1	
Approach LOS		D			C			B			C	

Intersection Summary				
HCM Average Control Delay	23.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	90.2	Sum of lost time (s)	28.0	
Intersection Capacity Utilization	58.9%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
91: I-15 SB Ramp & Pleasnt Grove Blvd.

Timing Plan: AM Peak

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	643	3	53	0	0	0	0	30	29	564	116	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0					6.0	6.0	6.0	6.0	
Lane Util. Factor	0.95	0.95	1.00					0.95	1.00	0.97	1.00	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1686	1583					3539	1583	3433	1863	
Flt Permitted	0.95	0.95	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1681	1686	1583					3539	1583	3433	1863	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	699	3	58	0	0	0	0	33	32	613	126	0
RTOR Reduction (vph)	0	0	40	0	0	0	0	0	30	0	0	0
Lane Group Flow (vph)	349	353	18	0	0	0	0	33	2	613	126	0
Turn Type	Perm		Perm						Perm	Prot		
Protected Phases		6						4		3	8	
Permitted Phases	6		6						4			
Actuated Green, G (s)	13.8	13.8	13.8					3.3	3.3	10.5	19.8	
Effective Green, g (s)	13.8	13.8	13.8					3.3	3.3	10.5	19.8	
Actuated g/C Ratio	0.30	0.30	0.30					0.07	0.07	0.23	0.43	
Clearance Time (s)	6.0	6.0	6.0					6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	509	510	479					256	115	790	809	
v/s Ratio Prot								0.01		c0.18	c0.07	
v/s Ratio Perm	0.21	0.21	0.01						0.00			
v/c Ratio	0.69	0.69	0.04					0.13	0.02	0.78	0.16	
Uniform Delay, d1	14.0	14.0	11.2					19.8	19.6	16.4	7.8	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.8	4.0	0.0					0.2	0.1	4.8	0.1	
Delay (s)	17.8	18.1	11.2					20.0	19.7	21.3	7.9	
Level of Service	B	B	B					C	B	C	A	
Approach Delay (s)		17.4			0.0			19.9			19.0	
Approach LOS		B			A			B			B	

Intersection Summary				
HCM Average Control Delay	18.3	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	45.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	91.4%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
94: I-15 NB Ramp & Pleasnt Grove Blvd.

Timing Plan: AM Peak

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	131	0	430	69	509	0	0	650	609
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.95	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1770	1583	1770	3539			3539	1583
Flt Permitted					0.95	1.00	0.36	1.00			1.00	1.00
Satd. Flow (perm)					1770	1583	679	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	142	0	467	75	553	0	0	707	662
RTOR Reduction (vph)	0	0	0	0	0	121	0	0	0	0	0	387
Lane Group Flow (vph)	0	0	0	0	142	346	75	553	0	0	707	275
Turn Type				Perm		Perm	Perm					Perm
Protected Phases					2			4			8	
Permitted Phases				2		2	4					8
Actuated Green, G (s)					14.5	14.5	18.8	18.8			18.8	18.8
Effective Green, g (s)					14.5	14.5	18.8	18.8			18.8	18.8
Actuated g/C Ratio					0.32	0.32	0.42	0.42			0.42	0.42
Clearance Time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					567	507	282	1469			1469	657
v/s Ratio Prot								0.16			c0.20	
v/s Ratio Perm					0.08	c0.22	0.11					0.17
v/c Ratio					0.25	0.68	0.27	0.38			0.48	0.42
Uniform Delay, d1					11.4	13.4	8.7	9.2			9.7	9.4
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					0.2	3.8	0.5	0.2			0.2	0.4
Delay (s)					11.6	17.2	9.2	9.3			9.9	9.8
Level of Service					B	B	A	A			A	A
Approach Delay (s)		0.0			15.9			9.3			9.9	
Approach LOS		A			B			A			A	

Intersection Summary				
HCM Average Control Delay	11.1	HCM Level of Service		B
HCM Volume to Capacity ratio	0.57			
Actuated Cycle Length (s)	45.3	Sum of lost time (s)		12.0
Intersection Capacity Utilization	91.4%	ICU Level of Service		F
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
100: 1100 North & 100 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	116	226	40	178	38	108	327	34	22	881	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.97		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1678		1770	1814		1770	1836		1770	1846	
Flt Permitted	0.58	1.00		0.36	1.00		0.12	1.00		0.52	1.00	
Satd. Flow (perm)	1079	1678		677	1814		231	1836		976	1846	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	126	246	43	193	41	117	355	37	24	958	62
RTOR Reduction (vph)	0	101	0	0	14	0	0	7	0	0	4	0
Lane Group Flow (vph)	30	271	0	43	220	0	117	385	0	24	1016	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	11.0	11.0		11.0	11.0		32.2	32.2		32.2	32.2	
Effective Green, g (s)	11.0	11.0		11.0	11.0		32.2	32.2		32.2	32.2	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.58	0.58		0.58	0.58	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	215	334		135	361		135	1071		569	1077	
v/s Ratio Prot		c0.16			0.12			0.21			c0.55	
v/s Ratio Perm	0.03			0.06			0.51			0.02		
v/c Ratio	0.14	0.81		0.32	0.61		0.87	0.36		0.04	0.94	
Uniform Delay, d1	18.2	21.1		18.9	20.1		9.7	6.1		4.9	10.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	13.2		0.5	2.1		39.2	0.1		0.0	15.4	
Delay (s)	18.3	34.3		19.4	22.3		48.9	6.1		4.9	26.1	
Level of Service	B	C		B	C		D	A		A	C	
Approach Delay (s)		33.1			21.8			16.0			25.6	
Approach LOS		C			C			B			C	

Intersection Summary				
HCM Average Control Delay	24.3	HCM Level of Service		C
HCM Volume to Capacity ratio	0.91			
Actuated Cycle Length (s)	55.2	Sum of lost time (s)		12.0
Intersection Capacity Utilization	107.3%	ICU Level of Service		G
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
141: Center Street & 100 East

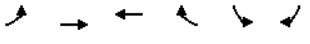
Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	98	32	8	244	16	37	249	3	34	550	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1846		1770	1860		1770	1798	
Flt Permitted	0.31	1.00	1.00	0.69	1.00		0.16	1.00		0.53	1.00	
Satd. Flow (perm)	574	1863	1583	1281	1846		295	1860		994	1798	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	83	107	35	9	265	17	40	271	3	37	598	180
RTOR Reduction (vph)	0	0	25	0	2	0	0	1	0	0	12	0
Lane Group Flow (vph)	83	107	10	9	280	0	40	273	0	37	766	0
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	27.0	20.9	20.9	16.5	15.4		29.0	25.3		28.8	25.2	
Effective Green, g (s)	27.0	20.9	20.9	16.5	15.4		29.0	25.3		28.8	25.2	
Actuated g/C Ratio	0.37	0.29	0.29	0.23	0.21		0.40	0.35		0.40	0.35	
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	1.0	1.0	3.0	1.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	321	534	454	297	390		192	646		431	622	
v/s Ratio Prot	c0.02	0.06		0.00	c0.15		c0.01	0.15		0.00	c0.43	
v/s Ratio Perm	0.07		0.01	0.01			0.07			0.03		
v/c Ratio	0.26	0.20	0.02	0.03	0.72		0.21	0.42		0.09	1.23	
Uniform Delay, d1	15.9	19.7	18.7	21.9	26.7		16.7	18.2		13.7	23.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.1	0.0	0.0	5.2		0.5	0.4		0.1	117.5	
Delay (s)	16.3	19.7	18.7	22.0	31.9		17.2	18.7		13.8	141.4	
Level of Service	B	B	B	C	C		B	B		B	F	
Approach Delay (s)		18.3			31.6			18.5			135.6	
Approach LOS		B			C			B			F	

Intersection Summary				
HCM Average Control Delay	78.8	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	72.9	Sum of lost time (s)	22.0	
Intersection Capacity Utilization	71.2%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
13: SR-89 & 100 East

Timing Plan: AM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	55	493	466	260	253	46
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	536	507	283	275	50
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		629	1179			
pX, platoon unblocked	0.97				0.97	0.97
vC, conflicting volume	789				805	253
vC1, stage 1 conf vol					507	
vC2, stage 2 conf vol					298	
vCu, unblocked vol	718				734	165
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	93				47	94
cM capacity (veh/h)	852				518	824

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	SB 1
Volume Total	60	179	179	179	253	253	283	325
Volume Left	60	0	0	0	0	0	0	275
Volume Right	0	0	0	0	0	0	283	50
cSH	852	1700	1700	1700	1700	1700	1700	550
Volume to Capacity	0.07	0.11	0.11	0.11	0.15	0.15	0.17	0.59
Queue Length 95th (ft)	6	0	0	0	0	0	0	95
Control Delay (s)	9.5	0.0	0.0	0.0	0.0	0.0	0.0	20.6
Lane LOS	A							C
Approach Delay (s)	1.0				0.0			20.6
Approach LOS								C

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	43.0%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
42: 500 North & 100 East

Timing Plan: AM Peak

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	32	72	377	18	51	852
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	35	78	410	20	55	926
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			TWLTL
Median storage veh)						2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1447	410			429	
vC1, stage 1 conf vol	410					
vC2, stage 2 conf vol	1037					
vCu, unblocked vol	1447	410			429	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	88			95	
cM capacity (veh/h)	302	642			1130	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	113	410	20	55	926
Volume Left	35	0	0	55	0
Volume Right	78	0	20	0	0
cSH	477	1700	1700	1130	1700
Volume to Capacity	0.24	0.24	0.01	0.05	0.54
Queue Length 95th (ft)	23	0	0	4	0
Control Delay (s)	14.9	0.0	0.0	8.3	0.0
Lane LOS	B			A	
Approach Delay (s)	14.9	0.0		0.5	
Approach LOS	B				

Intersection Summary				
Average Delay	1.4			
Intersection Capacity Utilization	57.7%	ICU Level of Service		B
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
48: 1100 North & 1300 West

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	106	25	54	214	9	24	71	40	27	152	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	115	27	59	233	10	26	77	43	29	165	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	242			142			594	506	129	570	515	238
vC1, stage 1 conf vol							146	146		355	355	
vC2, stage 2 conf vol							448	360		215	160	
vCu, unblocked vol	242			142			594	506	129	570	515	238
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			96			93	86	95	94	70	98
cM capacity (veh/h)	1324			1440			383	561	921	521	559	801

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	9	142	59	242	147	210
Volume Left	9	0	59	0	26	29
Volume Right	0	27	0	10	43	15
cSH	1324	1700	1440	1700	580	566
Volume to Capacity	0.01	0.08	0.04	0.14	0.25	0.37
Queue Length 95th (ft)	0	0	3	0	25	43
Control Delay (s)	7.7	0.0	7.6	0.0	13.3	15.1
Lane LOS	A		A		B	C
Approach Delay (s)	0.4		1.5		13.3	15.1
Approach LOS					B	C

Intersection Summary				
Average Delay	7.0			
Intersection Capacity Utilization	38.1%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
72: Center Street & Main Street

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	2	146	155	89	302	1	97	16	28	5	56	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	159	168	97	328	1	105	17	30	5	61	14

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	161	168	97	329	153	80
Volume Left (vph)	2	0	97	0	105	5
Volume Right (vph)	0	168	0	1	30	14
Hadj (s)	0.04	-0.67	0.53	0.03	0.05	-0.06
Departure Headway (s)	5.8	5.1	6.2	5.7	5.9	5.9
Degree Utilization, x	0.26	0.24	0.17	0.52	0.25	0.13
Capacity (veh/h)	586	669	560	618	551	534
Control Delay (s)	9.6	8.5	9.2	13.4	10.8	9.9
Approach Delay (s)	9.1		12.4		10.8	9.9
Approach LOS	A		B		B	A

Intersection Summary					
Delay	10.8				
HCM Level of Service	B				
Intersection Capacity Utilization	48.3%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
74: 200 South & Main Street

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	46	103	57	93	22	81	151	21	10	228	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	50	112	62	101	24	88	164	23	11	248	8

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total (vph)	54	112	62	125	88	187	266
Volume Left (vph)	4	0	62	0	88	0	11
Volume Right (vph)	0	112	0	24	0	23	8
Hadj (s)	0.07	-0.67	0.53	-0.10	0.53	-0.05	0.03
Departure Headway (s)	6.5	5.7	6.9	6.2	6.4	5.9	5.9
Degree Utilization, x	0.10	0.18	0.12	0.22	0.16	0.30	0.44
Capacity (veh/h)	512	577	486	536	530	582	580
Control Delay (s)	9.0	8.7	9.6	9.7	9.5	10.2	13.5
Approach Delay (s)	8.8		9.7		10.0		13.5
Approach LOS	A		A		A		B

Intersection Summary					
Delay	10.7				
HCM Level of Service	B				
Intersection Capacity Utilization	42.0%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
79: Pleasant Grove Blvd. & 220 South

Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	264	49	32	568	76	16
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	287	53	35	617	83	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						6
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			340		974	287
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			340		974	287
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		70	98
cM capacity (veh/h)			1219		271	752

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	287	53	35	617	100
Volume Left	0	0	35	0	83
Volume Right	0	53	0	0	17
cSH	1700	1700	1219	1700	328
Volume to Capacity	0.17	0.03	0.03	0.36	0.30
Queue Length 95th (ft)	0	0	2	0	31
Control Delay (s)	0.0	0.0	8.0	0.0	21.5
Lane LOS			A		C
Approach Delay (s)	0.0		0.4		21.5
Approach LOS					C

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	40.8%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
83: Pleasant Grove Blvd. & 1300 West

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	392	346	2	30	552	26	1	35	19	4	42	607
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	426	376	2	33	600	28	1	38	21	4	46	660
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												4
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	628			378			2247	1923	377	1947	1910	614
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	628			378			2247	1923	377	1947	1910	614
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	55			97			0	0	97	0	0	0
cM capacity (veh/h)	954			1180			0	36	669	0	37	492

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	426	378	33	628	1	59	710
Volume Left	426	0	33	0	1	0	4
Volume Right	0	2	0	28	0	21	660
cSH	954	1700	1180	1700	0	54	238
Volume to Capacity	0.45	0.22	0.03	0.37	Err	1.09	2.99
Queue Length 95th (ft)	58	0	2	0	Err	125	1580
Control Delay (s)	11.8	0.0	8.1	0.0	Err	273.2	936.0
Lane LOS	B		A		F	F	F
Approach Delay (s)	6.2		0.4		Err		936.0
Approach LOS					F		F

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	81.5%	ICU Level of Service		D
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
97: 2600 North & 1300 West

Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	70	84	17	204	68	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	91	18	222	74	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			167		380	122
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			167		380	122
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		88	99
cM capacity (veh/h)			1410		614	929

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	167	240	84
Volume Left	0	18	74
Volume Right	91	0	10
cSH	1700	1410	639
Volume to Capacity	0.10	0.01	0.13
Queue Length 95th (ft)	0	1	11
Control Delay (s)	0.0	0.7	11.5
Lane LOS		A	B
Approach Delay (s)	0.0	0.7	11.5
Approach LOS			B

Intersection Summary				
Average Delay	2.3			
Intersection Capacity Utilization	34.8%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
101: 1800 North & 1300 West

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	6	26	13	27	40	15	22	60	11	15	122	16
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	28	14	29	43	16	24	65	12	16	133	17

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	49	89	101	166
Volume Left (vph)	7	29	24	16
Volume Right (vph)	14	16	12	17
Hadj (s)	-0.11	-0.01	0.01	-0.01
Departure Headway (s)	4.5	4.6	4.4	4.3
Degree Utilization, x	0.06	0.11	0.12	0.20
Capacity (veh/h)	737	735	777	792
Control Delay (s)	7.8	8.1	8.0	8.4
Approach Delay (s)	7.8	8.1	8.0	8.4
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.2			
HCM Level of Service	A			
Intersection Capacity Utilization	25.4%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
103: 1800 North & 100 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	5	92	2	5	10	64	268	4	6	652	8
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	5	100	2	5	11	70	291	4	7	709	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1170	1161	713	1261	1163	293	717			296		
vC1, stage 1 conf vol	726	726		433	433							
vC2, stage 2 conf vol	444	435		829	730							
vCu, unblocked vol	1170	1161	713	1261	1163	293	717			296		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	77	99	98	99	92			99		
cM capacity (veh/h)	348	362	432	197	323	746	884			1266		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	105	18	70	296	724
Volume Left	0	2	70	0	7
Volume Right	100	11	0	4	9
cSH	428	435	884	1700	1266
Volume to Capacity	0.25	0.04	0.08	0.17	0.01
Queue Length 95th (ft)	24	3	6	0	0
Control Delay (s)	16.2	13.6	9.4	0.0	0.1
Lane LOS	C	B	A		A
Approach Delay (s)	16.2	13.6	1.8		0.1
Approach LOS	C	B			

Intersection Summary					
Average Delay			2.2		
Intersection Capacity Utilization			59.5%	ICU Level of Service	B
Analysis Period (min)			15		

HCM Unsignalized Intersection Capacity Analysis
105: 2600 North & Canyon Road

Timing Plan: AM Peak

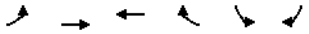
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (veh/h)	15	0	108	0	0	0	0	457	61	80	149	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	0	117	0	0	0	0	497	66	87	162	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	866	868	530	984	900	163	164			563		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	866	868	530	984	900	163	164			563		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	79	100	100	100	100			91		
cM capacity (veh/h)	256	265	549	167	254	882	1414			1008		

Direction, Lane #	EB 1	WB 1	SE 1	NW 1	NW 2
Volume Total	134	0	563	87	164
Volume Left	16	0	0	87	0
Volume Right	117	0	66	0	2
cSH	482	1700	1414	1008	1700
Volume to Capacity	0.28	0.00	0.00	0.09	0.10
Queue Length 95th (ft)	28	0	0	7	0
Control Delay (s)	15.3	0.0	0.0	8.9	0.0
Lane LOS	C	A		A	
Approach Delay (s)	15.3	0.0	0.0	3.1	
Approach LOS	C	A			

Intersection Summary					
Average Delay			3.0		
Intersection Capacity Utilization			53.2%	ICU Level of Service	A
Analysis Period (min)			15		

HCM Unsignalized Intersection Capacity Analysis
106: 2600 North & 900 West

Timing Plan: AM Peak



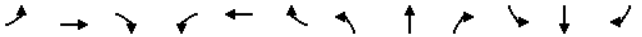
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	12	75	149	47	63	55
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	82	162	51	68	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	213				295	188
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	213				295	188
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				90	93
cM capacity (veh/h)	1357				689	855

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	95	213	128
Volume Left	13	0	68
Volume Right	0	51	60
cSH	1357	1700	758
Volume to Capacity	0.01	0.13	0.17
Queue Length 95th (ft)	1	0	15
Control Delay (s)	1.1	0.0	10.7
Lane LOS	A		B
Approach Delay (s)	1.1	0.0	10.7
Approach LOS			B

Intersection Summary				
Average Delay		3.4		
Intersection Capacity Utilization		27.6%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
108: Huntsman Lane & 900 West

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	0	29	3	0	23	0	10	20	3	3	43	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	32	3	0	25	0	11	22	3	3	47	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	35	25	36	50
Volume Left (vph)	0	0	11	3
Volume Right (vph)	3	0	3	0
Hadj (s)	-0.02	0.03	0.04	0.05
Departure Headway (s)	4.1	4.2	4.1	4.1
Degree Utilization, x	0.04	0.03	0.04	0.06
Capacity (veh/h)	856	843	848	857
Control Delay (s)	7.3	7.3	7.3	7.4
Approach Delay (s)	7.3	7.3	7.3	7.4
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.3		
HCM Level of Service		A		
Intersection Capacity Utilization		14.8%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
114: 2600 North & 600 West

Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	119	38	9	151	18	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	129	41	10	164	20	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			171		334	150
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			171		334	150
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		97	100
cM capacity (veh/h)			1407		657	896

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	171	174	23
Volume Left	0	10	20
Volume Right	41	0	3
cSH	1700	1407	683
Volume to Capacity	0.10	0.01	0.03
Queue Length 95th (ft)	0	1	3
Control Delay (s)	0.0	0.5	10.5
Lane LOS		A	B
Approach Delay (s)	0.0	0.5	10.5
Approach LOS			B

Intersection Summary				
Average Delay		0.9		
Intersection Capacity Utilization		25.3%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
116: 1800 North & 600 West

Timing Plan: AM Peak

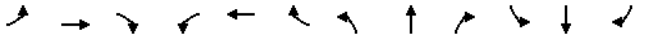
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	53	65	76	81	16	11	19	17	6	69	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	58	71	83	88	17	12	21	18	7	75	7

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	133	188	12	39	7	82
Volume Left (vph)	4	83	12	0	7	0
Volume Right (vph)	71	17	0	18	0	7
Hadj (s)	-0.28	0.07	0.53	-0.30	0.53	-0.02
Departure Headway (s)	4.2	4.5	5.9	5.0	5.8	5.3
Degree Utilization, x	0.15	0.23	0.02	0.05	0.01	0.12
Capacity (veh/h)	822	771	574	663	577	640
Control Delay (s)	8.0	8.8	7.8	7.1	7.7	7.8
Approach Delay (s)	8.0	8.8	7.3		7.8	
Approach LOS	A	A	A		A	

Intersection Summary				
Delay		8.2		
HCM Level of Service		A		
Intersection Capacity Utilization		30.1%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
123: 1100 North & 600 West

Timing Plan: AM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	188	26	79	205	22	10	46	19	35	124	25
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	204	28	86	223	24	11	50	21	38	135	27
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	247			233			734	663	218	697	665	235
vC1, stage 1 conf vol							245	245		407	407	
vC2, stage 2 conf vol							489	418		290	259	
vCu, unblocked vol	247			233			734	663	218	697	665	235
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			94			97	90	97	92	73	97
cM capacity (veh/h)	1319			1335			356	498	821	468	491	804

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	246	86	247	82	200
Volume Left	13	86	0	11	38
Volume Right	28	0	24	21	27
cSH	1319	1335	1700	522	513
Volume to Capacity	0.01	0.06	0.15	0.16	0.39
Queue Length 95th (ft)	1	5	0	14	46
Control Delay (s)	0.5	7.9	0.0	13.2	16.4
Lane LOS	A	A		B	C
Approach Delay (s)	0.5	2.0		13.2	16.4
Approach LOS				B	C

Intersection Summary				
Average Delay	6.0			
Intersection Capacity Utilization	49.4%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
124: 800 North & 600 West

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	8	18	18	18	3	5	67	3	3	257	8
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	9	20	20	20	3	5	73	3	3	279	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	389	377	284	399	380	74	288			76		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	389	377	284	399	380	74	288			76		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	97	96	96	100	100			100		
cM capacity (veh/h)	550	551	755	537	549	987	1274			1523		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	29	42	82	291
Volume Left	1	20	5	3
Volume Right	20	3	3	9
cSH	672	562	1274	1523
Volume to Capacity	0.04	0.08	0.00	0.00
Queue Length 95th (ft)	3	6	0	0
Control Delay (s)	10.6	11.9	0.6	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	10.6	11.9	0.6	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	30.3%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
127: 1100 North & 300 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	68	60	81	168	3	54	20	30	1	54	17
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	74	65	88	183	3	59	22	33	1	59	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1157										
pX, platoon unblocked												
vC, conflicting volume	186			139			515	471	107	480	502	184
vC1, stage 1 conf vol							109	109		360	360	
vC2, stage 2 conf vol							407	362		120	141	
vCu, unblocked vol	186			139			515	471	107	480	502	184
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			94			88	96	97	100	89	98
cM capacity (veh/h)	1389			1444			496	561	948	573	549	858

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	1	139	88	186	113	78
Volume Left	1	0	88	0	59	1
Volume Right	0	65	0	3	33	18
cSH	1389	1700	1444	1700	591	600
Volume to Capacity	0.00	0.08	0.06	0.11	0.19	0.13
Queue Length 95th (ft)	0	0	5	0	18	11
Control Delay (s)	7.6	0.0	7.7	0.0	12.5	11.9
Lane LOS	A		A		B	B
Approach Delay (s)	0.1		2.5		12.5	11.9
Approach LOS					B	B

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	34.9%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
130: 1100 North & 500 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	58	10	4	173	2	14	4	0	3	10	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	63	11	4	188	2	15	4	0	3	11	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	190			74			292	278	68	279	283	189
vC1, stage 1 conf vol							79	79		198	198	
vC2, stage 2 conf vol							213	199		82	85	
vCu, unblocked vol	190			74			292	278	68	279	283	189
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			98	99	100	100	98	99
cM capacity (veh/h)	1384			1526			730	696	995	761	698	853

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	79	195	20	24
Volume Left	5	4	15	3
Volume Right	11	2	0	10
cSH	1384	1526	722	763
Volume to Capacity	0.00	0.00	0.03	0.03
Queue Length 95th (ft)	0	0	2	2
Control Delay (s)	0.6	0.2	10.1	9.9
Lane LOS	A	A	B	A
Approach Delay (s)	0.6	0.2	10.1	9.9
Approach LOS			B	A

Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	20.9%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
134: 1100 North & Murdock Drive

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	52	11	0	152	2	34	1	0	2	2	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	57	12	0	165	2	37	1	0	2	2	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	167			68			258	243	62	242	248	166
vC1, stage 1 conf vol							76	76		166	166	
vC2, stage 2 conf vol							183	167		76	82	
vCu, unblocked vol	167			68			258	243	62	242	248	166
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			95	100	100	100	100	98
cM capacity (veh/h)	1410			1533			762	719	1002	794	722	878

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	75	167	38	20
Volume Left	7	0	37	2
Volume Right	12	2	0	15
cSH	1410	1533	761	848
Volume to Capacity	0.00	0.00	0.05	0.02
Queue Length 95th (ft)	0	0	4	2
Control Delay (s)	0.7	0.0	10.0	9.3
Lane LOS	A		A	A
Approach Delay (s)	0.7	0.0	10.0	9.3
Approach LOS			A	A

Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	23.8%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
139: 500 North & 700 East

Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	54	25	10	114	32	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	59	27	11	124	35	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			86		218	72
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			86		218	72
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		95	99
cM capacity (veh/h)			1510		765	990

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	86	135	46
Volume Left	0	11	35
Volume Right	27	0	11
cSH	1700	1510	809
Volume to Capacity	0.05	0.01	0.06
Queue Length 95th (ft)	0	1	4
Control Delay (s)	0.0	0.6	9.7
Lane LOS		A	A
Approach Delay (s)	0.0	0.6	9.7
Approach LOS			A

Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	23.2%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
145: 200 South & Locust Ave

Timing Plan: AM Peak

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Volume (veh/h)	121	55	39	178	84	25
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	132	60	42	193	91	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			191		440	161
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			191		440	161
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		84	97
cM capacity (veh/h)			1382		557	884

Direction, Lane #	EB 1	WB 1	NW 1
Volume Total	191	236	118
Volume Left	0	42	91
Volume Right	60	0	27
cSH	1700	1382	609
Volume to Capacity	0.11	0.03	0.19
Queue Length 95th (ft)	0	2	18
Control Delay (s)	0.0	1.6	12.3
Lane LOS		A	B
Approach Delay (s)	0.0	1.6	12.3
Approach LOS			B

Intersection Summary				
Average Delay	3.4			
Intersection Capacity Utilization	37.4%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
146: Center Street & 700 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	27	13	12	77	13	4	25	4	10	54	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	29	14	13	84	14	4	27	4	11	59	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	98			43			198	169	36	180	169	91
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	98			43			198	169	36	180	169	91
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	96	100	99	92	99
cM capacity (veh/h)	1495			1565			702	716	1036	750	716	967

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	48	111	36	76
Volume Left	4	13	4	11
Volume Right	14	14	4	7
cSH	1495	1565	742	737
Volume to Capacity	0.00	0.01	0.05	0.10
Queue Length 95th (ft)	0	1	4	9
Control Delay (s)	0.7	0.9	10.1	10.4
Lane LOS	A	A	B	B
Approach Delay (s)	0.7	0.9	10.1	10.4
Approach LOS			B	B

Intersection Summary				
Average Delay	4.8			
Intersection Capacity Utilization	19.8%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
149: 200 South & Murdock Drive

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	15	39	18	0	96	0	45	12	0	15	39	18
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	42	20	0	104	0	49	13	0	16	42	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	104			62			230	189	52	196	199	104
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	104			62			230	189	52	196	199	104
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			93	98	100	98	94	98
cM capacity (veh/h)	1487			1541			671	698	1015	746	689	950

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	78	104	62	78
Volume Left	16	0	49	16
Volume Right	20	0	0	20
cSH	1487	1541	677	753
Volume to Capacity	0.01	0.00	0.09	0.10
Queue Length 95th (ft)	1	0	8	9
Control Delay (s)	1.6	0.0	10.9	10.3
Lane LOS	A		B	B
Approach Delay (s)	1.6	0.0	10.9	10.3
Approach LOS			B	B

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	26.7%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
152: 200 South & 1300 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	4	13	10	4	25	8	23	10	2	2	25	13
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	14	11	4	27	9	25	11	2	2	27	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	36			25			96	73	20	76	74	32
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	36			25			96	73	20	76	74	32
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	99	100	100	97	99
cM capacity (veh/h)	1575			1589			849	813	1058	899	812	1042

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	29	40	38	43
Volume Left	4	4	25	2
Volume Right	11	9	2	14
cSH	1575	1589	848	879
Volume to Capacity	0.00	0.00	0.04	0.05
Queue Length 95th (ft)	0	0	4	4
Control Delay (s)	1.1	0.8	9.4	9.3
Lane LOS	A	A	A	A
Approach Delay (s)	1.1	0.8	9.4	9.3
Approach LOS			A	A

Intersection Summary				
Average Delay	5.5			
Intersection Capacity Utilization	18.6%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
157: Murdock Drive & 1500 East

Timing Plan: AM Peak

Movement	EBL	EBR	EBR2	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations												
Volume (veh/h)	0	14	71	97	29	5	3	134	0	63	47	3
Sign Control	Stop				Free			Free			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	15	77	105	32	5	3	146	0	68	51	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None			None				
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	426	400	146	146			37			482	397	34
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	426	400	146	146			37			482	397	34
tC, single (s)	7.1	6.5	6.2	4.1			4.1			7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	100	97	91	93			100			84	90	100
cM capacity (veh/h)	467	498	901	1436			1574			416	499	1039

Direction, Lane #	EB 1	NB 1	SB 1	NW 1
Volume Total	92	142	149	123
Volume Left	0	105	3	68
Volume Right	77	5	0	3
cSH	795	1436	1574	455
Volume to Capacity	0.12	0.07	0.00	0.27
Queue Length 95th (ft)	10	6	0	27
Control Delay (s)	10.1	5.9	0.2	15.8
Lane LOS	B	A	A	C
Approach Delay (s)	10.1	5.9	0.2	15.8
Approach LOS	B			C

Intersection Summary					
Average Delay	7.4				
Intersection Capacity Utilization	39.3%	ICU Level of Service	A		
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
165: 1000 South & Locust Ave

Timing Plan: AM Peak

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	49	15	36	63	84	173
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	16	39	68	91	188
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	332	185	279			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	332	185	279			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	98	97			
cM capacity (veh/h)	643	857	1283			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	70	108	279
Volume Left	53	39	0
Volume Right	16	0	188
cSH	683	1283	1700
Volume to Capacity	0.10	0.03	0.16
Queue Length 95th (ft)	8	2	0
Control Delay (s)	10.9	3.0	0.0
Lane LOS	B	A	
Approach Delay (s)	10.9	3.0	0.0
Approach LOS	B		

Intersection Summary					
Average Delay	2.4				
Intersection Capacity Utilization	34.0%	ICU Level of Service	A		
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
166: Center Street & 300 East

Timing Plan: AM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	63	68	34	208	5	50	82	5	3	421	92
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	68	74	37	226	5	54	89	5	3	458	100

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	154	268	149	561
Volume Left (vph)	12	37	54	3
Volume Right (vph)	74	5	5	100
Hadj (s)	-0.24	0.05	0.09	-0.07
Departure Headway (s)	6.4	6.4	6.5	5.5
Degree Utilization, x	0.28	0.48	0.27	0.86
Capacity (veh/h)	514	526	512	638
Control Delay (s)	11.8	15.1	11.8	33.2
Approach Delay (s)	11.8	15.1	11.8	33.2
Approach LOS	B	C	B	D

Intersection Summary				
Delay			23.2	
HCM Level of Service			C	
Intersection Capacity Utilization			66.1%	ICU Level of Service
Analysis Period (min)			15	C

HCM Signalized Intersection Capacity Analysis
9: SR-89 & 2000 West

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	431	825	36	4	826	398	18	6	16	523	9	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.89		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	1770	1665		1770	1863	1583
Flt Permitted	0.14	1.00	1.00	0.31	1.00	1.00	0.75	1.00		0.74	1.00	1.00
Satd. Flow (perm)	266	5085	1583	569	5085	1583	1399	1665		1381	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	468	897	39	4	898	433	20	7	17	568	10	407
RTOR Reduction (vph)	0	0	16	0	0	354	0	10	0	0	0	231
Lane Group Flow (vph)	468	897	23	4	898	79	20	14	0	568	10	176
Turn Type	pm+pt		Perm	pm+pt		Perm	Perm			Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)	56.2	49.4	49.4	22.8	22.0	22.0	51.8	51.8		51.8	51.8	51.8
Effective Green, g (s)	56.2	49.4	49.4	22.8	22.0	22.0	51.8	51.8		51.8	51.8	51.8
Actuated g/C Ratio	0.47	0.41	0.41	0.19	0.18	0.18	0.43	0.43		0.43	0.43	0.43
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	478	2093	652	116	932	290	604	719		596	804	683
v/s Ratio Prot	c0.23	0.18		0.00	0.18			0.01			0.01	
v/s Ratio Perm	c0.23		0.01	0.01		0.05	0.01			c0.41		0.11
v/c Ratio	0.98	0.43	0.03	0.03	0.96	0.27	0.03	0.02		0.95	0.01	0.26
Uniform Delay, d1	34.9	25.2	21.1	39.5	48.6	42.1	19.7	19.5		32.9	19.5	21.8
Progression Factor	1.00	1.00	1.00	0.55	0.70	1.12	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	35.3	0.6	0.1	0.1	19.6	2.0	0.0	0.0		25.5	0.0	0.2
Delay (s)	70.2	25.9	21.2	21.7	53.5	49.3	19.7	19.6		58.5	19.5	22.0
Level of Service	E	C	C	C	D	D	B	B		E	B	C
Approach Delay (s)		40.5			52.1			19.6			43.0	
Approach LOS		D			D			B			D	

Intersection Summary						
HCM Average Control Delay		45.0	HCM Level of Service		D	
HCM Volume to Capacity ratio		0.94				
Actuated Cycle Length (s)		120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization		90.5%	ICU Level of Service		E	
Analysis Period (min)		15				
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis
10: SR-89 & 1300 West

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	89	1315	156	56	1356	202	204	203	46	174	123	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5004		1770	4986		1770	1811		1770	1795	
Flt Permitted	0.10	1.00		0.12	1.00		0.57	1.00		0.40	1.00	
Satd. Flow (perm)	193	5004		220	4986		1057	1811		752	1795	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	97	1429	170	61	1474	220	222	221	50	189	134	43
RTOR Reduction (vph)	0	12	0	0	16	0	0	7	0	0	10	0
Lane Group Flow (vph)	97	1587	0	61	1678	0	222	264	0	189	167	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	77.2	77.2		77.2	77.2		30.8	30.8		30.8	30.8	
Effective Green, g (s)	77.2	77.2		77.2	77.2		30.8	30.8		30.8	30.8	
Actuated g/C Ratio	0.64	0.64		0.64	0.64		0.26	0.26		0.26	0.26	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	124	3219		142	3208		271	465		193	461	
v/s Ratio Prot		0.32			0.34			0.15			0.09	
v/s Ratio Perm	c0.50			0.28			0.21			c0.25		
v/c Ratio	0.78	0.49		0.43	0.52		0.82	0.57		0.98	0.36	
Uniform Delay, d1	15.4	11.2		10.5	11.5		42.0	38.8		44.3	36.6	
Progression Factor	1.20	1.21		0.59	0.25		1.01	1.01		1.00	1.00	
Incremental Delay, d2	33.6	0.5		7.8	0.5		17.3	1.6		58.1	0.5	
Delay (s)	52.1	14.0		14.0	3.3		59.5	40.7		102.3	37.0	
Level of Service	D	B		B	A		E	D		F	D	
Approach Delay (s)		16.2			3.7			49.2			70.8	
Approach LOS		B			A			D			E	

Intersection Summary				
HCM Average Control Delay	19.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.84			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.7%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
11: SR-89 & Pleasant Grove Blvd

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	259	1153	84	176	1072	55	94	377	101	35	291	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.95		0.97	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5034		1770	5048		3433	3427		3433	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	5034		1770	5048		3433	3427		3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	282	1253	91	191	1165	60	102	410	110	38	316	216
RTOR Reduction (vph)	0	6	0	0	5	0	0	20	0	0	0	179
Lane Group Flow (vph)	282	1338	0	191	1220	0	102	500	0	38	316	37
Turn Type	Prot			Prot			Prot			Prot		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												8
Actuated Green, G (s)	30.0	51.2		17.4	38.6		6.9	25.0		2.4	20.5	20.5
Effective Green, g (s)	30.0	51.2		17.4	38.6		6.9	25.0		2.4	20.5	20.5
Actuated g/C Ratio	0.25	0.43		0.14	0.32		0.06	0.21		0.02	0.17	0.17
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	443	2148		257	1624		197	714		69	605	270
v/s Ratio Prot	0.16	c0.27		0.11	c0.24		c0.03	c0.15		0.01	0.09	
v/s Ratio Perm												0.02
v/c Ratio	0.64	0.62		0.74	0.75		0.52	0.70		0.55	0.52	0.14
Uniform Delay, d1	40.1	26.9		49.2	36.4		54.9	44.0		58.3	45.3	42.2
Progression Factor	0.64	0.54		1.06	0.76		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.5	1.2		10.9	3.2		2.3	3.1		9.2	0.8	0.2
Delay (s)	28.3	15.8		63.0	31.0		57.2	47.1		67.4	46.1	42.5
Level of Service	C	B		E	C		E	D		E	D	D
Approach Delay (s)		18.0			35.3			48.8			46.2	
Approach LOS		B			D			D			D	

Intersection Summary				
HCM Average Control Delay	32.1	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0	
Intersection Capacity Utilization	73.3%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
12: SR-89 & Geneva Road

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	559	166	45	555	144	383	310	121	164	223	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	4911		1770	5085	1583	1770	1863	1583	1770	3539	1583
Flt Permitted	0.38	1.00		0.29	1.00	1.00	0.60	1.00	1.00	0.48	1.00	1.00
Satd. Flow (perm)	713	4911		546	5085	1583	1120	1863	1583	886	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	608	180	49	603	157	416	337	132	178	242	5
RTOR Reduction (vph)	0	36	0	0	0	87	0	0	36	0	0	3
Lane Group Flow (vph)	17	752	0	49	603	70	416	337	96	178	242	2
Turn Type	Perm			Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		6
Actuated Green, G (s)	50.7	50.7		50.7	50.7	50.7	57.3	57.3	57.3	57.3	57.3	57.3
Effective Green, g (s)	50.7	50.7		50.7	50.7	50.7	57.3	57.3	57.3	57.3	57.3	57.3
Actuated g/C Ratio	0.42	0.42		0.42	0.42	0.42	0.48	0.48	0.48	0.48	0.48	0.48
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	301	2075		231	2148	669	535	890	756	423	1690	756
v/s Ratio Prot		c0.15			0.12			0.18			0.07	
v/s Ratio Perm	0.02			0.09		0.04	c0.37		0.06	0.20		0.00
v/c Ratio	0.06	0.36		0.21	0.28	0.11	0.78	0.38	0.13	0.42	0.14	0.00
Uniform Delay, d1	20.5	23.6		22.0	22.7	20.9	26.1	20.0	17.4	20.5	17.6	16.4
Progression Factor	0.64	0.53		0.70	0.68	1.57	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.4		1.8	0.3	0.3	7.0	0.3	0.1	0.7	0.0	0.0
Delay (s)	13.5	12.8		17.2	15.8	33.0	33.1	20.3	17.5	21.2	17.6	16.4
Level of Service	B	B		B	B	C	C	C	B	C	B	B
Approach Delay (s)		12.8			19.2			25.9			19.1	
Approach LOS		B			B			C			B	

Intersection Summary				
HCM Average Control Delay	19.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	65.2%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
14: 700 South & SR-89

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	264	73	302	151	16	119	1355	279	19	959	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91	1.00	1.00	0.91	
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1802		1770	1837		1770	5085	1583	1770	5037	
Flt Permitted	0.64	1.00		0.16	1.00		0.16	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	1198	1802		290	1837		294	5085	1583	178	5037	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	124	287	79	328	164	17	129	1473	303	21	1042	70
RTOR Reduction (vph)	0	9	0	0	3	0	0	0	47	0	6	0
Lane Group Flow (vph)	124	357	0	328	178	0	129	1473	256	21	1106	0
Turn Type	pm+pt			pm+pt			pm+pt		Perm	Perm		
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	33.2	27.2		53.2	41.2		54.8	54.8	54.8	41.8	41.8	
Effective Green, g (s)	33.2	27.2		53.2	41.2		54.8	54.8	54.8	41.8	41.8	
Actuated g/C Ratio	0.28	0.23		0.44	0.34		0.46	0.46	0.46	0.35	0.35	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	360	408		375	631		220	2322	723	62	1755	
v/s Ratio Prot	0.02	0.20		c0.15	0.10		0.03	c0.29			0.22	
v/s Ratio Perm	0.08			c0.24			0.23		0.16	0.12		
v/c Ratio	0.34	0.88		0.87	0.28		0.59	0.63	0.35	0.34	0.63	
Uniform Delay, d1	33.8	44.8		28.9	28.6		38.8	24.9	21.1	28.9	32.6	
Progression Factor	1.00	1.00		1.00	1.00		0.81	0.76	0.69	0.84	0.86	
Incremental Delay, d2	0.6	18.6		19.7	0.2		3.4	1.2	1.2	14.0	1.7	
Delay (s)	34.3	63.3		48.6	28.9		34.8	20.0	15.7	38.4	29.7	
Level of Service	C	E		D	C		C	C	B	D	C	
Approach Delay (s)		56.0			41.6			20.3			29.9	
Approach LOS		E			D			C			C	

Intersection Summary				
HCM Average Control Delay	30.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	84.6%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
15: 700 North & SR-89

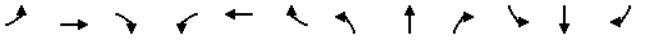
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	191	233	159	89	107	93	131	1661	62	81	1107	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.66	1.00	1.00	0.34	1.00	1.00	0.21	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	1232	1863	1583	632	1863	1583	388	5085	1583	182	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	208	253	173	97	116	101	142	1805	67	88	1203	89
RTOR Reduction (vph)	0	0	91	0	0	28	0	0	9	0	0	23
Lane Group Flow (vph)	208	253	82	97	116	73	142	1805	58	88	1203	66
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	22.7	22.7	22.7	22.7	22.7	22.7	85.3	85.3	85.3	85.3	85.3	85.3
Effective Green, g (s)	22.7	22.7	22.7	22.7	22.7	22.7	85.3	85.3	85.3	85.3	85.3	85.3
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19	0.19	0.71	0.71	0.71	0.71	0.71	0.71
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	233	352	299	120	352	299	276	3615	1125	129	3615	1125
v/s Ratio Prot		0.14			0.06			0.35			0.24	
v/s Ratio Perm	c0.17		0.05	0.15		0.05	0.37		0.04	c0.48		0.04
v/c Ratio	0.89	0.72	0.27	0.81	0.33	0.25	0.51	0.50	0.05	0.68	0.33	0.06
Uniform Delay, d1	47.5	45.7	41.6	46.6	42.1	41.4	7.9	7.8	5.2	9.7	6.6	5.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	0.28	0.31
Incremental Delay, d2	31.9	6.9	0.5	31.5	0.6	0.4	6.7	0.5	0.1	19.0	0.2	0.1
Delay (s)	79.4	52.5	42.1	78.1	42.6	41.8	14.6	8.3	5.3	32.0	2.0	1.7
Level of Service	E	D	D	E	D	D	B	A	A	C	A	A
Approach Delay (s)		58.5			53.3			8.6			3.9	
Approach LOS		E			D			A			A	

Intersection Summary				
HCM Average Control Delay	17.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	73.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
40: 700 South & Geneva Road

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	150	38	122	151	16	64	700	200	54	402	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1807		1770	1863	1583		3524	1583	1770	3539	1583
Flt Permitted	0.65	1.00		0.63	1.00	1.00		0.89	1.00	0.32	1.00	1.00
Satd. Flow (perm)	1217	1807		1173	1863	1583		3155	1583	594	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	163	41	133	164	17	70	761	217	59	437	25
RTOR Reduction (vph)	0	21	0	0	0	13	0	0	101	0	0	12
Lane Group Flow (vph)	37	183	0	133	164	4	0	831	116	59	437	13
Turn Type	Perm			Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		6
Actuated Green, G (s)	7.8	7.8		7.8	7.8	7.8		18.3	18.3	18.3	18.3	18.3
Effective Green, g (s)	7.8	7.8		7.8	7.8	7.8		18.3	18.3	18.3	18.3	18.3
Actuated g/C Ratio	0.23	0.23		0.23	0.23	0.23		0.54	0.54	0.54	0.54	0.54
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	278	413		268	426	362		1693	850	319	1899	850
v/s Ratio Prot		0.10			0.09						0.12	
v/s Ratio Perm	0.03			c0.11		0.00		c0.26	0.07	0.10		0.01
v/c Ratio	0.13	0.44		0.50	0.38	0.01		0.49	0.14	0.18	0.23	0.02
Uniform Delay, d1	10.5	11.3		11.4	11.1	10.2		5.0	4.0	4.1	4.2	3.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.8		1.4	0.6	0.0		0.2	0.1	0.3	0.1	0.0
Delay (s)	10.7	12.0		12.9	11.7	10.2		5.2	4.0	4.3	4.2	3.7
Level of Service	B	B		B	B	B		A	A	A	A	A
Approach Delay (s)		11.8			12.1			5.0			4.2	
Approach LOS		B			B			A			A	

Intersection Summary				
HCM Average Control Delay	6.6	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	34.1	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	62.6%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
73: 200 South & 100 East

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	150	25	25	200	25	50	400	50	50	200	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1823		1770	1863	1583	1770	1832		1770	1807	
Flt Permitted	0.43	1.00		0.50	1.00	1.00	0.59	1.00		0.45	1.00	
Satd. Flow (perm)	802	1823		930	1863	1583	1104	1832		841	1807	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	163	27	27	217	27	54	435	54	54	217	54
RTOR Reduction (vph)	0	9	0	0	0	22	0	2	0	0	5	0
Lane Group Flow (vph)	54	181	0	27	217	5	54	487	0	54	266	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2			6		
Actuated Green, G (s)	17.3	17.3		17.3	17.3	17.3	70.7	70.7		70.7	70.7	
Effective Green, g (s)	17.3	17.3		17.3	17.3	17.3	70.7	70.7		70.7	70.7	
Actuated g/C Ratio	0.17	0.17		0.17	0.17	0.17	0.71	0.71		0.71	0.71	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	139	315		161	322	274	781	1295		595	1278	
v/s Ratio Prot		0.10			c0.12			c0.27			0.15	
v/s Ratio Perm	0.07			0.03		0.00	0.05			0.06		
v/c Ratio	0.39	0.57		0.17	0.67	0.02	0.07	0.38		0.09	0.21	
Uniform Delay, d1	36.7	38.0		35.2	38.7	34.3	4.5	5.8		4.6	5.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.13	0.08	
Incremental Delay, d2	1.8	2.5		0.5	5.5	0.0	0.2	0.8		0.2	0.3	
Delay (s)	38.5	40.5		35.7	44.2	34.3	4.7	6.7		0.8	0.7	
Level of Service	D	D		D	D	C	A	A		A	A	
Approach Delay (s)		40.0			42.4			6.5			0.7	
Approach LOS		D			D			A			A	

Intersection Summary				
HCM Average Control Delay	18.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	67.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
87: 700 North & Pleasant Grove Blvd.

Timing Plan: PM Peak

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	55	84	15	418	46	42	40	825	205	46	633	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95		0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3434		3433	3529	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3434		3433	3529	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	91	16	454	50	46	43	897	223	50	688	14
RTOR Reduction (vph)	0	0	15	0	0	36	0	15	0	0	1	0
Lane Group Flow (vph)	60	91	1	454	50	10	43	1105	0	50	701	0
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2						
Actuated Green, G (s)	5.6	6.2	6.2	18.9	19.5	19.5	3.9	41.3		5.3	42.7	
Effective Green, g (s)	5.6	6.2	6.2	18.9	19.5	19.5	3.9	41.3		5.3	42.7	
Actuated g/C Ratio	0.06	0.07	0.07	0.20	0.21	0.21	0.04	0.44		0.06	0.46	
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	234	105	692	737	329	143	1514		194	1608	
v/s Ratio Prot	0.02	c0.03		c0.13	0.01		0.01	c0.32		c0.01	0.20	
v/s Ratio Perm			0.00			0.01						
v/c Ratio	0.29	0.39	0.01	0.66	0.07	0.03	0.30	0.73		0.26	0.44	
Uniform Delay, d1	42.2	41.9	40.9	34.4	29.8	29.6	43.6	21.6		42.3	17.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	1.1	0.0	2.2	0.0	0.0	1.2	1.8		0.7	0.2	
Delay (s)	43.0	43.0	40.9	36.7	29.8	29.6	44.8	23.4		43.0	17.5	
Level of Service	D	D	D	D	C	C	D	C		D	B	
Approach Delay (s)		42.8			35.4			24.2			19.2	
Approach LOS		D			D			C			B	

Intersection Summary				
HCM Average Control Delay	26.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	93.7	Sum of lost time (s)	22.0	
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
91: Pleasant Grove Blvd & I-15 SB Ramp

Timing Plan: PM Peak

Movement	NBL	NBR	NBR2	SEL	SET	SER	NWL	NWT	NWR	SWL2	SWL	SWR
Lane Configurations												
Volume (vph)	0	686	145	677	3	56	0	0	0	595	91	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0				6.0	6.0	
Lane Util. Factor		0.88	1.00	0.95	0.95	1.00				0.97	1.00	
Frt		0.85	0.85	1.00	1.00	0.85				1.00	1.00	
Flt Protected		1.00	1.00	0.95	0.95	1.00				0.95	0.95	
Satd. Flow (prot)		2787	1583	1681	1686	1583				3433	1770	
Flt Permitted		1.00	1.00	0.95	0.95	1.00				0.95	0.95	
Satd. Flow (perm)		2787	1583	1681	1686	1583				3433	1770	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	746	158	736	3	61	0	0	0	647	99	0
RTOR Reduction (vph)	0	0	112	0	0	45	0	0	0	0	0	0
Lane Group Flow (vph)	0	746	46	368	371	16	0	0	0	647	99	0
Turn Type		custom	custom	Perm		Perm				Prot		
Protected Phases		4			6					3	8	
Permitted Phases			4	6		6						
Actuated Green, G (s)		21.4	21.4	18.8	18.8	18.8				15.0	42.4	
Effective Green, g (s)		21.4	21.4	18.8	18.8	18.8				15.0	42.4	
Actuated g/C Ratio		0.29	0.29	0.26	0.26	0.26				0.20	0.58	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0				6.0	6.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)		815	463	432	433	407				703	1025	
v/s Ratio Prot		c0.27								c0.19	0.06	
v/s Ratio Perm			0.03	0.22	0.22	0.01						
v/c Ratio		0.92	0.10	0.85	0.86	0.04				0.92	0.10	
Uniform Delay, d1		25.0	18.9	25.9	25.9	20.4				28.5	6.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00				1.00	1.00	
Incremental Delay, d2		14.7	0.1	14.9	15.3	0.0				17.4	0.0	
Delay (s)		39.8	19.0	40.8	41.2	20.5				45.9	6.9	
Level of Service		D	B	D	D	C				D	A	
Approach Delay (s)	36.1				39.4			0.0			40.7	
Approach LOS	D				D			A			D	

Intersection Summary				
HCM Average Control Delay	38.6	HCM Level of Service		D
HCM Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	73.2	Sum of lost time (s)		18.0
Intersection Capacity Utilization	52.8%	ICU Level of Service		A
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
94: I-15 NB Ramp & Pleasant Grove Blvd

Timing Plan: PM Peak

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Volume (vph)	0	0	0	48	6	727	77	729	0	0	561	655
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Lane Util. Factor					1.00	1.00	1.00	0.95			0.95	1.00
Frt					1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected					0.96	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)					1784	1583	1770	3539			3539	1583
Flt Permitted					0.96	1.00	0.33	1.00			1.00	1.00
Satd. Flow (perm)					1784	1583	620	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	52	7	790	84	792	0	0	610	712
RTOR Reduction (vph)	0	0	0	0	0	9	0	0	0	0	0	521
Lane Group Flow (vph)	0	0	0	0	59	781	84	792	0	0	610	191
Turn Type				Perm		Perm	Perm					Perm
Protected Phases					2			4			8	
Permitted Phases				2		2	4					8
Actuated Green, G (s)					30.7	30.7	15.6	15.6			15.6	15.6
Effective Green, g (s)					30.7	30.7	15.6	15.6			15.6	15.6
Actuated g/C Ratio					0.53	0.53	0.27	0.27			0.27	0.27
Clearance Time (s)					6.0	6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)					3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)					939	834	166	947			947	424
v/s Ratio Prot								c0.22			0.17	
v/s Ratio Perm					0.03	c0.49	0.14					0.12
v/c Ratio					0.06	0.94	0.51	0.84			0.64	0.45
Uniform Delay, d1					6.8	12.9	18.1	20.1			18.9	17.8
Progression Factor					1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2					0.0	17.5	2.4	6.5			1.5	0.8
Delay (s)					6.8	30.4	20.5	26.6			20.4	18.5
Level of Service					A	C	C	C			C	B
Approach Delay (s)		0.0			28.8			26.1			19.4	
Approach LOS		A			C			C			B	

Intersection Summary				
HCM Average Control Delay	23.9	HCM Level of Service		C
HCM Volume to Capacity ratio	0.90			
Actuated Cycle Length (s)	58.3	Sum of lost time (s)		12.0
Intersection Capacity Utilization	75.2%	ICU Level of Service		D
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
100: 1100 North & 100 East

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	160	100	26	83	25	79	611	32	47	385	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.97		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1755		1770	1798		1770	1849		1770	1842	
Flt Permitted	0.68	1.00		0.56	1.00		0.47	1.00		0.26	1.00	
Satd. Flow (perm)	1270	1755		1045	1798		882	1849		483	1842	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	174	109	28	90	27	86	664	35	51	418	33
RTOR Reduction (vph)	0	38	0	0	18	0	0	4	0	0	6	0
Lane Group Flow (vph)	98	245	0	28	99	0	86	695	0	51	445	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.8	9.8		9.8	9.8		22.4	22.4		22.4	22.4	
Effective Green, g (s)	9.8	9.8		9.8	9.8		22.4	22.4		22.4	22.4	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.51	0.51		0.51	0.51	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	282	389		232	399		447	937		245	934	
v/s Ratio Prot		c0.14			0.06			c0.38			0.24	
v/s Ratio Perm	0.08			0.03			0.10			0.11		
v/c Ratio	0.35	0.63		0.12	0.25		0.19	0.74		0.21	0.48	
Uniform Delay, d1	14.5	15.6		13.8	14.2		6.0	8.6		6.0	7.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	2.3		0.1	0.1		0.1	2.8		0.2	0.1	
Delay (s)	14.8	17.9		13.8	14.3		6.0	11.4		6.2	7.2	
Level of Service	B	B		B	B		A	B		A	A	
Approach Delay (s)		17.1			14.2			10.8			7.1	
Approach LOS		B			B			B			A	

Intersection Summary				
HCM Average Control Delay	11.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	44.2	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	83.2%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Signalized Intersection Capacity Analysis
141: Center Street & 100 East

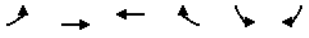
Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	174	244	41	12	180	14	50	716	12	38	375	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1843		1770	1858		1770	1800	
Flt Permitted	0.37	1.00	1.00	0.60	1.00		0.22	1.00		0.10	1.00	
Satd. Flow (perm)	684	1863	1583	1110	1843		414	1858		194	1800	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	265	45	13	196	15	54	778	13	41	408	118
RTOR Reduction (vph)	0	0	31	0	2	0	0	1	0	0	8	0
Lane Group Flow (vph)	189	265	14	13	209	0	54	790	0	41	518	0
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	38.6	32.2	32.2	20.1	18.7		46.0	40.0		42.8	38.4	
Effective Green, g (s)	38.6	32.2	32.2	20.1	18.7		46.0	40.0		42.8	38.4	
Actuated g/C Ratio	0.39	0.32	0.32	0.20	0.19		0.46	0.40		0.43	0.38	
Clearance Time (s)	5.0	6.0	6.0	5.0	6.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	1.0	1.0	3.0	1.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	426	600	510	232	345		272	743		152	691	
v/s Ratio Prot	c0.07	0.14		0.00	c0.11		c0.01	c0.43		0.01	0.29	
v/s Ratio Perm	0.11		0.01	0.01			0.08			0.10		
v/c Ratio	0.44	0.44	0.03	0.06	0.60		0.20	1.06		0.27	0.75	
Uniform Delay, d1	21.7	26.8	23.2	32.2	37.3		17.4	30.0		22.8	26.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.90	0.88		1.00	1.00	
Incremental Delay, d2	0.7	0.2	0.0	0.1	2.0		0.4	51.1		1.0	7.3	
Delay (s)	22.4	27.0	23.2	32.3	39.3		16.0	77.5		23.8	34.0	
Level of Service	C	C	C	C	D		B	E		C	C	
Approach Delay (s)		24.9			38.9			73.6			33.2	
Approach LOS		C			D			E			C	

Intersection Summary				
HCM Average Control Delay	47.8	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	75.7%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

HCM Unsignalized Intersection Capacity Analysis
13: SR-89 & 100 East

Timing Plan: PM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	55	700	666	360	253	46
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	761	724	391	275	50
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	TWLTL			
Median storage veh)			2			
Upstream signal (ft)		629	1179			
pX, platoon unblocked	0.86				0.88	0.86
vC, conflicting volume	1115				1097	362
vC1, stage 1 conf vol					724	
vC2, stage 2 conf vol					373	
vCu, unblocked vol	809				589	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	91				48	95
cM capacity (veh/h)	699				524	933

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	SB 1
Volume Total	60	254	254	254	362	362	391	325
Volume Left	60	0	0	0	0	0	0	275
Volume Right	0	0	0	0	0	0	391	50
cSH	699	1700	1700	1700	1700	1700	1700	562
Volume to Capacity	0.09	0.15	0.15	0.15	0.21	0.21	0.23	0.58
Queue Length 95th (ft)	7	0	0	0	0	0	0	92
Control Delay (s)	10.6	0.0	0.0	0.0	0.0	0.0	0.0	19.8
Lane LOS	B							C
Approach Delay (s)	0.8				0.0			19.8
Approach LOS								C

Intersection Summary				
Average Delay	3.1			
Intersection Capacity Utilization	48.6%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
42: 500 North & 100 East

Timing Plan: PM Peak

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	27	45	761	63	41	621
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	49	827	68	45	675
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			TWLTL
Median storage veh)						2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1591	827			896	
vC1, stage 1 conf vol	827					
vC2, stage 2 conf vol	764					
vCu, unblocked vol	1591	827			896	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	87			94	
cM capacity (veh/h)	317	371			758	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	78	827	68	45	675
Volume Left	29	0	0	45	0
Volume Right	49	0	68	0	0
cSH	349	1700	1700	758	1700
Volume to Capacity	0.22	0.49	0.04	0.06	0.40
Queue Length 95th (ft)	21	0	0	5	0
Control Delay (s)	18.3	0.0	0.0	10.0	0.0
Lane LOS	C			B	
Approach Delay (s)	18.3	0.0		0.6	
Approach LOS	C				

Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	51.0%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
48: 1100 North & 1300 West

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	23	249	56	27	194	20	41	219	66	16	105	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	271	61	29	211	22	45	238	72	17	114	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	233			332			693	642	301	792	662	222
vC1, stage 1 conf vol							351	351		280	280	
vC2, stage 2 conf vol							342	291		511	382	
vCu, unblocked vol	233			332			693	642	301	792	662	222
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			90	55	90	93	78	98
cM capacity (veh/h)	1335			1228			455	529	739	260	514	818

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	25	332	29	233	354	147
Volume Left	25	0	29	0	45	17
Volume Right	0	61	0	22	72	15
cSH	1335	1700	1228	1700	549	477
Volume to Capacity	0.02	0.20	0.02	0.14	0.64	0.31
Queue Length 95th (ft)	1	0	2	0	115	32
Control Delay (s)	7.7	0.0	8.0	0.0	22.7	15.9
Lane LOS	A		A		C	C
Approach Delay (s)	0.5		0.9		22.7	15.9
Approach LOS					C	C

Intersection Summary						
Average Delay	9.6					
Intersection Capacity Utilization	53.2%	ICU Level of Service	A			
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis
72: Center Steet & Main Street

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	9	365	164	76	278	5	273	18	75	6	27	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	397	178	83	302	5	297	20	82	7	29	9

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total (vph)	407	178	83	308	398	45
Volume Left (vph)	10	0	83	0	297	7
Volume Right (vph)	0	178	0	5	82	9
Hadj (s)	0.05	-0.67	0.53	0.02	0.06	-0.05
Departure Headway (s)	6.9	6.2	7.7	7.2	6.6	7.8
Degree Utilization, x	0.78	0.31	0.18	0.61	0.73	0.10
Capacity (veh/h)	506	561	447	477	525	385
Control Delay (s)	29.5	10.7	11.1	19.6	25.4	11.6
Approach Delay (s)	23.8		17.8		25.4	11.6
Approach LOS	C		C		D	B

Intersection Summary						
Delay	22.2					
HCM Level of Service	C					
Intersection Capacity Utilization	72.0%	ICU Level of Service	C			
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis
74: 200 South & Man Street

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	16	178	143	59	121	18	53	283	53	17	237	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	193	155	64	132	20	58	308	58	18	258	13

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total (vph)	211	155	64	151	58	365	289
Volume Left (vph)	17	0	64	0	58	0	18
Volume Right (vph)	0	155	0	20	0	58	13
Hadj (s)	0.08	-0.67	0.53	-0.06	0.53	-0.08	0.02
Departure Headway (s)	7.5	6.7	8.2	7.6	7.6	6.9	7.2
Degree Utilization, x	0.44	0.29	0.15	0.32	0.12	0.70	0.58
Capacity (veh/h)	453	500	399	422	456	499	470
Control Delay (s)	15.0	11.2	11.4	13.0	10.4	23.5	19.5
Approach Delay (s)	13.4		12.5		21.7		19.5
Approach LOS	B		B		C		C

Intersection Summary					
Delay	17.3				
HCM Level of Service	C				
Intersection Capacity Utilization	55.0%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
79: Pleasant Grove Blvd. & 220 South

Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	566	39	33	495	67	47
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	615	42	36	538	73	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						6
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			658		1225	615
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			658		1225	615
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		62	90
cM capacity (veh/h)			930		190	491

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	615	42	36	538	124
Volume Left	0	0	36	0	73
Volume Right	0	42	0	0	51
cSH	1700	1700	930	1700	323
Volume to Capacity	0.36	0.02	0.04	0.32	0.38
Queue Length 95th (ft)	0	0	3	0	44
Control Delay (s)	0.0	0.0	9.0	0.0	26.2
Lane LOS			A		D
Approach Delay (s)	0.0		0.6		26.2
Approach LOS					D

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	40.2%	ICU Level of Service		A
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
83: Pleasnt Grove Blvd. & 1300 West

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	810	964	5	57	570	26	4	48	66	1	29	492
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	880	1048	5	62	620	28	4	52	72	1	32	535
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												4
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	648			1053			3838	3583	1051	3664	3572	634
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	648			1053			3838	3583	1051	3664	3572	634
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	6			91			0	0	74	0	0	0
cM capacity (veh/h)	938			661			0	0	276	0	0	479

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	880	1053	62	648	4	124	567
Volume Left	880	0	62	0	4	0	1
Volume Right	0	5	0	28	0	72	535
cSH	938	1700	661	1700	0	1	0
Volume to Capacity	0.94	0.62	0.09	0.38	Err	169.76	2476.24
Queue Length 95th (ft)	373	0	8	0	Err	Err	Err
Control Delay (s)	37.6	0.0	11.0	0.0	Err	Err	Err
Lane LOS	E		B		F	F	F
Approach Delay (s)	17.1		1.0		Err		Err
Approach LOS					F		F

Intersection Summary					
Average Delay	Err				
Intersection Capacity Utilization	93.0%	ICU Level of Service	F		
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
97: 2600 North & 1300 West

Timing Plan: PM Peak

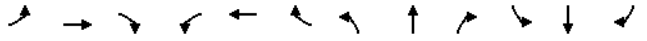
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	173	61	10	169	80	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	188	66	11	184	87	26
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			254		427	221
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			254		427	221
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		85	97
cM capacity (veh/h)			1311		580	818

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	254	195	113
Volume Left	0	11	87
Volume Right	66	0	26
cSH	1700	1311	622
Volume to Capacity	0.15	0.01	0.18
Queue Length 95th (ft)	0	1	16
Control Delay (s)	0.0	0.5	12.1
Lane LOS		A	B
Approach Delay (s)	0.0	0.5	12.1
Approach LOS			B

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	29.6%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
101: 1800 North & 1300 West

Timing Plan: PM Peak



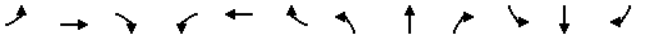
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	31	87	20	19	56	10	26	182	21	12	94	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	34	95	22	21	61	11	28	198	23	13	102	18

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	150	92	249	134
Volume Left (vph)	34	21	28	13
Volume Right (vph)	22	11	23	18
Hadj (s)	-0.01	0.01	0.00	-0.03
Departure Headway (s)	5.0	5.1	4.7	4.8
Degree Utilization, x	0.21	0.13	0.33	0.18
Capacity (veh/h)	667	645	727	695
Control Delay (s)	9.3	8.8	10.0	8.9
Approach Delay (s)	9.3	8.8	10.0	8.9
Approach LOS	A	A	A	A

Intersection Summary					
Delay			9.4		
HCM Level of Service			A		
Intersection Capacity Utilization			33.7%	ICU Level of Service	A
Analysis Period (min)			15		

HCM Unsignalized Intersection Capacity Analysis
103: 1800 North & 100 East

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	3	56	11	1	8	70	595	10	10	377	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	3	61	12	1	9	76	647	11	11	410	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1247	1248	417	1305	1250	652	424			658		
vC1, stage 1 conf vol	439	439		804	804							
vC2, stage 2 conf vol	808	810		501	446							
vCu, unblocked vol	1247	1248	417	1305	1250	652	424			658		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5		6.1	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	99	90	96	100	98	93			99		
cM capacity (veh/h)	302	322	636	284	320	468	1135			930		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	77	22	76	658	435
Volume Left	13	12	76	0	11
Volume Right	61	9	0	11	14
cSH	518	339	1135	1700	930
Volume to Capacity	0.15	0.06	0.07	0.39	0.01
Queue Length 95th (ft)	13	5	5	0	1
Control Delay (s)	13.2	16.3	8.4	0.0	0.4
Lane LOS	B	C	A		A
Approach Delay (s)	13.2	16.3	0.9		0.4
Approach LOS	B	C			

Intersection Summary					
Average Delay			1.7		
Intersection Capacity Utilization			53.3%	ICU Level of Service	A
Analysis Period (min)			15		

HCM Unsignalized Intersection Capacity Analysis
105: 2600 North & Canyon Road

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (veh/h)	15	0	108	0	0	0	0	457	61	80	149	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	16	0	117	0	0	0	0	497	66	87	162	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	866	866	530	983	899	162	162			563		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	866	866	530	983	899	162	162			563		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	100	79	100	100	100	100			91		
cM capacity (veh/h)	256	266	549	167	255	883	1417			1008		

Direction, Lane #	EB 1	WB 1	SE 1	NW 1	NW 2
Volume Total	134	0	563	87	162
Volume Left	16	0	0	87	0
Volume Right	117	0	66	0	0
cSH	482	1700	1417	1008	1700
Volume to Capacity	0.28	0.00	0.00	0.09	0.10
Queue Length 95th (ft)	28	0	0	7	0
Control Delay (s)	15.3	0.0	0.0	8.9	0.0
Lane LOS	C	A		A	
Approach Delay (s)	15.3	0.0	0.0	3.1	
Approach LOS	C	A			

Intersection Summary				
Average Delay	3.0			
Intersection Capacity Utilization	53.1%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
106: 2600 North & 900 West

Timing Plan: PM Peak

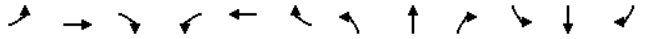
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	52	142	116	57	33	26
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	57	154	126	62	36	28
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	188				424	157
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	188				424	157
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				94	97
cM capacity (veh/h)	1386				563	888

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	211	188	64
Volume Left	57	0	36
Volume Right	0	62	28
cSH	1386	1700	671
Volume to Capacity	0.04	0.11	0.10
Queue Length 95th (ft)	3	0	8
Control Delay (s)	2.3	0.0	10.9
Lane LOS	A		B
Approach Delay (s)	2.3	0.0	10.9
Approach LOS			B

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
108: Huntsman Lane & 900 West

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	0	29	3	0	23	0	10	21	3	3	44	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	32	3	0	25	0	11	23	3	3	48	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	35	25	37	51
Volume Left (vph)	0	0	11	3
Volume Right (vph)	3	0	3	0
Hadj (s)	-0.02	0.03	0.04	0.05
Departure Headway (s)	4.1	4.2	4.1	4.1
Degree Utilization, x	0.04	0.03	0.04	0.06
Capacity (veh/h)	855	842	848	857
Control Delay (s)	7.3	7.3	7.3	7.4
Approach Delay (s)	7.3	7.3	7.3	7.4
Approach LOS	A	A	A	A

Intersection Summary				
Delay			7.3	
HCM Level of Service			A	
Intersection Capacity Utilization			14.9%	ICU Level of Service
Analysis Period (min)			15	

HCM Unsignalized Intersection Capacity Analysis
114: 2600 North & 600 West

Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	132	29	4	166	49	18
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	143	32	4	180	53	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			175		348	159
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			175		348	159
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		92	98
cM capacity (veh/h)			1401		647	886

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	175	185	73
Volume Left	0	4	53
Volume Right	32	0	20
cSH	1700	1401	697
Volume to Capacity	0.10	0.00	0.10
Queue Length 95th (ft)	0	0	9
Control Delay (s)	0.0	0.2	10.8
Lane LOS		A	B
Approach Delay (s)	0.0	0.2	10.8
Approach LOS			B

Intersection Summary					
Average Delay			1.9		
Intersection Capacity Utilization			22.4%	ICU Level of Service	A
Analysis Period (min)			15		

HCM Unsignalized Intersection Capacity Analysis
116: 1800 North & 600 West

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	69	21	29	70	6	47	86	50	5	51	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	75	23	32	76	7	51	93	54	5	55	12

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total (vph)	113	114	51	148	5	67
Volume Left (vph)	15	32	51	0	5	0
Volume Right (vph)	23	7	0	54	0	12
Hadj (s)	-0.06	0.05	0.53	-0.22	0.53	-0.09
Departure Headway (s)	4.6	4.8	5.7	4.9	5.8	5.2
Degree Utilization, x	0.15	0.15	0.08	0.20	0.01	0.10
Capacity (veh/h)	723	709	607	699	584	655
Control Delay (s)	8.4	8.6	8.0	8.0	7.7	7.5
Approach Delay (s)	8.4	8.6	8.0		7.5	
Approach LOS	A	A	A		A	

Intersection Summary						
Delay			8.2			
HCM Level of Service			A			
Intersection Capacity Utilization			26.2%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
123: 1100 North & 600 West

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	262	23	39	186	19	31	140	96	13	85	23
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	285	25	42	202	21	34	152	104	14	92	25
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	223			310			721	670	297	840	672	212
vC1, stage 1 conf vol							362	362		297	297	
vC2, stage 2 conf vol							358	308		543	375	
vCu, unblocked vol	223			310			721	670	297	840	672	212
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			97			92	70	86	95	82	97
cM capacity (veh/h)	1346			1251			444	511	742	277	501	828

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	342	42	223	290	132
Volume Left	33	42	0	34	14
Volume Right	25	0	21	104	25
cSH	1346	1251	1700	565	495
Volume to Capacity	0.02	0.03	0.13	0.51	0.27
Queue Length 95th (ft)	2	3	0	73	27
Control Delay (s)	0.9	8.0	0.0	17.9	14.9
Lane LOS	A	A		C	B
Approach Delay (s)	0.9	1.3		17.9	14.9
Approach LOS				C	B

Intersection Summary						
Average Delay			7.6			
Intersection Capacity Utilization			58.1%	ICU Level of Service		B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
124: 800 North & 600 West

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	9	18	23	9	7	25	261	20	2	173	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	10	20	25	10	8	27	284	22	2	188	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	558	556	192	570	549	295	196			305		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	558	556	192	570	549	295	196			305		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	98	98	94	98	99	98			100		
cM capacity (veh/h)	422	430	850	409	434	745	1377			1255		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	37	42	333	198
Volume Left	8	25	27	2
Volume Right	20	8	22	8
cSH	579	451	1377	1255
Volume to Capacity	0.06	0.09	0.02	0.00
Queue Length 95th (ft)	5	8	2	0
Control Delay (s)	11.6	13.8	0.8	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	11.6	13.8	0.8	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay		2.1		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
127: 1100 North & 300 East

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	14	199	19	35	100	7	35	25	68	2	10	13
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	216	21	38	109	8	38	27	74	2	11	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1157										
pX, platoon unblocked												
vC, conflicting volume	116			237			461	449	227	523	456	112
vC1, stage 1 conf vol							257	257		189	189	
vC2, stage 2 conf vol							204	192		334	267	
vCu, unblocked vol	116			237			461	449	227	523	456	112
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			97			94	96	91	100	98	98
cM capacity (veh/h)	1472			1330			637	611	813	521	594	940

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	15	237	38	116	139	27
Volume Left	15	0	38	0	38	2
Volume Right	0	21	0	8	74	14
cSH	1472	1700	1330	1700	713	725
Volume to Capacity	0.01	0.14	0.03	0.07	0.20	0.04
Queue Length 95th (ft)	1	0	2	0	18	3
Control Delay (s)	7.5	0.0	7.8	0.0	11.3	10.2
Lane LOS	A		A		B	B
Approach Delay (s)	0.5		1.9		11.3	10.2
Approach LOS					B	B

Intersection Summary				
Average Delay		3.9		
Intersection Capacity Utilization	39.0%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
130: 1100 North & 500 Ear

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	8	193	29	3	103	1	20	14	8	1	10	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	210	32	3	112	1	22	15	9	1	11	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	113			241			375	362	226	378	378	112
vC1, stage 1 conf vol							243	243		119	119	
vC2, stage 2 conf vol							132	120		259	259	
vCu, unblocked vol	113			241			375	362	226	378	378	112
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			97	98	99	100	98	99
cM capacity (veh/h)	1476			1325			698	658	814	677	648	940

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	250	116	46	20
Volume Left	9	3	22	1
Volume Right	32	1	9	8
cSH	1476	1325	702	739
Volume to Capacity	0.01	0.00	0.06	0.03
Queue Length 95th (ft)	0	0	5	2
Control Delay (s)	0.3	0.2	10.5	10.0
Lane LOS	A	A	B	B
Approach Delay (s)	0.3	0.2	10.5	10.0
Approach LOS			B	B

Intersection Summary					
Average Delay	1.8				
Intersection Capacity Utilization	31.2%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
134: 1100 North & Murdock Drive

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	18	181	37	3	97	1	23	1	3	4	0	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	197	40	3	105	1	25	1	3	4	0	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	107			237			379	369	217	372	389	106
vC1, stage 1 conf vol							256	256		112	112	
vC2, stage 2 conf vol							123	113		260	276	
vCu, unblocked vol	107			237			379	369	217	372	389	106
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			96	100	100	99	100	99
cM capacity (veh/h)	1484			1330			689	647	823	690	635	948

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	257	110	29	15
Volume Left	20	3	25	4
Volume Right	40	1	3	11
cSH	1484	1330	700	857
Volume to Capacity	0.01	0.00	0.04	0.02
Queue Length 95th (ft)	1	0	3	1
Control Delay (s)	0.7	0.2	10.4	9.3
Lane LOS	A	A	B	A
Approach Delay (s)	0.7	0.2	10.4	9.3
Approach LOS			B	A

Intersection Summary					
Average Delay	1.6				
Intersection Capacity Utilization	29.9%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
139: 500 North & 700 East

Timing Plan: PM Peak

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	152	59	30	68	23	44
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	165	64	33	74	25	48
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			229		336	197
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			229		336	197
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		96	94
cM capacity (veh/h)			1339		643	844

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	229	107	73
Volume Left	0	33	25
Volume Right	64	0	48
cSH	1700	1339	762
Volume to Capacity	0.13	0.02	0.10
Queue Length 95th (ft)	0	2	8
Control Delay (s)	0.0	2.5	10.2
Lane LOS		A	B
Approach Delay (s)	0.0	2.5	10.2
Approach LOS			B

Intersection Summary				
Average Delay		2.5		
Intersection Capacity Utilization		30.8%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
145: 200 South & Locust Ave

Timing Plan: PM Peak

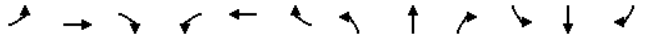
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Volume (veh/h)	352	125	40	194	86	72
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	383	136	43	211	93	78
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			518		748	451
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			518		748	451
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		74	87
cM capacity (veh/h)			1048		364	609

Direction, Lane #	EB 1	WB 1	NW 1
Volume Total	518	254	172
Volume Left	0	43	93
Volume Right	136	0	78
cSH	1700	1048	446
Volume to Capacity	0.30	0.04	0.39
Queue Length 95th (ft)	0	3	45
Control Delay (s)	0.0	1.8	18.1
Lane LOS		A	C
Approach Delay (s)	0.0	1.8	18.1
Approach LOS			C

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization		57.7%	ICU Level of Service	B
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
146: Center Street & 700 East

Timing Plan: PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	177	9	30	63	5	9	87	47	9	40	23
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	192	10	33	68	5	10	95	51	10	43	25
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	74			202			422	378	197	473	380	71
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	74			202			422	378	197	473	380	71
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			98	82	94	98	92	97
cM capacity (veh/h)	1526			1370			482	534	844	396	532	991

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	223	107	155	78
Volume Left	21	33	10	10
Volume Right	10	5	51	25
cSH	1526	1370	602	594
Volume to Capacity	0.01	0.02	0.26	0.13
Queue Length 95th (ft)	1	2	26	11
Control Delay (s)	0.8	2.5	13.0	12.0
Lane LOS	A	A	B	B
Approach Delay (s)	0.8	2.5	13.0	12.0
Approach LOS			B	B

Intersection Summary				
Average Delay	6.0			
Intersection Capacity Utilization	28.0%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
149: 200 South & Murdock Drive

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	99	52	8	89	10	37	41	10	8	25	45
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	108	57	9	97	11	40	45	11	9	27	49
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	108			164			427	370	136	397	392	102
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	108			164			427	370	136	397	392	102
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			99			92	92	99	98	95	95
cM capacity (veh/h)	1483			1414			474	536	913	504	520	953

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	218	116	96	85
Volume Left	54	9	40	9
Volume Right	57	11	11	49
cSH	1483	1414	532	702
Volume to Capacity	0.04	0.01	0.18	0.12
Queue Length 95th (ft)	3	0	16	10
Control Delay (s)	2.1	0.6	13.2	10.8
Lane LOS	A	A	B	B
Approach Delay (s)	2.1	0.6	13.2	10.8
Approach LOS			B	B

Intersection Summary				
Average Delay	5.3			
Intersection Capacity Utilization	36.0%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
152: 200 South & 1300 East

Timing Plan: PM Peak

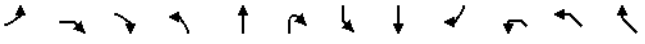
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	55	23	2	47	4	16	23	4	12	14	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	60	25	2	51	4	17	25	4	13	15	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	55			85			257	236	72	251	247	53
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	55			85			257	236	72	251	247	53
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			97	96	100	98	98	98
cM capacity (veh/h)	1549			1512			655	641	990	660	633	1014

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	137	58	47	43
Volume Left	52	2	17	13
Volume Right	25	4	4	15
cSH	1549	1512	668	739
Volume to Capacity	0.03	0.00	0.07	0.06
Queue Length 95th (ft)	3	0	6	5
Control Delay (s)	3.0	0.3	10.8	10.2
Lane LOS	A	A	B	B
Approach Delay (s)	3.0	0.3	10.8	10.2
Approach LOS			B	B

Intersection Summary					
Average Delay	4.8				
Intersection Capacity Utilization	23.7%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
157: Murdock Drive & 1500 East

Timing Plan: PM Peak



Movement	EBL	EBR	EBR2	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations												
Volume (veh/h)	0	17	61	49	103	54	2	47	5	21	16	0
Sign Control	Stop				Free			Free			Stop	
Grade	0%				0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	18	66	53	112	59	2	51	5	23	17	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type					None			None				
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	315	335	54	57			171			382	309	141
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	315	335	54	57			171			382	309	141
tC, single (s)	7.1	6.5	6.2	4.1			4.1			7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	2.2			2.2			3.5	4.0	3.3
p0 queue free %	100	97	93	97			100			96	97	100
cM capacity (veh/h)	606	564	1013	1548			1407			511	584	907

Direction, Lane #	EB 1	NB 1	SB 1	NW 1
Volume Total	85	224	59	40
Volume Left	0	53	2	23
Volume Right	66	59	5	0
cSH	864	1548	1407	540
Volume to Capacity	0.10	0.03	0.00	0.07
Queue Length 95th (ft)	8	3	0	6
Control Delay (s)	9.6	2.0	0.3	12.2
Lane LOS	A	A	A	B
Approach Delay (s)	9.6	2.0	0.3	12.2
Approach LOS	A			B

Intersection Summary					
Average Delay	4.3				
Intersection Capacity Utilization	36.3%	ICU Level of Service		A	
Analysis Period (min)	15				

HCM Unsignalized Intersection Capacity Analysis
165: 1000 South & Locust Ave

Timing Plan: PM Peak

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	273	58	36	130	98	114
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	297	63	39	141	107	124
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	388	168	230			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	388	168	230			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	50	93	97			
cM capacity (veh/h)	597	876	1337			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	360	180	230
Volume Left	297	39	0
Volume Right	63	0	124
cSH	633	1337	1700
Volume to Capacity	0.57	0.03	0.14
Queue Length 95th (ft)	89	2	0
Control Delay (s)	17.9	1.9	0.0
Lane LOS	C	A	
Approach Delay (s)	17.9	1.9	0.0
Approach LOS	C		

Intersection Summary				
Average Delay	8.8			
Intersection Capacity Utilization	49.6%	ICU Level of Service	A	
Analysis Period (min)	15			

HCM Unsignalized Intersection Capacity Analysis
166: Center Street & 300 East

Timing Plan: PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	36	139	65	19	125	0	26	148	24	9	136	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	39	151	71	21	136	0	28	161	26	10	148	34

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	261	157	215	191
Volume Left (vph)	39	21	28	10
Volume Right (vph)	71	0	26	34
Hadj (s)	-0.10	0.06	-0.01	-0.06
Departure Headway (s)	5.2	5.5	5.3	5.3
Degree Utilization, x	0.38	0.24	0.32	0.28
Capacity (veh/h)	644	593	613	615
Control Delay (s)	11.3	10.2	10.8	10.4
Approach Delay (s)	11.3	10.2	10.8	10.4
Approach LOS	B	B	B	B

Intersection Summary				
Delay	10.8			
HCM Level of Service	B			
Intersection Capacity Utilization	43.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Appendix C: Access Management Guidelines

Access Management

Access management is the practice of coordinating the location, number, spacing, and design of access points to minimize site access conflicts and maximize the traffic capacity and safety of a roadway. Uncoordinated growth along major travel corridors often results in strip development and a proliferation of access points. In many of these instances, each individual development along the corridor has its own access driveway. Numerous access points along major travel corridors create unnecessary conflicts between turning and through traffic which causes delays and accidents. Numerous benefits are derived from controlling the location and number of access points to a roadway. Those benefits include:

- Improving overall roadway safety
- Reducing the total number of vehicle trips
- Decreasing interruptions in traffic flow
- Minimizing traffic delays and congestion
- Maintaining roadway capacity
- Extending the useful life of roads
- Avoiding costly highway projects
- Improving air quality
- Encouraging compact development patterns
- Improving access to adjacent land uses
- Enhancing pedestrian and bicycle facilities

Principles of Access Management

Constantly growing traffic congestion, concerns over traffic safety, and the ever increasing cost of upgrading roads have generated interest in managing the access to not only the highway system, but to surface streets as well. Access management is the process that provides access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. Access management attempts to balance the need to provide good mobility for through traffic with the requirements for reasonable access to adjacent land uses.

Arguably the most important concept in understanding the need for access management is to insure the movement of traffic and access to property is mutually exclusive. No facility can move traffic very well and provide unlimited access at the same time. Figure 1 shows the relationship between mobility, access, and the functional classification of streets. The extreme examples of this concept are the freeways and the cul-de-sac. The freeway moves traffic very well with few opportunities for access, while the cul-de-sac has unlimited opportunities for access, but doesn't move traffic very well. In many

cases, accidents and congestion are the result of streets trying to serve both mobility and access at the same time.

A good access management program will accomplish the following:

- Limit the number of conflict points at driveway locations.
- Separate conflict areas.
- Reduce the interference of through traffic.
- Provide sufficient spacing for at-grade, signalized intersections.
- Provide adequate on-site circulation and storage.

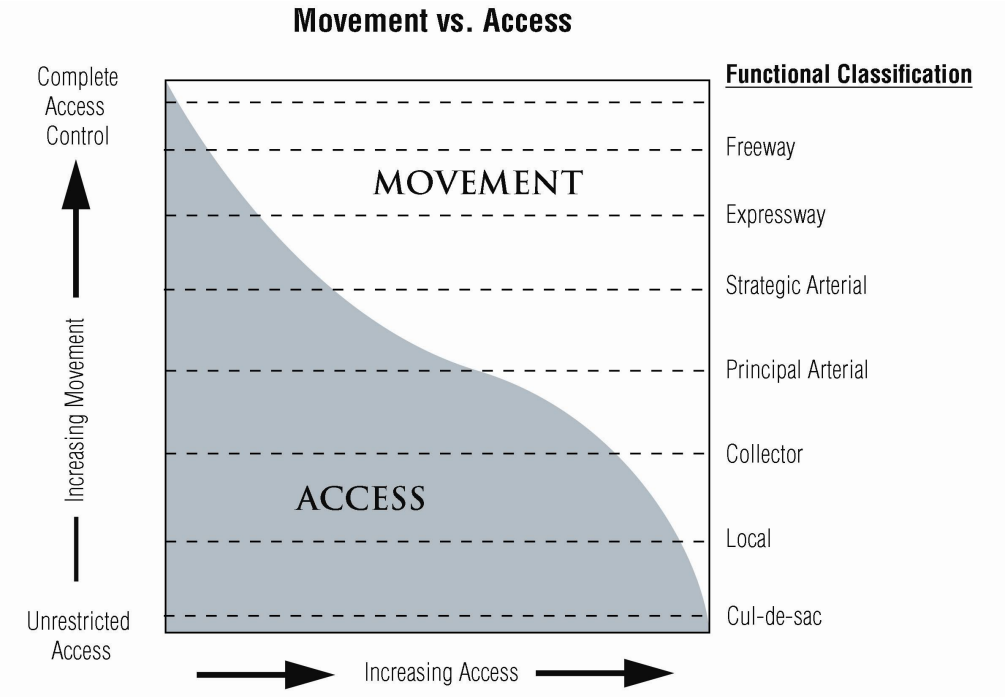


Figure 1 Mobility vs. Access by Functional Classification

Access management attempts to put an end to the seemingly endless cycle of road improvements followed by increased access, increased congestion, and the need for more road improvements.

Poor planning and inadequate control of access can quickly lead to an unnecessarily high number of direct accesses along roadways. The movements that occur on and off roadways at driveway locations, when those driveways are too closely spaced, can make it very difficult for through traffic to flow smoothly at desired speeds and levels of safety. The American Association of State Highways and Transportation Officials (AASHTO) state that "the number of accidents is disproportionately higher at driveways than at other intersections…thus their design and location merits special consideration."

Studies have shown that anywhere between 50 and 70 percent of all crashes that occur on the urban street system are access related.

Fewer direct accesses, greater separation of driveways, and better driveway design and location are the basic elements of access management. There is less occasion for through traffic to brake and change lanes in order to avoid turning traffic when these techniques are implemented uniformly and comprehensively.

Consequently, with good access management, the flow of traffic will be smoother and average travel speeds higher. There will definitely be less potential for accidents. According to the Federal Highway Administration (FHWA), before and after analyses show that routes with well managed access can experience 50 percent fewer accidents than comparable facilities with no access controls.

Roadway Functional Classification

Access spacing should recognize that access and mobility are competing functions. This recognition is fundamental to the design of roadway systems that preserve public investments, contribute to traffic safety, reduce fuel consumption and vehicle emissions, and do not become functionally obsolete. Suitable functional design of the roadway system also preserves the private investment in residential and commercial development

A typical trip on an urban street system can be described as occurring in identifiable steps. These steps can be sorted into a definite hierarchy with respect to how the competing functions of mobility and access are satisfied. At the low end of the hierarchy are highway facilities that provide good access to abutting properties, but provide limited opportunity for through movement. Vehicles entering or exiting a roadway typically perform the ingress or egress maneuver at a very low speed, momentarily blocking through traffic and impeding the movement of traffic on the roadway. At the high end of the hierarchy are facilities that provide good mobility by limiting and controlling access to the roadway, thereby reducing conflicts that slow the flow of through traffic.

Roadway specialization simply means using each individual street facility to perform the desired mix of the functions of access or movement. This is accomplished by classifying highways with respect to the amount of access or mobility they are to provide and then identifying and using the most effective facility to perform that function.

The functional system of classification divides streets into three basic classes identified as arterials, collectors, and local streets. The function of an arterial is to provide for mobility of through traffic. Access to an arterial is controlled to reduce interferences and facilitate through movement. Collector streets provide a mix for the functions of mobility and access, and therefore accomplish neither well. The predominate purpose of local streets is to provide good access. Each class of roadway has its own geometric, traffic control, and spacing requirements.

Roadway Network and Access Management Standards

The access management concepts and standards presented below are consistent with guidelines established by the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), the Transportation Research Board (TRB), and the Institute of Transportation Engineers (ITE).

Access Management Techniques

There are a number of access management techniques that can be used to preserve or enhance the capacity of a roadway. Specific techniques for managing access are discussed in this section and illustrated with examples. Not all techniques will apply to every situation. Some of them are more appropriate to less developed rural areas of the City, whereas others are more appropriate in the urban areas. In the urban areas, the techniques can be applied when existing sites are redeveloped or when negotiations with landowners are successful. Therefore, it is up to the City's Planning Board to determine what will work best based in each situation.

Number of Access Points

Controlling the number of access points or driveways from a site to a roadway reduces potential conflicts between cars, pedestrians, and bicycles. Each parcel should normally be allowed one access point, and shared access is required were possible. Provisions can be made in the local land use regulations to allow for more than one access point where special circumstances would require additional accesses. Incentives such as density bonuses or reduced frontage requirements can encourage developers to utilize access from existing side roads or to construct side roads rather than directly access an arterial or a collector road.

Spacing of Access Points

Establishing a minimum distance between access points reduces the number of points a driver has to observe and reduces the opportunity for conflicts. Spacing requirements should be based on the classification and design speed of the road, the existing and projected volume of traffic as a result of the proposed development, and the physical conditions of the site. Minimum spacing standards should be applied to both residential and commercial/industrial developments.

To ensure efficient traffic flow, new signals should be limited to locations where the progressive movement of traffic will not be impeded significantly. Uniform, or near uniform, spacing of signals is essential for the progression of traffic. As a minimum, signals should be spaced no closer than one-quarter mile (1,320 feet). It may be recommended on principal arterial streets that signals be spaced at one-third mile (1,760 feet) to one-half mile (2,640 feet).

Unsignalized driveways are far more common than signalized driveways. They affect all kinds of activity, not merely large activity centers. Traffic operational factors leading toward wider spacing of driveways (especially medium- and higher-volume driveways) include weaving and merging distances, stopping sight distance, acceleration rates, and storage distance for back-to-

back left turns. From a spacing perspective, these driveways should be treated the same as public streets. Sound traffic engineering criteria indicates that 500 feet or more should be provided between full-movement unsignalized accesses.

Restricted access movement (i.e., right-in/right-out access) can provide for additional access to promote economic development with minimum impact to the roadway facility. This type of access should be spaced to allow for a minimum of traffic conflicts and provide distance for deceleration and acceleration of traffic in and out of the access. The spacing requirement of accesses is based on the functional classification of the roadway facility and is shown in Table 1. Access spacing shall be measured from center of access to center of access. The spacing of right-turn accesses on each side of a divided roadway can be treated separately; however, where left-turn at median breaks are involved, the access on both sides should line up or be offset from the median break by a minimum of 300 feet. On undivided roadways, access on both sides of the road should be aligned. Where this is not possible, driveways should have an offset distance based on the roadway classification (Table 2). This offset is the distance from the center of an access to the center of the next access on the opposite side of the road.

Table 1 Access Spacing Based on Functional Classification

Functional Classification	Minimum Signal Spacing (ft)*	Minimum Unsignalized Full-Movement Access Spacing (ft)*	Minimum Right-In/Right-Out Access Spacing (ft)*
Major Arterial	2,640	660	330
Minor Arterial	1,320	500	250
Collector	1,320	500	250
Commercial Local	1,320	660	330
Residential Local	1,320	125	100
Residential Sub-Local	1,320	100	75

*Distances in table are measured from center to center of driveway.

Table 2 Minimum Offset between Driveways on Opposite Sides of Undivided Roadways

Functional Classification	Minimum Offset (ft)*
Major Arterial	600 for speed ≥ 45 mph and 300 for speeds < 45 mph
Minor Arterial	220
Collector	200
Commercial Local	200
Residential Local	N/A
Residential Sub-Local	N/A

*Distances in table are measured from center to center of driveway.
Note: Values are based on TRB Access Management Guidelines.

Medians

Medians are used to control and manage left turns and crossing movements as well as separating traffic moving in opposite directions. Restricting left turning movements reduces the conflicts between through and turning traffic resulting in improved safety. Studies have shown that the installation of a non-traversable median will reduce crashes by 30 % over that of a two way left turn lane (TWLTL). Medians are typically used on arterial or other roadways with high volumes of traffic and four or more lanes of traffic.

The use and design of a median is determined by the characteristics of the roadway such as: traffic volumes, speed, number and configuration of lanes, right-of-way width and land uses along the roadway. The need for a median can be identified through engineering review, a traffic study assessing the impact of a proposed project, and should be considered on any roadway that has a speed limit greater than 40 MPH. Medians can improve pedestrian safety by providing a refuge area for those crossing the street. The designer should consider incorporating pedestrian refuge at all major intersection crossings.

In addition, medians are often used in commercial and residential developments to separate lanes of traffic and limit conflicts caused by left turns. Medians can also add to the overall aesthetics of a roadway corridor or a development by incorporating landscaping or other items of visual interest. A well designed roadway with good access management can be aesthetically pleasing. It provides the landscape architect greater opportunity in the development of practical and efficient landscape plans. However care should be taken to maintain sight distance around the intersection /access locations. It is therefore required that only ground cover plantings be planted within 350 feet of an intersection/access opening. Also care should be taken to select landscape materials and location of the materials that will not intrude into the roadway which could result a safety problem for the motorist. Also care should be taken in selection of trees that when mature will not be larger than a 4 inch diameter.

Continuous two way left turn lanes can reduce the conflict and delays caused by vehicles turning left through on-coming traffic. Left turn lanes also reduce accidents caused by slowing vehicles and traffic going around on the right. Two way left turn lanes should only be used to retrofit areas of existing development and shall be limited to a roadway with less than 18,000 ADT. New roads that utilize other access management techniques should not need a two way left turn lane.

Median openings are provided at all signalized at-grade intersections. They are also generally provided at unsignalized junctions of arterial and collector streets. They may be provided at driveways, where they will have minimum impact on roadway flow. The spacing of median openings for signalize driveways should reflect traffic signal coordination requirements and the storage-space needed for left turns. Minimum desired spacing of unsignalized median openings at driveways shall be based on the left turn storage requirements. Median openings for left-

turn entrances (where there is no left-turn exit from the activity center) should be spaced to allow sufficient storage for left-turning vehicles.

Left-turn ingress or egress requires a median opening when traffic traveling in opposing directions is separated by a barrier median. Median widths commonly vary from 30 inches to over 30 feet. A 14 foot median is desirable in order to provide for an adequate left turn lane at intersections.

Design elements include the median width, the spacing of median openings and the geometries of median noses at opening. Typically, median widths at intersections are 30 inches formed by two 15 inch curbs back to back with a plowable (tapered) end.

Corner Clearance

Corner Clearance is the distance between a driveway and an intersection. Providing adequate corner clearance improves traffic flow and roadway safety by ensuring that the traffic turning into the driveway does not interfere with the function of the intersection. Local regulations should require that driveways be located a minimum distance from an intersection based on roadway classification or speed. Any access opening shall not be located within the functional area of the intersection as shown in Figure 2.

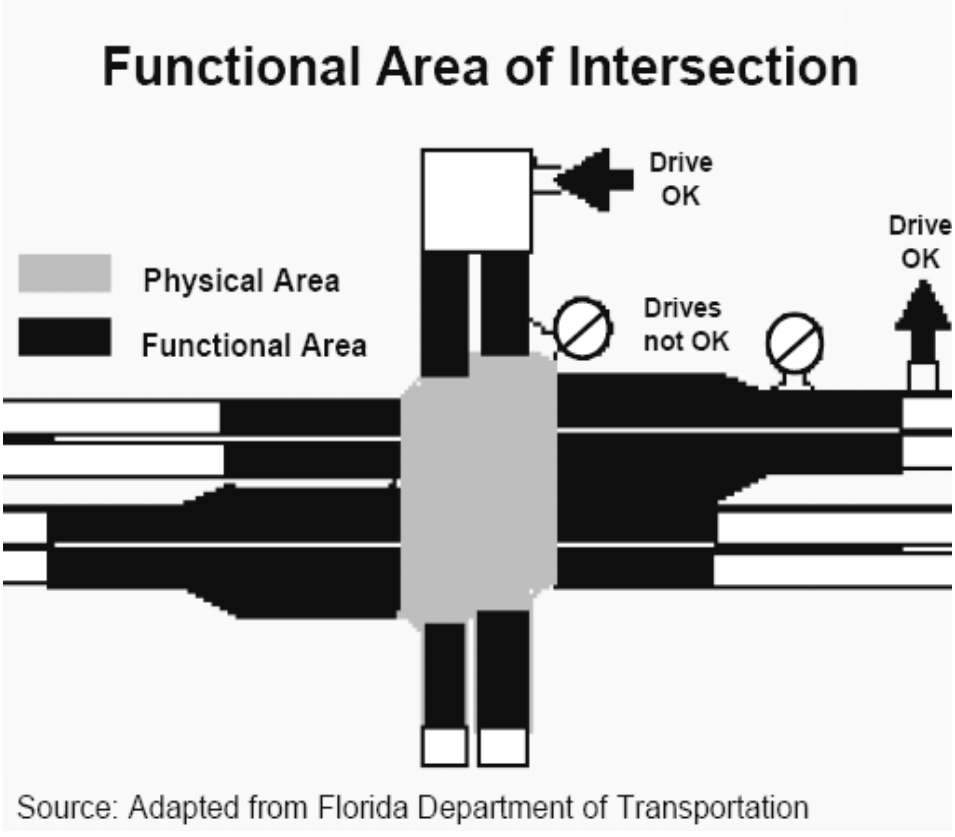


Figure 2 Functional Area of Intersections

Corner Clearance shall be based on an engineering study that includes the following distances illustrated in Figure 4 and Table 3. Figure 4 shows an example inadequate corner clearance that can inhibit roadway capacity and decrease safety.

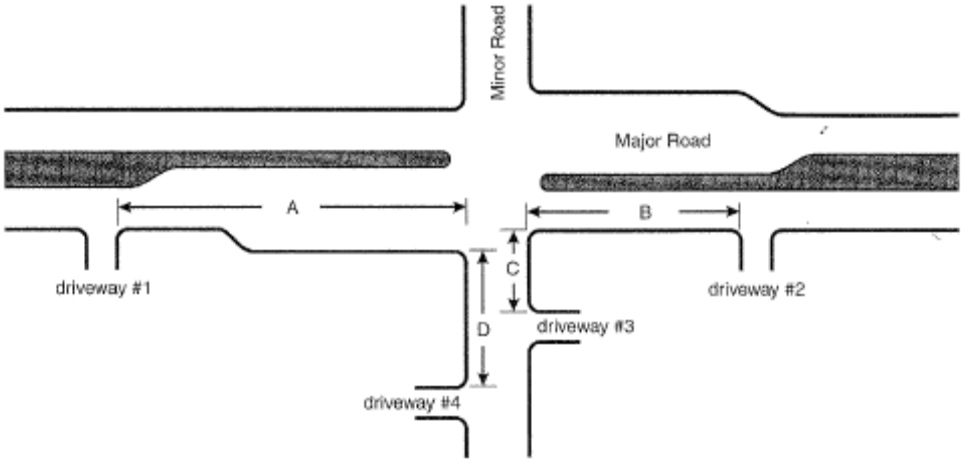


Figure 3 Corner Clearance Types

Table 3 Corner Clearance Criteria

Clearance Type	Sample Clearance Criteria
A- Approach side on the major roadway	Equal or exceed the functional distance of the intersection d1+d2+d3 (based on engineering study). d1= Distance traveled during perception d2= Distance traveled while driver decelerates to a stop d3= Storage length
B- Departure side on the major roadway	Residential Roadways 260 feet* Collector Roadways 305 feet* Arterial Roadways 380 feet*
C- Approach side on the minor roadway	Shall be a minimum of 100 feet
D- Departure side on the minor roadway	Shall be a minimum of 120 feet

* Based on a spillback rate of 15% from TRB Access Management Manual

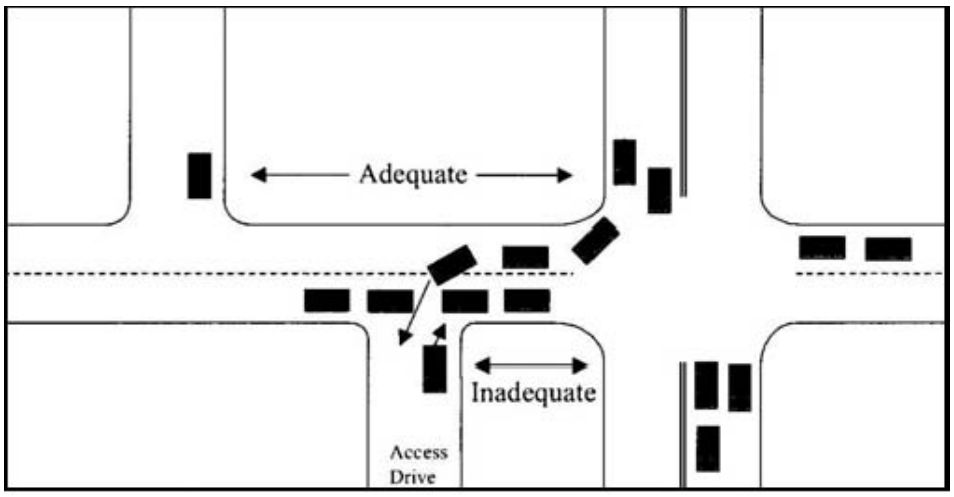


Figure 4 Inadequate Corner Clearance

Width of Access Points

Uncontrolled access is a serious hazard for vehicles entering or exiting a site, vehicles passing by a site, bicyclists and pedestrians. In addition to limiting the number of access points, the width of the access point should be restricted based on the use of the site in question. Residential driveways should be limited to a maximum width of 32 feet at the edge of pavement, including turning radii. The maximum width for a commercial or industrial site entrance with two-way traffic should be limited to 44 feet including 12' for right out 12' for left out with 16' for ingress lane and 2- 2 foot shoulders. The width of the entrance should be determined based on the type of use for the site, the type of traffic (i.e. cars vs. 18 wheel trucks), and the projected volume of traffic.

Turning Radius

The turning radius of a driveway or access road affects both the flow and safety of through traffic as well as vehicles entering and exiting the roadway. The size of the turning radius affects the speed at which vehicles can exit the flow of traffic and enter a driveway. In general, the larger the turning radius, the greater the speed at which a vehicle can turn into a site. An excessively small turning radius will require a turning vehicle to slow down significantly to make the turn, therefore backing up the traffic flow or encroaching into the other lane. An excessively large turning radius will encourage turning vehicles to travel quickly, thereby creating hazards to pedestrians. Either of these situations increases the potential for accidents.

The speed of the roadway, the anticipated type and volume of the traffic, pedestrian safety and the type of use proposed for the site should be considered when evaluating the turning radius. Proposed uses that would require deliveries by large trucks (such as major retail establishments and gas stations) should provide larger turning radii to accommodate such vehicles. Other uses

such as banks, offices or areas with high pedestrian traffic could adequately be served with smaller turning radii based on the type of traffic they would generate.

Throat Length

Throat Length is the length of the driveway that is controlled internally from turning traffic measured from the intersection with the road. Driveways should be designed with adequate throat length to accommodate queuing of the maximum number of vehicles as defined by the peak period of operation in the traffic study. This will prevent potential conflicts between traffic entering the site and internal traffic flow. Inadequate throat length may cause turning traffic to back up onto the road thereby impeding traffic flow and increasing the potential for accidents. The minimum throat length for an access into a minor commercial property is 50 feet. For major commercial development FHWA recommends a minimum throat length of 150' for a major driveway entrance, with 300' desirable. Figure 5 shows both a poor and good example of driveway throat length.

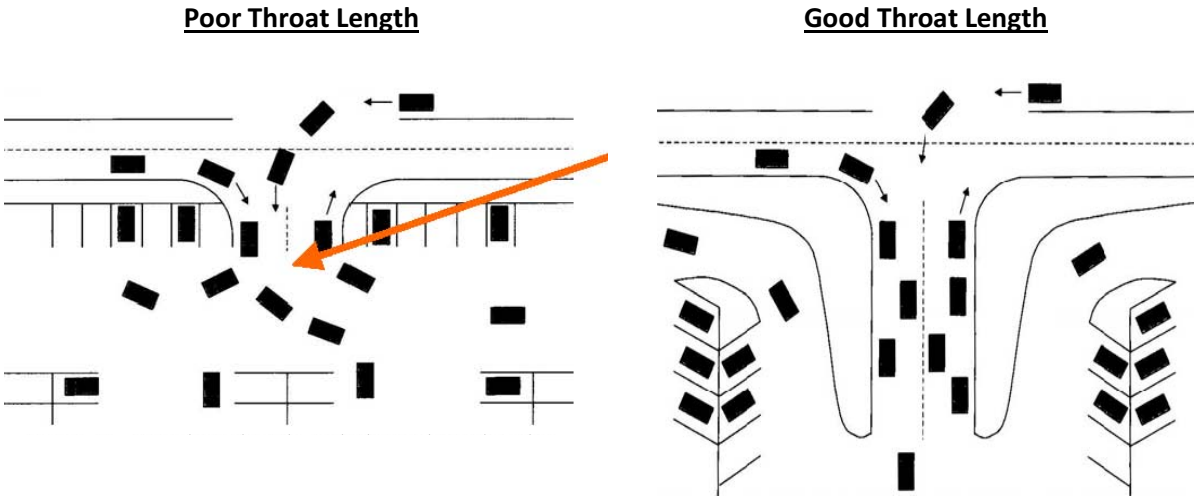


Figure 5 Driveway Throat Length Examples

Driveway Profiles

The slope of a driveway can dramatically influence its operation. Usage by large vehicles can have a tremendous effect on operations if slopes are severe. The profile, or grade, of a driveway should be designed to provide a comfortable and safe transition for those using the facility, and to accommodate the storm water drainage system of the roadway. A maximum grade of 2 percent for a minimum of 50' should be provided for commercial driveways. For street accesses and major traffic generators they shall be designed to meet street standards with no water ways crossing the opening. Table 4 gives the maximum change that can occur between the roadway cross-slope and the driveway slope.

Table 4 Maximum Change between Roadway Cross-Slope and Driveway Slope

Roadway Functional Classification	Driveway	
	High Volume	Low Volume
Major Arterial	5%	6%
Minor Arterial	6%	7%
Collector	7%	8%
Commercial Local	N/A	≤10%
Residential Local	N/A	≤12%
Residential Sub-Local	N/A	≤12%

Shared Access

Access points shall be shared between adjacent parcels to minimize the potential for conflict between turning and through traffic. Shared access can be used effectively for both residential and nonresidential developments. Since the issues surrounding shared access for residential and nonresidential development are slightly different, they are discussed separately.

Residential

Residential subdivisions located along arterial or collector roadways should be required to construct an internal road system rather than be developed along the existing roadway frontage or a single access cul-de-sac. Subdivision proposals should encourage a coordinated street network by providing rights-of-way or stubs for the extension of streets to adjacent parcels. This will prevent the proliferation of driveways on arterial and collector streets and provide for an interconnected street network.

Shared driveways shall also be used to minimize the number of curb cuts in residential districts, particularly along rural arterial and collector roads. If access is necessary from an arterial or collector then shared driveways is required. Shared driveways serving more than two homes will be built to fire lane standards.

Commercial

Joint driveways providing access to adjacent developments, and interconnections between sites, are required for all development proposals on arterial and collector roadways. Interconnections between sites can eliminate the need for additional curb cuts, thereby preserving the capacity of the roadway. This is particularly important for commercial/industrial sites and should be used to encourage the development of internal or collector roadway systems servicing more than one parcel or establishment. Future roadway rights-of-way should also be provided to promote interconnected access to vacant parcels or to facilitate the consolidation of access points for existing developments.

Pedestrian access between developments will allow people to walk between establishments, thereby reducing the number of vehicle trips. Every opportunity should be taken to provide for interconnections between existing and future developments for both vehicles and pedestrians.

Alignment of Access Points

Street and driveway intersections represent points of conflict for vehicles, bicycles and pedestrians. All modes of travel should be able to clearly identify intersections and assess the travel patterns of vehicles and pedestrians through the intersection. To minimize the potential conflicts and improve safety, intersections and driveways shall be aligned opposite each other wherever possible and intersect roadways at a 90 degree angle. Good driveway alignment will provide vehicles, bicycles, and pedestrians with a clear line of sight and allow them to traverse the intersection more safely.

Sight Distance

Sight distance is the length of the road that is visible to the driver. A minimum safe sight distance should be required for access points based on the roadway classification. The American Association of State Highway and Transportation Officials (AASHTO) publication, *A Policy on Geometric Design of Highways and Streets* contains recommendations for sight distance based on the roadway design speed and grade. Providing sufficient intersection sight distance at the driveway point for vehicles using a driveway to see oncoming traffic and judge the gap to safely make their movement is essential. Vehicles should be able to enter and leave the property safely. Intersection sight distance varies, depending on the design speed of the roadway to be entered, and assumes a passenger car can turn right or left into a two-lane highway and attain 85 percent of the design speed without being overtaken by an approaching vehicle that reduces speed to 85 percent of the design speed. The table below gives intersection sight distance requirements for passenger cars. Sight distances should be adjusted with crossroad grade in accordance with AASHTO policies.

Table 5 Intersection/Driveway Sight Distance

Posted Speed Limit (mph)	Sight Distance Required (ft)*
30	335
35	390
40	445
45	500
50	555
55	610
60	665
65	720

*Based on a 2 lane roadway (for other lane configurations, refer to AASHTO for adjustments). Drivers' eye setback is assumed to be 15 feet measured from the edge of traveled way.

Normally, intersection sight distance will govern the required sight distance for the driveway but it is also important to verify that the main roadway have sufficient stopping sight distance. For example, a driver of a vehicle approaching an intersection should have an unobstructed view of the entire intersection including any traffic control devices and sufficient length along the intersecting highway to permit the driver to anticipate and avoid potential collisions. The safe stopping sight distance should be reviewed to make sure that the approaching vehicle has a clear view of the roadway in the area of the access. Sight distance may be more of a consideration in rural areas because of higher speeds and rolling/hilly terrain. The stopping sight distance will be greater for a roadway with a high speed and a downgrade as vehicles will take longer to stop in such a circumstance. Table 6 gives the safe stopping sight distance that should be provided for a driver on the roadway to have a clear view of the access/driveway. In making this determination for stopping sight distance, it should be assumed that the approaching driver's eye is 3.5 feet above the roadway surface and that the object to be seen is 2 feet above the surface of the road.

Table 6 Safe Stopping Sight Distances on Grades

Design Speed (mph)	Safe Stopping Sight Distance (ft)			
	Downhill Grades		Uphill Grades	
	-3%	-6%	3%	6%
25	158	165	147	143
30	205	215	200	184
35	257	271	237	229
40	315	333	289	278
45	378	400	344	331
50	446	474	405	388
55	520	553	469	450

Turning Lanes

Turning lanes remove the turning traffic from the through travel lanes. Left turning lanes are used to separate the left turning traffic from the through traffic. Right turn lanes reduce traffic delays caused by the slowing of right turning vehicles. Designated right or left turn lanes are generally used in high traffic situations on arterial and collector roadways. A traffic impact study will identify the need for and make recommendations on the design of turning lanes or tapers based on the existing traffic volumes, speed, and the projected impacts of the proposed use.

Storage Length

The length of the turning lane shall be a minimum of 100 feet and at an unsignalized intersection it shall be a minimum length to accommodate 2- 25 foot vehicles based on the number of vehicles likely to arrive in a 2 minute period at peak hour. For signalized

intersections, the storage length shall be 1 ½ times the average number of vehicles that would queue per cycle during the peak hour based on design year volumes.

Lane Width

Turning lanes shall normally be a minimum of 12 feet in width. Any exception will require approval from the City Engineer. For right turn lanes, provide an additional 12 feet of pavement to accommodate the lane.

Left-turn Lanes

The provision of left-turn lanes is essential from both capacity and safety standpoints where left turns would otherwise share the use of a through lane. Shared use of a through lane will dramatically reduce capacity, especially when opposing traffic is heavy. Left-turn lanes should always be provided at a signalized intersection.

Right-turn Lanes

Right-turn lanes remove the speed differences in the main travel lanes, thereby reducing the frequency and severity of rear-end collisions. They also increase capacity of signalized intersections and may allow more efficient traffic signal phasing.

Length of Auxiliary Lanes

A separate turning lane consists of a taper plus a full width auxiliary lane. The design of turn lanes is based primarily on the speed at which drivers will turn into the lane, the speed to which drivers must reduce in order to turn into the driveway after traversing the deceleration lane, and the amount of vehicular storage that will be required. Other special considerations include the volume of trucks that will use the turning lane and the steepness of an ascending or descending grade.

The total length of an auxiliary lane is made up of the storage length plus the distance necessary to come to a stop from the prevailing speed of the road and the taper distance (which both vary based on speed). A taper length of 50 ft for speeds below 45 mph, 75 ft for speeds of 45 to 50 mph, and 100 ft for speeds over 50 mph is typical. If a two-lane turn lane is to be provided, it is recommended that a 10:1 taper be used to develop the dual lanes. The taper will allow for additional storage during short duration surges in traffic volumes. The length needed for a vehicles to come to a stop from either the design speed or an average running speed of a roadway are shown in Table 7. These deceleration lengths assume the roadway is on a 2 percent or less vertical grade. The storage distance plus the deceleration distance and taper distance will result in the total length of an auxiliary lane (Figure 6).

Table 7 Deceleration Length

Speed (mph)	Deceleration Length (ft)*
30	170
35	220
40	275
45	340
50	410
55	485
60	510
65	570

*Assume the roadway is on a 2 percent or less vertical grade.

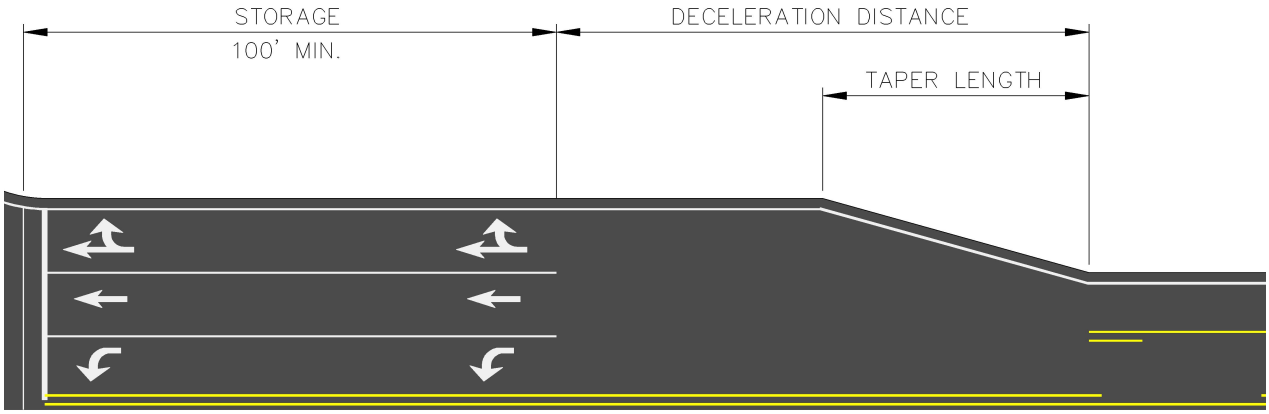


Figure 6 Auxiliary Lane Length

Pedestrian and Bicycle Access

A key aspect of access management is reducing the number of vehicle trips. This can be accomplished by providing safe and appealing pedestrian access within developments and between adjacent developments.

All new development and redevelopment of existing sites should address pedestrian and bicycle access to and within the site. Sidewalks should be provided in all urban residential subdivisions and in or adjacent to commercial or industrial developments. Sidewalks and other pedestrian facilities should comply with the Americans with Disabilities Act (ADA) Standards for Accessible Design. Crosswalks should be clearly marked and located in appropriate areas. Paint or paving materials can be used to delineate crosswalks. In addition to traditional brick, an alternative involves imprinting the asphalt with a brick design and then painting the crosswalk.

Parking lot designs need to address pedestrian access to the site and circulation within the site. Five foot wide sidewalks or striped pedestrian crossings should be provided from adjacent sites through parking lots to promote safe pedestrian access. Safe and appealing pedestrian circulation systems allow people to park their cars once and walk to different establishments, resulting in an overall reduction in the number of vehicle trips. Joint and cross access between developments can provide opportunities for shared parking.

Appendix D: Public Involvement

Public involvement is a key element to producing an effective and worthwhile transportation master plan for the City to implement and follow. Collecting and responding to public input allows City staff and decision-makers to consider all the issues and to address them appropriately. An intensive effort was put forth to collect public comment regarding this particular update of the City's transportation master plan, including the following actions:

Website

A draft of the transportation master plan document was posted on the City's website (http://www.plgrove.org/) for the public to download and review.

Open House

An open house was held to present the proposed updated Pleasant Grove City Transportation Master Plan to the public. The open house was held on May 13, 2009 at the Community Development Building in Pleasant Grove, Utah. The meeting was attended by approximately 80 to 100 people and 17 comments were received.

- **Advertisement**
    - **Postcard** – Individual postcards were mailed to 1,316 residents located within 200 feet of a proposed roadway widening or new roadway alignment. Of the 1,316 postcards mailed, only 92 postcards were returned to sender. The postcard and mailing list are included in this report.
    - **Utility Bills** – An announcement was placed in the Pleasant Grove City utility bills.
    - **Website** – Details of the open house were posted on the City's website (http://www.plgrove.org/).
- **Presentation** – The following displays were shown to the public at the open house and are included in this report:
    - Proposed Pleasant Grove 2040 Roadway Master Plan
    - Existing & Proposed Pleasant Grove Bicycle and Pedestrian Facilities
    - Pleasant Grove Future Transit Plans
    - Typical Sections
- **Comments** – A comment form was provided at the public open house for residents to communicate their concerns and approval of specific elements of the proposed plan. A total of 17 comments were received. A summary of these comments as well as responses are included in this report.

City Council and Planning Commission Meetings

A progress report of the transportation master plan update process was presented at both City Council and Planning Commission Meetings on May 26, 2009 and May 28, 2009 respectively. The presentation is included in this report.

Final Public Hearing

A final public hearing is scheduled for June 23, 2009.

Conclusion

Public involvement has proven to be a critical element of the planning process. As the City updates this plan in the future, public input should be collected and taken into account as this plan evolves.

Attachments

The following items are included in this report:

- **Open House Advertisement:**
    - Postcard
    - Postcard Mailing List
    - Newsletter placed in utility bills
- **Open House Attendance List**
- **Open House Displays**
- **Open House Comments and Responses**
- **City Council and Planning Commission Meetings Presentation**

Open House Advertisement

- Postcard
- Postcard Mailing List
- Newsletter placed in utility bills

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

OPEN HOUSE

MAY 13, 2009
6:30-8:00 P.M.
THE MEETING WILL BE HELD AT THE COMMUNITY DEVELOPMENT BUILDING (86 EAST 100 SOUTH), IN THE CITY COUNCIL CHAMBERS

THE MEETING WILL BE AN OPEN HOUSE FORMAT. THERE WILL NOT BE A FORMAT PRESENTATION. COME VIEW THE PROPOSED PLAN AND PROVIDE FEEDBACK.

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

To view a draft of the proposed plan please visit http://www.plgrove.org/.

You may attend any time between 6:30 and 8:00, there will not be a formal presentation.

Members of the community will have an opportunity to review the proposed Transportation Master Plan for the city, including roads, transit, bicycle and pedestrian facilities. City staff will be available to answer questions and receive comments.

Pleasant Grove
Utah's City of Trees

86 EAST 100 SOUTH
PLEASANT GROVE,
UTAH 84062

PLEASANT GROVE CITY TRANSPORTATION MASTER PLAN
OPEN HOUSE MAILING LIST

Orange text indicates postcards that were returned to sender.

	OWNER	MAIL STREET	MAIL CITY	MAIL STATE	MAIL ZIP CODE
1	AARON, JACKIE WILSON	3894 W 9850 NORTH	PLEASANT GROVE	UT	84062
2	ABBOTT, CHARLES F	4411 SHEFFIELD DR	PROVO	UT	84604
3	ACA PROPERTIES L.C.	PO BOX 339	MIDVALE	UT	84047
4	ADAIR, MORGAN B & MARTA J JT	50 W 725 NORTH	LINDON	UT	84042
5	ADAMS, AARON B & TIFFANY JT	888 W 2800 NORTH	PLEASANT GROVE	UT	84062
6	ADAMS, BRADY E & ROBIN T JT	1491 W 80 SOUTH	PLEASANT GROVE	UT	84062
7	ADAMS, GLEN WELDON	67 E 300 SOUTH	PLEASANT GROVE	UT	84062
8	ADAMS, J RICHINS & MARLEENE H TEE	98 S 1100 EAST	AMERICAN FORK	UT	84003
9	ADAMS, JARED & HOLLY JT	1567 W 80 SOUTH	PLEASANT GROVE	UT	84062
10	ADAMS, MICHAEL E & KATHRYN J JT	4291 N 900 WEST	PLEASANT GROVE	UT	84062
11	ADAMS, MICHELE ARROWSMITH	1338 RENAISSANCE PL	PLEASANT GROVE	UT	84062
12	ADAMS, ORIN A & NAOMI JT	752 W 2600 NORTH	PLEASANT GROVE	UT	84062
13	ADAMS, PATRICIA R	669 ROCKY KNOLL LN	DRAPER	UT	84020
14	ADAMS, PAULINE	524 W 1800 NORTH	PLEASANT GROVE	UT	84062
15	ADAMS, THOMAS A & BEA W TEE	95 S 1050 EAST	PLEASANT GROVE	UT	84062
16	AJF PROPERTIES LLC	1554 N 300 EAST	PLEASANT GROVE	UT	84062
17	ALEMAN, JORGE A	2267 N 600 WEST	PLEASANT GROVE	UT	84062
18	ALL AMERICAN DEVELOPMENT AND CONSTRU	10253 N OAK RD	CEDAR HILLS	UT	84062
19	ALL STAR AUTOMOTIVE INVESTMENTS LC	656 N 2000 WEST	PLEASANT GROVE	UT	84062
20	ALLEN, JUSTIN B & ALEXIS G JT	681 N 1300 WEST	PLEASANT GROVE	UT	84062
21	ALLEN, PAUL E & JUDY JT	60 N 100 EAST	PLEASANT GROVE	UT	84062
22	ALLEN, STEPHEN R & CAROLYN JT	166 W 2600 NORTH	PLEASANT GROVE	UT	84062
23	ALLEN, STEVEN C & MARLA G JT	9590 CANYON RD	PLEASANT GROVE	UT	84062
24	ALLENBACH, BRENT H	1334 RENAISSANCE PL	PLEASANT GROVE	UT	84062
25	ALLMAN, KELLY J & ELIZABETH A ET AL	2409 N 1050 WEST	PLEASANT GROVE	UT	84062
26	ALLRED, JASON M	330 S 100 EAST	PLEASANT GROVE	UT	84062
27	ALLRED, KEITH B & JUDITH L	1240 N 100 EAST	PLEASANT GROVE	UT	84062
28	ALLRIDGE, DALLAN L & SUSAN C JT	1629 N 390 WEST	PLEASANT GROVE	UT	84062
29	ALLRIDGE, LEE R & DALLAN JT	267 N 530 EAST	AMERICAN FORK	UT	84003
30	ALOHA INVESTMENTS LLC	492 W 700 SOUTH	OREM	UT	84058
31	ALPINE ECHO 1 INC	775 COVENTRY LN	ALPINE	UT	84004
32	ALPINE PEDIATRICS PROPERTY MANAGEMEN	1912 W 930 NORTH	PLEASANT GROVE	UT	84062
33	ALVAREZ, ROBERT C	1479 W 80 SOUTH	PLEASANT GROVE	UT	84062
34	AMATO, DOUGLAS & SUSAN G JT	PO BOX 204	VINA	CA	96092
35	AMERICAN SPRINGS DEVELOPMENT COMPANY	146 W 700 NORTH	AMERICAN FORK	UT	84003
36	AMG ENTERPRISES INC	6 S 400 WEST	LINDON	UT	84042
37	AMSOURCE PLEASANT GROVE LC ET AN INT	358 S RIO GRANDE ST #200	SALT LAKE CITY	UT	84101
38	ANDERSON, ARRON W & IDA C TEE	712 E 900 SOUTH	PLEASANT GROVE	UT	84062
39	ANDERSON, CRAIG & AMIE TEE	1265 W 2850 NORTH	PLEASANT GROVE	UT	84062
40	ANDERSON, DEBBIE L	1780 N 1300 WEST	PLEASANT GROVE	UT	84062
41	ANDERSON, JAMES A & AUDREY R TEE	691 E 990 SOUTH	PLEASANT GROVE	UT	84062
42	ANDERSON, JEDEDIAH J & KIMBERLY S	936 N 1420 WEST	PLEASANT GROVE	UT	84062
43	ANDERSON, KEVIN B & LISA A JT	795 N 600 WEST	PLEASANT GROVE	UT	84062
44	ANDERSON, TONY J & GINGER M JT	1207 W 3420 NORTH	PLEASANT GROVE	UT	84062
45	ANDERSON, WILLIAM L ET AL	2460 W 450 SOUTH #5	SPRINGVILLE	UT	84663
46	ANDRUS, CHRIS	1339 ALPINE WAY	PROVO	UT	84606
47	ANDRUS, PATRICIA L & JON A TEE	2445 CANYON RD	PLEASANT GROVE	UT	84062
48	ANGUS, DONALD J & LE ANN	502 W 1800 NORTH	PLEASANT GROVE	UT	84062
49	ANTOINE BUNKER FARMS LIMITED FAMILY	6286 W 10890 NORTH	HIGHLAND	UT	84003
50	AOK FAMILY HOLDING TRUST	PO BOX 536	FERRON	UT	84523
51	ARCHLAND PROPERTY I LLC	PO BOX 182571	COLUMBUS	OH	43218
52	AREVALO, JOSE R & OLINDA J JT	357 W 800 NORTH	LINDON	UT	84042
53	ARIAS, ITALO M ET AL	1520 E MURDOCK DR	PLEASANT GROVE	UT	84062
54	ARNEY, TRACEE L & JAMES D JT	738 W 2240 NORTH	PLEASANT GROVE	UT	84062
55	AROTEC ENG CO	747 W 400 SOUTH	OREM	UT	84058
56	ARSON, GREG	252 W 1290 NORTH	AMERICAN FORK	UT	84003
57	ASBEY, GAYLE	2480 N 600 WEST	PLEASANT GROVE	UT	84062
58	ASH, LLOYD K & LINDA R	294 E 300 SOUTH	PLEASANT GROVE	UT	84062
59	ASHER, DUSTY R & LACY K JT	1261 W 1800 NORTH	PLEASANT GROVE	UT	84062
60	ASHROSS L.C.	530 S 250 WEST	PLEASANT GROVE	UT	84062

61	ASHTON, RANDY D & JULIE R JT	331 W 2600 NORTH	PLEASANT GROVE	UT	84062
62	ASTON, VERNON R & JENNIFER P JT	1597 N 150 EAST	PLEASANT GROVE	UT	84062
63	ATKINSON, ADRIAN D TEE	PO BOX 647	PLEASANT GROVE	UT	84062
64	ATKINSON, ARLEN T & PATRICIA JT	241 S 100 EAST	PLEASANT GROVE	UT	84062
65	ATKINSON, DELBERT W & KARLA M JT	4633 CANYON RD	PLEASANT GROVE	UT	84062
66	ATKINSON, JACOB I & AMANDA G JT	1793 GARDEN DR	PLEASANT GROVE	UT	84062
67	ATTERTON, R BRENT & KIM JT	1777 N 70 EAST	PLEASANT GROVE	UT	84062
68	ATWOOD, GRANT L & FLORENCE TEES	4966 W 11000 NORTH	HIGHLAND	UT	84003
69	ATWOOD, SCOTT & ERIKA TEE	1259 W 2310 NORTH	PLEASANT GROVE	UT	84062
70	AULT, LEO H & VIRGINIA A JT	357 LOADER DR	PLEASANT GROVE	UT	84062
71	AUSTIN, STEPHEN	986 W 270 SOUTH #103	PLEASANT GROVE	UT	84062
72	AVANYU ACRES OWNERS ASSOCIATION	9543 AVANYU DR	CEDAR HILLS	UT	84062
73	AVERETT, CASEY G & TRACY JT	1825 N 100 EAST	PLEASANT GROVE	UT	84062
74	BAGGS, STEPHEN F & ARDEAN C	5217 MCKINNEY WAY	CARMICHAEL	CA	95608
75	BAILEY, REBECCA	1511 W 80 SOUTH	PLEASANT GROVE	UT	84062
76	BAIR, REED I & JOAN L JT	945 N 100 EAST	PLEASANT GROVE	UT	84062
77	BAIRD, MARTIN H	1478 E 1000 SOUTH	PLEASANT GROVE	UT	84062
78	BAKER, DENNIS	250 SOUTH BEACHWOOD, STE 120	BOISE	ID	83709
79	BAKER INVESTMENTS LLC	250 BEECHWOOD DR #120	BOISE	ID	83709
80	BAKER, BLAIR H & CONNIE S JT	1021 N 1600 WEST	PLEASANT GROVE	UT	84062
81	BAKER, JED & SHEILA TEE	13 1/2 BOUSCAY AV	NORWALK	OH	44857
82	BALD MOUNTAIN DEVELOPMENT LLC ET AL	5373 W 10480 NORTH	HIGHLAND	UT	84003
83	BALDWIN AND GAGON CONSTRUCTION COMPA	1625 E 480 SOUTH	PLEASANT GROVE	UT	84062
84	BALDWIN, RHETT B	986 W 270 SOUTH #203	PLEASANT GROVE	UT	84062
85	BALL, DANA D	2059 TUSCANY WAY	PLEASANT GROVE	UT	84062
86	BANK OF AMERICAN FORK	33 E MAIN ST	AMERICAN FORK	UT	84003
87	BANKS, BRET C & LISA M JT	990 N 100 EAST	PLEASANT GROVE	UT	84062
88	BARIA, JO ANN	3959 SIDNEY ST SE	LACEY	WA	98503
89	BARNEY, DAVID & HEATHER JT	1361 W 50 NORTH	PLEASANT GROVE	UT	84062
90	BARNHARDT, ROLLAND J & ROLAND JT	306 S 100 EAST	PLEASANT GROVE	UT	84062
91	BASSETT, TOM	PO BOX 727	BIGGS	CA	95917
92	BATCHLER, JACK W & RUTH J	PO BOX 580	PLEASANT GROVE	UT	84062
93	BATH, JANA W & NORMAN J TIC	1004 W 1000 NORTH	PLEASANT GROVE	UT	84062
94	BAUGH, CASEY	4937 W 11000 NORTH	HIGHLAND	UT	84003
95	BAUMAN, JOHN A & LYNDA D	1150 N 1300 WEST	PLEASANT GROVE	UT	84062
96	BAXTER, KAY F	25 SMITH LN	PLEASANT GROVE	UT	84062
97	BEAGLEY, HEATHER J & HEATHER J	9540 N CANYON RD	PLEASANT GROVE	UT	84062
98	BEAN, CINDY TEE	9231 S REDWOOD RD	WEST JORDAN	UT	84088
99	BEAN, CINDY R	15 S 1300 WEST	PLEASANT GROVE	UT	84062
100	BEAR DEVELOPMENT LLC	838 W 4230 NORTH	PLEASANT GROVE	UT	84062
101	BECK, DARREL J & CINDIE K JT	798 W 1000 NORTH	PLEASANT GROVE	UT	84062
102	BEESLEY, WAYNE	702 UTAH AV	PROVO	UT	84606
103	BEFUS, SCOTT JASON	84 S 850 EAST	PLEASANT GROVE	UT	84062
104	BELLISTON, FAYE S & MARCUS J TEE	147 W HIDDEN HOLLOW CIR	OREM	UT	84058
105	BELMONT ESTATES LLC	1549 E 400 SOUTH	PLEASANT GROVE	UT	84062
106	BENNETT LAND HOLDINGS LLC ET AL	5 IRONWOOD DR	NORTH SALT LAKE	UT	84054
107	BENNETT, GLENNETA R	4591 CANYON RD	PLEASANT GROVE	UT	84062
108	BENNETT, LAMAE H	125 E 500 NORTH	PLEASANT GROVE	UT	84062
109	BENSON, C DAVID & SANDRA K JT	980 W 1800 NORTH	PLEASANT GROVE	UT	84062
110	BENSON, JO ANN & DONALD W JT	420 E 300 SOUTH	PLEASANT GROVE	UT	84062
111	BERGESON, DEAN R & DIXIE A JT	701 E 990 SOUTH	PLEASANT GROVE	UT	84062
112	BEST, JOHN E & JULIE TEE	2356 N 600 WEST	PLEASANT GROVE	UT	84062
113	BETHERS, DALE F & EDITH H	2831 CANYON RD	PLEASANT GROVE	UT	84062
114	BEVERIDGE, GREGORY C & NORMA JT	1178 W 3300 NORTH	PLEASANT GROVE	UT	84062
115	BEVERIDGE, KENDALL LAMAR TEE	10996 N 4800 WEST	HIGHLAND	UT	84003
116	BEZZANT, DOUGLAS G & TAMRA B TIC	376 S LOCUST AV	PLEASANT GROVE	UT	84062
117	BEZZANT, MAE S TEE	360 S LOCUST AV	PLEASANT GROVE	UT	84062
118	BEZZANT, RICHARD L & LORNA E JT	325 N 100 EAST	PLEASANT GROVE	UT	84062
119	BIG SPRINGS DEVELOPMENT INC	1610 N 525 EAST	PLEASANT GROVE	UT	84062
120	BIGELOW, BARBARA & BRENT R TEE	866 N 600 WEST	PLEASANT GROVE	UT	84062
121	BIGELOW, ROBERT B & STEPHANIE JT	1370 N 100 EAST	PLEASANT GROVE	UT	84062
122	BIGELOW, ROBERT D & JILL B	1330 N 100 EAST	PLEASANT GROVE	UT	84062
123	BINGHAM, ROBERT I & RONNIE J	1585 N MURDOCK DR	PLEASANT GROVE	UT	84062
124	BIRD, RYAN G & JENNY A JT	319 W 1800 NORTH	PLEASANT GROVE	UT	84062
125	BISHOP, ANDREW	1476 N FREEDOM BLVD	PROVO	UT	84604

126	BISHOP, GREGORY L & JESSICA N JT	2845 N 900 WEST	PLEASANT GROVE	UT	84062
127	BISHOP, JARED L	688 W 2760 NORTH	PLEASANT GROVE	UT	84062
128	BISHOP, REBECCA S & STEVEN A TEE	399 E STATE RD	PLEASANT GROVE	UT	84062
129	BLACK SCOT DEVELOPMENT LC	1093 E 20 SOUTH	LINDON	UT	84042
130	BLACK SCOT DEVELOPMENT LLC	3214 N UNIVERSITY AV #104	PROVO	UT	84604
131	BLACK, DUBBY J & AMY L JT	119 E 1640 NORTH	PLEASANT GROVE	UT	84062
132	BLACKHAM, MAX A & MARY L JT	2024 N 600 WEST	PLEASANT GROVE	UT	84062
133	BLACKHAM, NATHAN H & JESSICA JT	1635 W 50 NORTH	PLEASANT GROVE	UT	84062
134	BLACKHURST, M DEAN & CHRISTIN TEE	PO BOX 79	NEPHI	UT	84648
135	BLACKHURST, MICHAEL D & CAROL JT	2575 N 600 WEST	PLEASANT GROVE	UT	84062
136	BLACKHURST, REESE BERRY ET AL	414 W 2600 NORTH	PLEASANT GROVE	UT	84062
137	BLAKE, DAVID C ET AL AN INT	265 N COUNTRY MANOR LN	ALPINE	UT	84004
138	BLAKE, PHILIP T & HELEN	29 S 2000 WEST	PLEASANT GROVE	UT	84062
139	BLANCO, GERARDO R & JANA L JT	986 N 1600 WEST	PLEASANT GROVE	UT	84062
140	BLUE CHROME INVESTMENTS LLC	1458 E 300 SOUTH	PLEASANT GROVE	UT	84062
141	BLUE RIBBON STORAGE LLC	754 E 1200 NORTH	PLEASANT GROVE	UT	84062
142	BOBO, DOUGLAS J & MARCELLE JT	2728 CANYON RD	PLEASANT GROVE	UT	84062
143	BOONE, JACOB H & CHERYL E JT	9454 CANYON RD	CEDAR HILLS	UT	84062
144	BORWEGEN, THOMAS G & GEORGIAN JT	359 E 500 SOUTH	PLEASANT GROVE	UT	84062
145	BOUDREAUX, BRANDON	9332 CANYON RD	CEDAR HILLS	UT	84062
146	BOWCUT, DON L & NORA G JT	1130 W STATE RD	PLEASANT GROVE	UT	84062
147	BOWEN, BRIAN D & JILL A JT	651 N 600 WEST	PLEASANT GROVE	UT	84062
148	BOWEN, RICHARD L & JANET M JT	715 W 2000 NORTH	PLEASANT GROVE	UT	84062
149	BOWER, GENE & MAY TEE	450 W CENTER ST	PLEASANT GROVE	UT	84062
150	BOWERS, CHARLES REX	1285 N 100 EAST	PLEASANT GROVE	UT	84062
151	BOWN, JAY ET AL	795 N 600 WEST	PLEASANT GROVE	UT	84062
152	BOX ELDER PROPERTIES LIMITED PARTNER	11038 HIGHLAND BLVD #100	HIGHLAND	UT	84003
153	BOX, PATRICK M & MARLENE JT	1835 N 820 WEST	PLEASANT GROVE	UT	84062
154	BOYD, GERALD	668 W 4000 NORTH	PLEASANT GROVE	UT	84062
155	BOYER, D ROY & LORRAINE S TEE	2622 CANYON RD	PLEASANT GROVE	UT	84062
156	BPW LLC	1801 GLORY CREEK DR	LAS VEGAS	NV	89128
157	BRADSHAW, KIETH (& DOROTHY A JT	4341 CANYON RD	PLEASANT GROVE	UT	84062
158	BRADSHAW, WARREN B & LE ORA E TEE	210 N PRESTON DR	ALPINE	UT	84004
159	BRAGONJE LLC	2480 S 3850 WEST #C	WEST VALLEY CITY	UT	84120
160	BRANCOLINO, MATIAS & ANGELICA	180 N 100 EAST	PLEASANT GROVE	UT	84062
161	BRANDT, DON ET AL	250 BEECHWOOD DR #120	BOISE	ID	83709
162	BRANDT, DON ET AL 30%INT	203 11TH AV SOUTH	NAMPA	ID	83651
163	BRANDT, WILLIAM J & MITZI JT	1594 W 1010 NORTH	PLEASANT GROVE	UT	84062
164	BRANIN, JAMES M & KATHY M JT	3473 N MAHOGANY DR	PLEASANT GROVE	UT	84062
165	BRATT, DEBRA	185 S STATE ST #1300	SALT LAKE CITY	UT	84111
166	BRATT, JON R & DEBRA R TEE	635 S 1300 WEST	PLEASANT GROVE	UT	84062
167	BRATT, LYNN M & ELIZABETH A JT	637 S 1300 WEST	PLEASANT GROVE	UT	84062
168	BRB ENTERPRISES LIMITED PARTNERSHIP	750 W PIONEER BLVD	MESQUITE	NV	89027
169	BRENNAN, DAVID S & CARMEN K JT	1951 TUSCANY WAY	PLEASANT GROVE	UT	84062
170	BRERETON, STERLING J & DIANE JT	205 N 100 EAST	PLEASANT GROVE	UT	84062
171	BRERETON, WESTON	10363 N 6680 WEST	HIGHLAND	UT	84003
172	BRIA, CAMERON S & JAIME L JT	364 E 300 SOUTH	PLEASANT GROVE	UT	84062
173	BRIMHALL, VINCE A & LORRIE A JT	1244 W 3040 NORTH	PLEASANT GROVE	UT	84062
174	BROCKBANK, ROGER R	4646 HIGHLAND DR	SALT LAKE CITY	UT	84117
175	BROMLEY, WILLIAM K & DIANA JT	1714 N 70 EAST	PLEASANT GROVE	UT	84062
176	BRONK, BRIAN	623 N 1300 WEST	PLEASANT GROVE	UT	84062
177	BROOKWOOD CONSTRUCTION & DESIGN INC	133 W 640 NORTH	AMERICAN FORK	UT	84003
178	BROWN, COLLEEN C TEE	9610 OLD ORCHARD LN	CEDAR HILLS	UT	84062
179	BROWN, ELISE M ET AL	81 N 1620 WEST	PLEASANT GROVE	UT	84062
180	BROWN, LARRY V & YVONNE K ET AL	930 W 1800 NORTH	PLEASANT GROVE	UT	84062
181	BROWNING, JENNIFER P & CORY R JT	2869 CANYON RD	PLEASANT GROVE	UT	84062
182	BRUNDAGE-BONE CONCRETE PUMPING INC	350 W 700 SOUTH	PLEASANT GROVE	UT	84062
183	BRYANT, PATRICIA	18583 JEFFERSON AV	CEDAR VALLEY	UT	84013
184	BRYANT, R JACOB & REBECCA JT	3686 N 900 WEST	PLEASANT GROVE	UT	84062
185	BUCKNER, CHAD W & MICKIE JT	3870 MOUNTAIN TOP CIR	CEDAR HILLS	UT	84062
186	BULLOCK, HAZEL H	1025 N 600 WEST	PLEASANT GROVE	UT	84062
187	BULLOCK, MARY T	159 S PLEASANT GROVE BLVD #15	PLEASANT GROVE	UT	84062
188	BULLOCK, W BRENT & CONNIE L JT	1419 N 100 EAST	PLEASANT GROVE	UT	84062
189	BURGENER, GERRY & DANA JT	1357 E 1000 SOUTH	PLEASANT GROVE	UT	84062
190	BURKETT, BRYANT & ELLEN JT	523 N 1300 WEST	PLEASANT GROVE	UT	84062

191	BURR, BRYAN ET AL TEE	210 N PRESTON DR	ALPINE	UT	84004
192	BURR, DANIEL S & KRISTEN D JT	9691 CHESTERFIELD DR	CEDAR HILLS	UT	84062
193	BURR, LOYE ANN	254 S 1100 EAST	AMERICAN FORK	UT	84003
194	BURT, FLORENCE M TEE	78 W 725 NORTH	LINDON	UT	84042
195	BURTT, KEVIN M	1251 E 1000 SOUTH	PLEASANT GROVE	UT	84062
196	BUSHMAN, GERALD L & PEGGY A TEE	990 E 900 SOUTH	PLEASANT GROVE	UT	84062
197	BYBEE, CHAD	145 S PROCTOR LA	PLEASANT GROVE	UT	84062
198	BYLUND PROPERTIES LLC	411 S 640 WEST	PLEASANT GROVE	UT	84062
199	CABIN LAND LLC	501 S MAIN ST	PLEASANT GROVE	UT	84062
200	CABINLAND LLC	1 E CENTER ST #321	PROVO	UT	84606
201	CAIN PROPERTIES LC	14829 GRANITE RIDGE LN	DRAPER	UT	84020
202	CALDWELL, ROGER B & JILL JT	680 W 2300 NORTH	PLEASANT GROVE	UT	84062
203	CALL, JAMES E & SANDRA L JT	706 W 2240 NORTH	PLEASANT GROVE	UT	84062
204	CALTON, GORDON H & KARI L JT	1309 W 2180 NORTH	PLEASANT GROVE	UT	84062
205	CAMPBELL, CLINT E & JENNIFER JT	236 E 1640 NORTH	PLEASANT GROVE	UT	84062
206	CAMPBELL, GARY J & LINDA B JT	73 S 850 EAST	PLEASANT GROVE	UT	84062
207	CAPITAL COMMUNITY BANCORPORATION INC	3280 N UNIVERSITY AV	PROVO	UT	84604
208	CARD, KAREN N & KENNETH JT	2899 CANYON RD	PLEASANT GROVE	UT	84062
209	CARLSON, JOSEPH W & CAROL E JT	1243 W 3040 NORTH	PLEASANT GROVE	UT	84062
210	CARR, CHAD C & ALISON M JT	1778 N 70 EAST	PLEASANT GROVE	UT	84062
211	CARSON, CLYDE W & THELMA B ET JT	1807 W 1100 NORTH	PLEASANT GROVE	UT	84062
212	CARSON, EVA D & DIANE ET AL	1625 N FREEDOM BLVD	PROVO	UT	84604
213	CARTER, CARL & MARSHA JT	1347 N 100 EAST	PLEASANT GROVE	UT	84062
214	CARTER, DENNIS L & DIANA M JT	9 E 700 SOUTH	PLEASANT GROVE	UT	84062
215	CARTER, ROBERT E & VANIECE M	205 S 1300 WEST	PLEASANT GROVE	UT	84062
216	CARTER, ROBERT E & VANIECE M JT	PO BOX 156	PLEASANT GROVE	UT	84062
217	CARTER, ROSEMARY & FRANCINE JT	681 W STATE RD	PLEASANT GROVE	UT	84062
218	CARTER, WESLEY E & MARLENE J JT	14 W 725 NORTH	LINDON	UT	84042
219	CASABAR, DAMON K & HOLLY JT	2932 N 1130 WEST	PLEASANT GROVE	UT	84062
220	CASSIS LAND COMPANY INC	372 WATERSIDE RD	HEBER CITY	UT	84032
221	CC INVESTMENTS LC	PO BOX 265	HEBER CITY	UT	84032
222	CENTENNIAL SQUARE LIMITED COMPANY	1148 NATHANIEL DR	PLEASANT GROVE	UT	84062
223	CENTRAL BANK	75 N UNIVERSITY AV	PROVO	UT	84601
224	CENTRAL BANK CUST	228 W 725 NORTH	LINDON	UT	84042
225	CHADWICK, GLEN D & VERNA P JT	814 E 3540 SOUTH CIR	SAINT GEORGE	UT	84790
226	CHAPMAN, STEVEN & LESLIE JT	695 W 2240 NORTH	PLEASANT GROVE	UT	84062
227	CHARLESWORTH, D MARK & LACEY S	2514 N 600 WEST	PLEASANT GROVE	UT	84062
228	CHASE, BRENT & PATRICIA JT	835 E 100 SOUTH	PLEASANT GROVE	UT	84062
229	CHAVAN, AMIT B ET AL	179 N 1630 WEST #72	PLEASANT GROVE	UT	84062
230	CHEIRASCO PROPERTIES LLC	125 E MAIN ST #611	AMERICAN FORK	UT	84003
231	CHITWOOD, RICHARD L ET AL	1442 E 1000 SOUTH	PLEASANT GROVE	UT	84062
232	CHOI, DONG S & KYUNG A JT	764 N 400 EAST	LINDON	UT	84042
233	CHORNIAK, JERRY T & JOAN A JT	500 S GENEVA RD	PLEASANT GROVE	UT	84062
234	CHRISTENSEN, AARON V & BROOKE JT	781 W 1500 NORTH	PLEASANT GROVE	UT	84062
235	CHRISTENSEN, BRYANT & DENNIS JT	1201 E 1220 NORTH	OREM	UT	84097
236	CHRISTENSEN, DANIEL D	1929 RIDGEHILL DR	BOUNTIFUL	UT	84010
237	CHRISTENSEN, EARL L	1199 W STATE RD	PLEASANT GROVE	UT	84062
238	CHRISTENSEN, EARL L	4512 W 8800 NORTH	AMERICAN FORK	UT	84003
239	CHRISTENSEN, NATHAN	1473 W 80 SOUTH	PLEASANT GROVE	UT	84062
240	CHRISTENSEN, NIEL C & ALICE W JT	470 N 745 EAST	PLEASANT GROVE	UT	84062
241	CHRISTENSEN, NORRIS A & CHERY 1/3INT	1602 W 1000 NORTH	PROVO	UT	84604
242	CHRISTENSEN, PETER D & DIANE JT	375 S MAIN ST #2	ALPINE	UT	84004
243	CHRISTENSEN, RONALD G & CHERY TEE	2373 N 600 WEST	PLEASANT GROVE	UT	84062
244	CHRISTENSEN, RONALD G & JAY D TIC	1199 W STATE RD	PLEASANT GROVE	UT	84062
245	CHRISTENSEN, ZOE J	699 E 990 SOUTH	PLEASANT GROVE	UT	84062
246	CHRISTIANSEN, BRIAN M & CHRIS JT	1785 N 270 WEST	PLEASANT GROVE	UT	84062
247	CHRISTIANSEN, TAMMY	2180 N 600 WEST	PLEASANT GROVE	UT	84062
248	CHRISTOPHERSON, JOSHUA K & RA JT	1258 W 2850 NORTH	PLEASANT GROVE	UT	84062
249	CHRISTOPHERSON, LYNN A & MELA JT	1320 W 1340 NORTH	PLEASANT GROVE	UT	84062
250	CHUN, WILLY ET AL	989 W 600 NORTH	PLEASANT GROVE	UT	84062
251	CHURCH, GEORGE D & DARLENE L TEE	678 E 900 SOUTH	PLEASANT GROVE	UT	84062
252	CHURCH, RAYMOND A & SHARON H JT	165 MAPLE LN	PLEASANT GROVE	UT	84062
253	CINDY & DANA LLC	875 E 400 NORTH	LINDON	UT	84042
254	CITYSIDE PROPERTIES LC	65 N 100 EAST	PLEASANT GROVE	UT	84062
255	CLARK, ELVIN ET AL DBA	448 W CENTER ST	PLEASANT GROVE	UT	84062

256	CLARK, JOHN W & ELIZABETH M TEE	55 E CENTER ST	PLEASANT GROVE	UT	84062
257	CLAUNCH, JON & CLAIRE JT	981 S 1150 EAST	PLEASANT GROVE	UT	84062
258	CLEGG, TRUDI ANN	240 N 100 EAST	PLEASANT GROVE	UT	84062
259	CLEMENT, KYLE & KATHLEEN B JT	1615 E MURDOCK DR	PLEASANT GROVE	UT	84062
260	CLINGER FAMILY PARTNERSHIP	1511 S GENEVA RD	OREM	UT	84058
261	CLINGO, LYNN E & DOROTHY TEE	9160 CANYON RD	CEDAR HILLS	UT	84062
262	CLOWARD, ROBERT G & KRISTA JT	1076 N 1700 WEST	PLEASANT GROVE	UT	84062
263	CLOWARD, RYAN B & EMILY R JT	1465 W 1800 NORTH	PLEASANT GROVE	UT	84062
264	CLUFF, TYLER F & FLORIS A JT	1985 TIMBERLINE RD	PACIFIC	MO	63069
265	COBABE, JOSHUA ET AL	986 W 270 SOUTH #301	PLEASANT GROVE	UT	84062
266	COBB, ROBERT L & SYLVIA F JT	1957 W 1100 NORTH	PLEASANT GROVE	UT	84062
267	COLEMAN, BECKY	261 S 930 WEST	PLEASANT GROVE	UT	84062
268	COLLEDGE, IVAN EUGENE ET AL	159 N 900 EAST	SPANISH FORK	UT	84660
269	COLLINGS, BRUCE E & SHIRLEY A ET AL	298 N 1000 EAST	OREM	UT	84097
270	COMMONWEALTH LAND TITLE INSURANCE CO	1200 6TH AV #1900	SEATTLE	WA	98101
271	COMPTON, AESALINA ET AL	128 HAVEN LN	IDAHO FALLS	ID	83404
272	CONTINENTAL PIPE MANUFACTURING CO	430 N 600 WEST	PLEASANT GROVE	UT	84062
273	COOK, CAMDEN M	95 S 930 EAST	AMERICAN FORK	UT	84003
274	COOK, JEFFREY D & STACEY JT	1169 N 1300 WEST	PLEASANT GROVE	UT	84062
275	COOK, JESSICA A ET AL	298 N 100 EAST	PLEASANT GROVE	UT	84062
276	COOK, KEVIN M & SUZANNE JT	383 S LOCUST AV	PLEASANT GROVE	UT	84062
277	COOK, WYATT D & LORI JT	PO BOX 728	DUCHESNE	UT	84021
278	COOLEY, SAM C	388 N 600 WEST	PLEASANT GROVE	UT	84062
279	CORDNER, DAWAYNE & LINDA J JT	2761 CANYON RD	PLEASANT GROVE	UT	84062
280	CORP OF PRES BISHOP CHURCH OF JESUS	50 E NORTH TEMPLE 12TH FLOOR	SALT LAKE CITY	UT	84150
281	COUCH, ROBERT BRINTON ET AL	394 E 300 SOUTH	PLEASANT GROVE	UT	84062
282	COUNTY LIVING DEVELOPMENT ET AL	1045 E 200 NORTH	PLEASANT GROVE	UT	84062
283	COWAN, LISA & SAMUEL R JT	1633 N 150 EAST	PLEASANT GROVE	UT	84062
284	COWGILL, JUNE D	1070 N 100 EAST	PLEASANT GROVE	UT	84062
285	COX, LEWIS K & SARA S JT	184 E STATE RD	PLEASANT GROVE	UT	84062
286	CRANDALL, AARON	989 SENIOR BAND RD	DRAPER	UT	84020
287	CREEKSIDE HOMEOWNERS ASSOCIATION	PO BOX 476	OREM	UT	84059
288	CREST HOLDINGS L.C.	49 W 7720 SOUTH	MIDVALE	UT	84047
289	CROOKSTON, BETTY JEAN ET AL	830 N 600 WEST	PLEASANT GROVE	UT	84062
290	CROW, JEFFERY O & CASSIE R	2763 N 1450 WEST	PLEASANT GROVE	UT	84062
291	CULLIMORE, SANDRA V TEE	291 S 100 EAST	PLEASANT GROVE	UT	84062
292	CULLIMORE, SANDRA VERNEE	253 S 100 EAST	PLEASANT GROVE	UT	84062
293	CUMMINGS & CUMMINGS LLC	935 N 400 EAST	PLEASANT GROVE	UT	84062
294	CUMMINGS, ROBERT S & LORRI K JT	148 S 1140 EAST	LINDON	UT	84042
295	D & S DEVELOPMENT 1 LLC	10568 N 5900 WEST	HIGHLAND	UT	84003
296	DALE WARBURTON AND MARILYN WA AN INT	795 E 350 NORTH	PLEASANT GROVE	UT	84062
297	DALEY, REX H & SHARON L TEE	463 E CENTER ST	LINDON	UT	84042
298	DALLIN, PAUL ET AL	245 E 100 NORTH	OREM	UT	84057
299	DALTON, ORAL T TEE	1040 N 60 EAST	AMERICAN FORK	UT	84003
300	DANA POINT LLC	7611 JORDAN LANDING BLVD	WEST JORDAN	UT	84084
301	DANIEL, GERRY G & SHERRY S JT	1523 W 80 SOUTH	PLEASANT GROVE	UT	84062
302	DANIELS, MICHAEL & BRENDA ET AN INT	743 N HILL AV	PASADENA	CA	91104
303	DANIELS, STEVE	8813 S REDWOOD RD #C-2	WEST JORDAN	UT	84088
304	DANKLEF, JAMES A & JUDY A JT	705 N 100 EAST	PLEASANT GROVE	UT	84062
305	DAVENPORT, KRISTEN	576 W 1420 NORTH	PLEASANT GROVE	UT	84062
306	DAVIDGE, RUDOLPH	2424 CANYON RD	PLEASANT GROVE	UT	84062
307	DAVIS, AARON S & MESHA M JT	28 W 1800 NORTH	PLEASANT GROVE	UT	84062
308	DAVIS, CONNIE S TEE	1036 W 2600 NORTH	PLEASANT GROVE	UT	84062
309	DAVIS, GAYLE N & LORRAINE S	1289 N 1300 WEST	PLEASANT GROVE	UT	84062
310	DAVIS, JIM ET AL 1/2INT	2296 N 180 WEST	PLEASANT GROVE	UT	84062
311	DAVIS, MARK	758 S 400 EAST	OREM	UT	84097
312	DAVIS, RONALD L & SUZETTE B JT	2873 N 900 WEST	PLEASANT GROVE	UT	84062
313	DAVIS, SHIRL B TEE	1342 E 1000 SOUTH	PLEASANT GROVE	UT	84062
314	DAVIS, TONI KAY	483 N 1300 WEST	PLEASANT GROVE	UT	84062
315	DAY, DONALD E & ELLA R JT	1472 RENAISSANCE PL	PLEASANT GROVE	UT	84062
316	DAY, LEONA WOOTEN	1422 N 230 WEST	OREM	UT	84057
317	DBT PROPERTIES L C	PO BOX 746	PLEASANT GROVE	UT	84062
318	DBT PROPERTIES LC	501 S MAIN ST	PLEASANT GROVE	UT	84062
319	DCW PROPERTIES LLC	322 S 700 WEST	PLEASANT GROVE	UT	84062
320	DE GROFF, ROSS D & MARY K JT	799 N 400 WEST	LINDON	UT	84042

321	DE ROEST, LAWRENCE M & EDNA P JT	2356 N 1300 WEST	PLEASANT GROVE	UT	84062
322	DE VINCENT DEVELOPMENT LLC	1121 E 580 NORTH CIR	AMERICAN FORK	UT	84003
323	DEEGAN, DAVID A & SUSAN K JT	255 S 930 WEST	PLEASANT GROVE	UT	84062
324	DEEGAN, JACOB C	792 N 350 WEST	LINDON	UT	84042
325	DEEP CREEK PROPERTIES INCORPORATED	1084 E PACIFIC DR	AMERICAN FORK	UT	84003
326	DEMILLE, STEVEN D & LYNDA D JT	918 N 1420 WEST	PLEASANT GROVE	UT	84062
327	DENBOER, TYLER D & ALLISON JT	511 N 1300 WEST	PLEASANT GROVE	UT	84062
328	DENTON, MARYLYN S	778 N 40 EAST	LINDON	UT	84042
329	DEWITT, BRENT & MICHELLE JT	7005 WOLF RUN SHOALS RD	FAIRFAX STATION	VA	22039
330	DIMOND, DAVID H & JUDY W JT	9486 N 4000 WEST	CEDAR HILLS	UT	84062
331	DINEHART, JORDAN & LAURENE JT	293 E 1640 NORTH	PLEASANT GROVE	UT	84062
332	DIXON, TIMMOTHY H & MELISSA JT	948 E MURDOCK DR	PLEASANT GROVE	UT	84062
333	DMA 459 LLC	3658 N RANCHO DR	LAS VEGAS	NV	89130
334	DMB INVESTMENT LLC	250 BEECHWOOD DR #120	BOISE	ID	83709
335	DOERSCHLER, CAM R & DONNIE L JT	10 MOHAWK AV	CORTE MADERA	CA	94925
336	DOYLE, NYLE & COLEEN TEE	1225 W 2600 NORTH	PLEASANT GROVE	UT	84062
337	DOYLE, PAUL D & MARY A ET AL	879 E 200 SOUTH	PLEASANT GROVE	UT	84062
338	DRAKE, DENNIS H & PHYLLIS M JT	1250 N 1300 WEST	PLEASANT GROVE	UT	84062
339	DRANEY, CYRIL L & JEAN M	3132 CANYON RD	PLEASANT GROVE	UT	84062
340	DRYER, RYAN S & MINDY H JT	412 E 420 SOUTH	PLEASANT GROVE	UT	84062
341	DU PREEZ, ANTHONY J	321 W 2660 NORTH	LEHI	UT	84043
342	DUCKETT, DUSTIN & ARIANNE JT	758 S 400 EAST	OREM	UT	84097
343	DUJARDIN, DANA	9456 CANYON HEIGHTS DR	CEDAR HILLS	UT	84062
344	DUNCAN, ROSETTA M TEE	1173 E 1000 SOUTH	PLEASANT GROVE	UT	84062
345	DUNN, ERIC P & KIMBERLY JT	1116 W 3540 NORTH	PLEASANT GROVE	UT	84062
346	DURRANT, MICHAEL J	45 SMITH LN	PLEASANT GROVE	UT	84062
347	EAST TEMPLE VIEW LLC	607 CAMDEN PARK LN	DRAPER	UT	84020
348	EBS PROPERTIES L.C.	65 N 100 EAST	PLEASANT GROVE	UT	84062
349	EDMONDS, RONALD D & DEBRA A JT	562 GLENDON WAY	PLEASANT GROVE	UT	84062
350	EDVALSON, BETH SMITH TEE	975 N 600 WEST	PLEASANT GROVE	UT	84062
351	EDWARDS, JOSH & KRISTY JT	769 E 200 SOUTH	PLEASANT GROVE	UT	84062
352	EDWARDS, WILLIAM F & CHERYL W JT	522 W 2900 NORTH	PLEASANT GROVE	UT	84062
353	EGBERT, DENNIS W & MARGARET B JT	3365 N MAHOGANY DR	PLEASANT GROVE	UT	84062
354	EKINS, STANFORD R & EVETTA F TIC	9430 CANYON RD	PLEASANT GROVE	UT	84062
355	ELDRIDGE, MARILYN L	389 W 800 NORTH	LINDON	UT	84042
356	ELGUETA, JEORGE A ET AL	587 E 1000 SOUTH	PLEASANT GROVE	UT	84062
357	ELK RIDGE DEVELOPMENT INC	7847 PHEASANT WOOD DR	SANDY	UT	84093
358	ELLIOTT, MURIEL M	3881 W 9600 NORTH	PLEASANT GROVE	UT	84062
359	ELLIS, PRESTON C & LYNETTE JT	1411 W 2010 NORTH	PLEASANT GROVE	UT	84062
360	ELLISON, NATHAN & BRIANNE JT	1703 W 1060 NORTH	PLEASANT GROVE	UT	84062
361	ENOCH, JOSH C & NICHOLE JT	1497 W 80 SOUTH	PLEASANT GROVE	UT	84062
362	ERICKSEN, ALLEN CLEMENTS	675 S 50 WEST	PLEASANT GROVE	UT	84062
363	ESCALANTE, ADRIAN	1475 E MURDOCK DR	PLEASANT GROVE	UT	84062
364	EVANS, CLARK B & SUSANN S JT	128 N 200 EAST	OREM	UT	84057
365	EVANS, CLARK B & SUSANN S ET TEE	752 N LOCUST AV	PLEASANT GROVE	UT	84062
366	EVANS, KEITH C & CLARK B ET A TEE	702 E 990 SOUTH	PLEASANT GROVE	UT	84062
367	EVANS, MATTHEW	175 N 1630 WEST	PLEASANT GROVE	UT	84062
368	EVERINGHAM, BRUCE & LAURA JT	1403 E 1000 SOUTH	PLEASANT GROVE	UT	84062
369	EWELL, AARON K & ANISA A JT	1685 W 1100 NORTH	PLEASANT GROVE	UT	84062
370	EWELL, MERRILL R & ALTA H TEE	1475 W 1100 NORTH	PLEASANT GROVE	UT	84062
371	FAMILY FIRST FEDERAL CREDIT UNION	175 E 200 SOUTH	OREM	UT	84058
372	FARNSWORTH, W DAVID & SHAWNA JT	1905 N 600 WEST	PLEASANT GROVE	UT	84062
373	FAUX, CRAIG & SUSAN K JT	680 W 1800 NORTH	PLEASANT GROVE	UT	84062
374	FAUX, DAVID M & DORA C TEE	676 E 900 SOUTH	PLEASANT GROVE	UT	84062
375	FENTON, BOYD D & SHELLEY W JT	1914 N 1300 WEST	PLEASANT GROVE	UT	84062
376	FERRIS, KENNETH R & SUSAN JT	1205 N 1300 WEST	PLEASANT GROVE	UT	84062
377	FIDELITY FUNDING COMPANY	53 W ANGELO AV	SALT LAKE CITY	UT	84115
378	FINCH, TERI L	682 E 900 SOUTH	PLEASANT GROVE	UT	84062
379	FINLAYSON, MERRILL P & GENEAL JT	1044 N 1300 WEST	PLEASANT GROVE	UT	84062
380	FIRMAGE GROVE LC	4700 S STATE ST	SALT LAKE CITY	UT	84107
381	FLADELAND, MARLYS M	PO BOX 806	PLEASANT GROVE	UT	84062
382	FLAKE, NANCY J	1783 W 1100 NORTH	PLEASANT GROVE	UT	84062
383	FLANARY, SHAWN R & SHERYL A JT	2774 N 100 EAST	PLEASANT GROVE	UT	84062
384	FLATT, CATHLEEN M & MARVIN A TEE	1100 E 40 NORTH	OREM	UT	84097
385	FLINDERS, DAVID W & LISA L JT	482 W 3300 NORTH	PLEASANT GROVE	UT	84062

386	FLINDERS, NEIL J & JOAN D TEE	4326 N 900 WEST	PLEASANT GROVE	UT	84062
387	FOOTE, ELWOOD E & NELDA I ET TEE	1067 W 1800 NORTH	PLEASANT GROVE	UT	84062
388	FORDHAM, TODD C & LORI JT	815 N 600 WEST	PLEASANT GROVE	UT	84062
389	FOUNDATIONS INSURANCE INC	63 E STATE RD	PLEASANT GROVE	UT	84062
390	FOWLER, RICKIE J & CLAUDETTE JT	1068 W 1800 NORTH	PLEASANT GROVE	UT	84062
391	FOWLES, BARBARA N TEE	442 N 600 EAST	PLEASANT GROVE	UT	84062
392	FOX, KYLE C	576 W 2600 NORTH	PLEASANT GROVE	UT	84062
393	FOX, WADE & KAYLEE JT	3905 N 900 WEST	PLEASANT GROVE	UT	84062
394	FRAME, SUSAN & CRAIG JT	2551 N 860 WEST	PLEASANT GROVE	UT	84062
395	FRANDSEN, STEVEN R	370 W 900 NORTH	PLEASANT GROVE	UT	84062
396	FRANK, LOUIS J & DONNA J JT	PO BOX 991	PLEASANT GROVE	UT	84062
397	FRATERNAL ORDER OF EAGLES PL GR ARIE	220 N 600 WEST	PLEASANT GROVE	UT	84062
398	FREE FAMILY LIMITED PARTNERSHIP	28 N 100 EAST	PLEASANT GROVE	UT	84062
399	FREE, W DUANE	2316 N 600 WEST	PLEASANT GROVE	UT	84062
400	FREEBIRD GROUP INVESTMENTS L C	1121 GROVE CREEK DR	PLEASANT GROVE	UT	84062
401	FREEMAN, JOHN J & ANITA JT	855 W 1800 NORTH	PLEASANT GROVE	UT	84062
402	FREEMAN, LESTER R & NEVA TEE	801 W 1800 NORTH	PLEASANT GROVE	UT	84062
403	FREEMAN, MATTHEW C	1287 W 50 NORTH	PLEASANT GROVE	UT	84062
404	FREEMAN, SAMUEL R & JOLENE JT	829 W 1800 NORTH	PLEASANT GROVE	UT	84062
405	FRISBEE, JEANE L & GERALD	246 S 100 EAST	PLEASANT GROVE	UT	84062
406	FRYER, BRAD	2702 N 900 WEST	PLEASANT GROVE	UT	84062
407	FRYER, KENNETH L & JOAN H ET TEE	624 E 500 NORTH	OREM	UT	84097
408	FUGAL, GUY L & PAULA G	590 W 1100 NORTH	PLEASANT GROVE	UT	84062
409	FUGAL, JOHN P & JENS P TEE	390 N MAIN ST	LINDON	UT	84042
410	FUGAL, JOSEPH M & JOAN V JT	1373 N 100 EAST	PLEASANT GROVE	UT	84062
411	FULLMER, JAMES ET AL	1590 N 300 WEST	PROVO	UT	84602
412	G & G INVESTMENTS L.C.	5451 W 10180 NORTH	HIGHLAND	UT	84003
413	GAGON, JOSEPH A ET AL	1580 E MURDOCK DR	PLEASANT GROVE	UT	84062
414	GARCIA, ROGELIO & ANA M JT	9788 CANYON RD	PLEASANT GROVE	UT	84062
415	GARDBROS LLC	2836 EDGEMONT DR	HENDERSON	NV	89074
416	GARFIELD, JEFFREY	4251 CANYON RD	PLEASANT GROVE	UT	84062
417	GARN, CLARK W & JANET H JT	407 N STATE ST	MORGAN	UT	84050
418	GARNER, GARY M & SHERYL L JT	1594 W 3300 NORTH	PLEASANT GROVE	UT	84062
419	GARNER, LAVAL F & ROSE P JT	984 S 1320 EAST	PLEASANT GROVE	UT	84062
420	GATEWAY FARMS PLEASANT GROVE LLC	1067 W JERLING	HIGHLAND	UT	84003
421	GDJ PROPERTIES LLC	754 W 700 SOUTH	PLEASANT GROVE	UT	84062
422	GENERAL CONSTRUCTION AND DEVELOPMENT	1642 W 10 SOUTH	PLEASANT GROVE	UT	84062
423	GENERAL CONSTRUCTION AND DEVELOPMENT	3214 N UNIVERSITY AV #605	PROVO	UT	84604
424	GENERAL CONSTRUCTION AND DEVELOPMENT	1646 W 10 SOUTH	PLEASANT GROVE	UT	84062
425	GENERAL CONSTRUCTION AND DEVELOPMENT	1634 W 10 SOUTH	PLEASANT GROVE	UT	84062
426	GIBB, DAVID R & DIAN JT	338 W 2600 NORTH	PLEASANT GROVE	UT	84062
427	GIBBY, ERIC A & NATALIE M JT	916 W 260 SOUTH	PLEASANT GROVE	UT	84062
428	GIBSON, TIMOTHY A & ANNETTE L JT	970 N 100 EAST	PLEASANT GROVE	UT	84062
429	GIFFORD, BRENN K & ZULY C JT	649 E 1000 SOUTH	PLEASANT GROVE	UT	84062
430	GIFFORD, CAROL LYN	747 W 1920 NORTH	PLEASANT GROVE	UT	84062
431	GIFFORD, DAVID O	600 PONDEROSA DR	ALPINE	UT	84004
432	GIFFORD, N PAUL	366 S BENCH RD	ALPINE	UT	84004
433	GILES, VERNON	903 E ROUTE 66 #D	GLENDORA	CA	91740
434	GILLMAN, JULIE A	468 W 2600 NORTH	PLEASANT GROVE	UT	84062
435	GIRARD, NANCY S	725 W 4430 NORTH	PLEASANT GROVE	UT	84062
436	GIRARD, NORMA F ET AL	790 N 400 WEST	LINDON	UT	84042
437	GLOBAL COATINGS INC	PO BOX 338	PLEASANT GROVE	UT	84062
438	GODFREY, GARY J & MARY F JT	1180 N 1300 WEST	PLEASANT GROVE	UT	84062
439	GONZALES, RONALD F & EILEEN W JT	410 N 800 EAST	PLEASANT GROVE	UT	84062
440	GOODMAN, JOHN M & VICKI C JT	500 E 200 SOUTH	PLEASANT GROVE	UT	84062
441	GOODMAN, JOLYNNE & MARK	1750 N 100 EAST	PLEASANT GROVE	UT	84062
442	GOODRICH, ERIC & HEIDI JT	9314 CANYON RD	CEDAR HILLS	UT	84062
443	GOODWILL, JOHN & SUSAN	79 N 1620 WEST	PLEASANT GROVE	UT	84062
444	GOODWIN, BRUCE L & VERA C JT	107 S 1300 WEST	PLEASANT GROVE	UT	84062
445	GORDON, KEN D & LINDA E JT	4026 CENTENNIAL	CEDAR HILLS	UT	84062
446	GOTCHER, DAVID M & AMY M JT	2007 TUSCANY WAY	PLEASANT GROVE	UT	84062
447	GRAHAM, W F & EULA B	1375 W 1100 NORTH	PLEASANT GROVE	UT	84062
448	GRAN CAMPBELL ENTERPRISES LLC ET AL	87 W 560 SOUTH	OREM	UT	84058
449	GRANTHAM, JERRY K & STACI L JT	1347 N MANILA CT	PLEASANT GROVE	UT	84062
450	GREBE, VICKI D & BRANDON ET AL	2146 N 1300 WEST	PLEASANT GROVE	UT	84062

451	GREEN GROVE APARTMENTS LIMITED PARTN	1127 GROVE CREEK DR	PLEASANT GROVE	UT	84062
452	GREEN, KENDALL T & MARJORIE JT	1560 E MURDOCK DR	PLEASANT GROVE	UT	84062
453	GREENFIELD INVESTMENTS LC	PO BOX 1239	OREM	UT	84059
454	GRIFFITH, LANE F ET AL	424 N 2000 WEST	PLEASANT GROVE	UT	84062
455	GROVE BUSINESS CENTER I LLC	845 OAK GROVE AV #210	FARMINGTON	UT	84025
456	GROVER, DANIEL R & JENNI L JT	1484 E 1000 SOUTH	PLEASANT GROVE	UT	84062
457	GUERNSEY, MILDRED B TEE	840 GROVE CREEK DR	PLEASANT GROVE	UT	84062
458	HACIENDA PROPERTIES LIMITED PARTNERS	PO BOX 6629	ORANGE	CA	92863
459	HACK, RONALD L & GINGER TEE	465 E 1000 SOUTH	PLEASANT GROVE	UT	84062
460	HADERLIE, BRETT F & BELINDA	8319 E PORTOBELLO AV	MESA	AZ	85212
461	HAILSTONE, MATTHEW D & HEIDI JT	1023 W 500 NORTH	PLEASANT GROVE	UT	84062
462	HAIR, DALE & MARY TEE	205 E STATE RD	PLEASANT GROVE	UT	84062
463	HAIR, DALE W & MARY W TEE	524 N 950 EAST	OREM	UT	84097
464	HALDIMAN, JEFFREY M & DIANE L JT	490 N 100 EAST	PLEASANT GROVE	UT	84062
465	HALECK, JARED C & EMILY JT	1529 W 80 SOUTH	PLEASANT GROVE	UT	84062
466	HALES, EDWARD	79 E 700 SOUTH	PLEASANT GROVE	UT	84062
467	HALL, JOEL S & JOYCE A JT	1176 W 2100 NORTH	PLEASANT GROVE	UT	84062
468	HALL, MACK R & LESLIE B JT	1990 N 1300 WEST	PLEASANT GROVE	UT	84062
469	HALL, PHILLIP M & MARY-JO JT	4407 CANYON RD	PLEASANT GROVE	UT	84062
470	HALL, ROBERT & JOYCE JT	7575 N 4650 WEST	PLEASANT GROVE	UT	84062
471	HALL, ROBYN VEE	1843 N 1300 WEST	PLEASANT GROVE	UT	84062
472	HALLAM, GEORGE W & SHARON F JT	PO BOX 746	PLEASANT GROVE	UT	84062
473	HALLIDAY, MELVIN & LINDA	122 N 500 WEST #48-1	BLANDING	UT	84511
474	HAMMOND, CLARK & SHAWNA JT	1587 W 1010 NORTH	PLEASANT GROVE	UT	84062
475	HAMMOND, GAIL C & IDA J TEE	1879 W 1100 NORTH	PLEASANT GROVE	UT	84062
476	HAMMOND, VICTOR W & LAURA A TEE	140 S 950 EAST	PLEASANT GROVE	UT	84062
477	HANKS, DONALD S & DEBRA L TEE	3618 N 900 WEST	PLEASANT GROVE	UT	84062
478	HANSEN, HOLDEN SHANE ET AL	1035 QUEENS DR	AMERICAN FORK	UT	84003
479	HANSEN, JOHN L & SANDRA S TEE	540 S MAIN ST	PLEASANT GROVE	UT	84062
480	HANSEN, JOHN L & SANDRA S TEE	1035 QUEENS DR	AMERICAN FORK	UT	84003
481	HANSEN, KENT J & ROBIN JT	1920 N 750 WEST	PLEASANT GROVE	UT	84062
482	HANSEN, KEVIN S & JULIE D JT	1765 GARDEN DR	PLEASANT GROVE	UT	84062
483	HANSEN, RICHARD G & SYLVIA S JT	1045 N 1300 WEST	PLEASANT GROVE	UT	84062
484	HANSON, STANLEY C TEE	PO BOX 564	PLEASANT GROVE	UT	84062
485	HARDMAN, DOUGLAS L & MARIE S JT	1791 N 1200 WEST	PLEASANT GROVE	UT	84062
486	HARDMAN, GARY R & BONNIE K JT	4278 CANYON RD	PLEASANT GROVE	UT	84062
487	HARMAN, LEON W TEE	199 1ST ST #212	LOS ALTOS	CA	94022
488	HARMER, APRIL L H	1380 W 1800 NORTH	PLEASANT GROVE	UT	84062
489	HARR JOHN P SENIOR PROPERTIES L.C.	590 W STATE RD	PLEASANT GROVE	UT	84062
490	HARRIS, M ADAM & ANGELA JT	1832 N 900 WEST	PLEASANT GROVE	UT	84062
491	HARRIS, NATALIE B	32 W 725 NORTH	LINDON	UT	84042
492	HARRIS, R CARL & MELANIE F JT	2046 N 1300 WEST	PLEASANT GROVE	UT	84062
493	HARSHBERGER, TAMARA	159 S PLEASANT GROVE BLVD #14	PLEASANT GROVE	UT	84062
494	HART, DAVID K & LARAYNE W JT	2520 CANYON RD	PLEASANT GROVE	UT	84062
495	HARTLEY, MELISSA S	220 N 100 EAST	PLEASANT GROVE	UT	84062
496	HARVEY LAND COMPANY	9610 WINCHESTER DR	CEDAR HILLS	UT	84062
497	HARVEY, DAVID C & DIXIE R TEE	2806 N 1450 WEST	PLEASANT GROVE	UT	84062
498	HARVEY, DONALD L & HERMINE R TEE	688 E 600 NORTH	PROVO	UT	84606
499	HARVEY, JEFFREY CHRISTOPHER	3331 N 1456 WEST	PLEASANT GROVE	UT	84062
500	HARVEY, SHIANN & JAYSON	1767 GARDEN DR	PLEASANT GROVE	UT	84062
501	HARVEY, STANLEY D & JODI ET A TEE	1244 N 200 WEST	PLEASANT GROVE	UT	84062
502	HARVIE, CHAD	952 W 270 SOUTH #302	PLEASANT GROVE	UT	84062
503	HASLER, HOLLY P & BLAIR JT	1092 N 1300 WEST	PLEASANT GROVE	UT	84062
504	HATCH, JERALD T & SHAUNA N JT	85 S 300 WEST	LINDON	UT	84042
505	HAYES, JANETH & RICHARD JT	1663 W 1060 NORTH	PLEASANT GROVE	UT	84062
506	HAYMOND, BRYCE M & RAVEN V TEE	929 W 670 SOUTH #9	PLEASANT GROVE	UT	84062
507	HAYNIE, CORRINE L	555 N 600 WEST	PLEASANT GROVE	UT	84062
508	HEADMAN, CHARLES L & DIANNE C JT	4628 CANYON RD	PLEASANT GROVE	UT	84062
509	HEALY, JON W & NAN T TEE	1275 MURDOCK DR	AMERICAN FORK	UT	84003
510	HEATON, MICHAEL & ERIN JT	210 N 100 EAST	PLEASANT GROVE	UT	84062
511	HEBBERT, FRANK M & NAOMI P TEE	1224 W 1800 NORTH	PLEASANT GROVE	UT	84062
512	HEINER, KEVIN & GENAE JT	PO BOX 400	PLEASANT GROVE	UT	84062
513	HEINER, KEVIN M & GENAE D JT	2325 N 1300 WEST	PLEASANT GROVE	UT	84062
514	HEINZ E AND IRMGARD S GERSTLE LLC	PO BOX 165	MILLBRAE	CA	94030
515	HEINZ, TIMOTHY D & CARLYN N JT	952 W 270 SOUTH #301	PLEASANT GROVE	UT	84062

516	HEMMERT, JAMES C	PO BOX 1311	PROVO	UT	84603
517	HENDERSON, GARY D & KATHRYN A JT	129 S 950 EAST	PLEASANT GROVE	UT	84062
518	HENDRICKS, ERIN	935 S OREM BLVD	OREM	UT	84058
519	HENDRICKSON, WILLIAM R & DEBR JT	231 E 200 NORTH	PROVO	UT	84606
520	HENRICHSEN, CAROL A TEE	812 E 200 SOUTH	PLEASANT GROVE	UT	84062
521	HENRY, DARRIN T & JOY L JT	86 S 800 EAST	PLEASANT GROVE	UT	84062
522	HEP DEVELOPMENT LLC	4366 W SAM WHITE LA	PLEASANT GROVE	UT	84062
523	HEP DEVELOPMENT LLC ET AL	6795 S 300 WEST	MIDVALE	UT	84047
524	HEPWORTH, LISA	652 W 2705 #330	PLEASANT GROVE	UT	84062
525	HERZOG, JOHN M & KRYSTAL J JT	1317 W 600 NORTH	PLEASANT GROVE	UT	84062
526	HESS, MYRNA & DOYLE G TEE	PO BOX 2710	WENDOVER	NV	89883
527	HEWETT, JONATHAN	9895 CANYON RD	PLEASANT GROVE	UT	84062
528	HEWETT, JONATHAN & EVE JT	9875 CANYON RD	CEDAR HILLS	UT	84062
529	HIATT, JOHN S & CYNTHIA N JT	1435 E 1000 SOUTH	PLEASANT GROVE	UT	84062
530	HICKS, CORAL V	1030 N 600 WEST	PLEASANT GROVE	UT	84062
531	HILTON, AARON D & DESERY S JT	1405 W 1800 NORTH	PLEASANT GROVE	UT	84062
532	HILTON, BRANDON & DEBORAH JT	1105 W 3540 NORTH	PLEASANT GROVE	UT	84062
533	HILTON, KELLEN A	1396 N 500 EAST	PLEASANT GROVE	UT	84062
534	HINOJOS, SYLVIA G	810 N 600 WEST	PLEASANT GROVE	UT	84062
535	HMC INVESTMENT CORPORATION	551 E STATE RD #101	AMERICAN FORK	UT	84003
536	HOKI, MURRAY M & MARTHA F JT	1609 N 900 WEST	PLEASANT GROVE	UT	84062
537	HOLMAN, A WAYNE & STELLA G ET AL	6043 W 9740 NORTH	HIGHLAND	UT	84003
538	HOLMAN, MICHAEL W & GAY C JT	1111 W 1800 NORTH	PLEASANT GROVE	UT	84062
539	HOLMES, NATHAN	905 N 100 EAST	PLEASANT GROVE	UT	84062
540	HOLMSTEAD, HAL E & KATHRYN S TEE	1070 E 700 NORTH	AMERICAN FORK	UT	84003
541	HOLMSTEAD, JAY R & SONDRA JT	405 N 600 WEST	PLEASANT GROVE	UT	84062
542	HOLMSTEAD, ROBB L & KATHRYN M JT	2155 N 600 WEST	PLEASANT GROVE	UT	84062
543	HOMER, RAYMOND W & OLGA J TEE	408 N 700 EAST	PLEASANT GROVE	UT	84062
544	HOMETOWN PROFESSIONALS LC	330 S MAIN ST	PLEASANT GROVE	UT	84062
545	HONE, CAMILLE	856 W 260 SOUTH	PLEASANT GROVE	UT	84062
546	HONE, DENISE	1467 E 1000 SOUTH	PLEASANT GROVE	UT	84062
547	HONE, LLOYD W TEE	319 E STATE RD	PLEASANT GROVE	UT	84062
548	HORELICA, SHAWN L & JENNIFER JT	1921 N 600 WEST	PLEASANT GROVE	UT	84062
549	HORMAN, CHARLES H ET AL TEE	3125 S WHITEWATER DR	SALT LAKE CITY	UT	84117
550	HORTON, TODD W & MARDICA JT	376 N 300 WEST	AMERICAN FORK	UT	84003
551	HORTT, MARTIN A & DEBRA M JT	933 N 1420 WEST	PLEASANT GROVE	UT	84062
552	HOUSTON, DANNY L & GAYLE L TEE	84 S 1100 EAST	AMERICAN FORK	UT	84003
553	HOUSTON, VAN L & JANEAN JT	106 S 1100 EAST	AMERICAN FORK	UT	84003
554	HOWARD, DON & RAMONA JT	980 N 600 WEST	PLEASANT GROVE	UT	84062
555	HOWARD, KENNETH S & KIMBERLI JT	1319 W 870 NORTH	PLEASANT GROVE	UT	84062
556	HUFF, DENNIS E	890 N 100 EAST	PLEASANT GROVE	UT	84062
557	HUFF, MARYLYN G ET AL	4252 STRATUS ST	SALT LAKE CITY	UT	84118
558	HULLINGER, DENNIS J & MARIETT JT	637 W 4000 NORTH	PLEASANT GROVE	UT	84062
559	HUMPHERYS, KRISTEN	1369 E 1000 SOUTH	PLEASANT GROVE	UT	84062
560	HUNDEGGER PROPERTIES LC	9271 N 2683 EAST ALPINE LOOP	PROVO	UT	84604
561	HUNSAKER, JESSE L & LISA JT	1364 E 1000 SOUTH	PLEASANT GROVE	UT	84062
562	HUNT, DEBRA H TEE	2252 N 1300 WEST	PLEASANT GROVE	UT	84062
563	HUNT, JEFFREY D & JENNIFER D JT	1548 N 150 EAST	PLEASANT GROVE	UT	84062
564	HUNTSMAN, BLAINE H & JOYCE N JT	2390 N 100 EAST	PLEASANT GROVE	UT	84062
565	HUNTSMAN, NORAH TEE	2498 N 1300 WEST	PLEASANT GROVE	UT	84062
566	IRWIN, BRIAN F & ANNE K JT	1428 E 1000 SOUTH	PLEASANT GROVE	UT	84062
567	IVIE, DEANNA R TEE	4596 CANYON RD	PLEASANT GROVE	UT	84062
568	IVIE, JOSEPH M & JILL L JT	870 N 100 EAST	PLEASANT GROVE	UT	84062
569	IVORY DEVELOPMENT LLC	978 WOODOAK LN	SALT LAKE CITY	UT	84117
570	IVORY HOMES LTD	970 WOODOAK LN	SALT LAKE CITY	UT	84117
571	JA OGDEN INC	285 S PINEVIEW DR	ALPINE	UT	84004
572	JACKSON, CLINTON R & RUTH C	632 W 2600 NORTH	PLEASANT GROVE	UT	84062
573	JACKSON, JEFFERY J & PATTI S JT	664 W 2600 NORTH	PLEASANT GROVE	UT	84062
574	JACOBS, JERALD	10010 N 4800 WEST	AMERICAN FORK	UT	84003
575	JAKEMAN, JOHN K & DUELLA O ET TEE	901 N 1300 WEST	PLEASANT GROVE	UT	84062
576	JALS #2 LLC	8070 S 3528 WEST	WEST JORDAN	UT	84088
577	JAMES, LANCE & KIMBERLY JT	622 N 100 EAST	PLEASANT GROVE	UT	84062
578	JAMISON, BARRETT T & MOLLY A JT	511 MOUNTAIN CREST RD	DUARTE	CA	91010
579	JARRETT, MARK D & TERESA D JT	970 S 500 EAST	PLEASANT GROVE	UT	84062
580	JARVIS, MARK G	166 S 60 WEST	OREM	UT	84058

581	JD STEEL CO INC	PO BOX 18009	PHOENIX	AZ	85005
582	JDC DESIGN LLC	1024 N 600 WEST	PLEASANT GROVE	UT	84062
583	JEFFERY, DUANE E & KAYE W JT	715 E 875 NORTH	AMERICAN FORK	UT	84003
584	JENKINS, ERYN C & BRADLEY G JT	95 S 850 EAST	PLEASANT GROVE	UT	84062
585	JENSEN, LUCILLE TEE	1588 W 1010 NORTH	PLEASANT GROVE	UT	84062
586	JENSEN, SARA H ET AL	9707 ROYAL RED RD	CEDAR HILLS	UT	84062
587	JENSEN, TOMIE	7301 BAYMEADOWS MAILSTOP JACB31 WAY	JACKSONVILLE	FL	32256
588	JEPPERSON, DENNIS G & KATHRYN TEE	1855 W 1100 NORTH	PLEASANT GROVE	UT	84062
589	JEPPSON, ARNOLD M & MAY M JT	1485 E 300 NORTH	AMERICAN FORK	UT	84003
590	JEPPSON, BRIAN C	1791 N 350 WEST	PLEASANT GROVE	UT	84062
591	JOGODA L.L.C. ET AL	335 E 1300 SOUTH	OREM	UT	84097
592	JOHN ANDERSON FAMILY LIMITED PARTNER	1050 S 175 EAST	BURLEY	ID	83318
593	JOHN HANCOCK CHARTER SCHOOL	125 N 100 EAST	PLEASANT GROVE	UT	84062
594	JOHNSEN, NORMA E & WILLIAM J TEE	2783 N 900 WEST	PLEASANT GROVE	UT	84062
595	JOHNSON, BRETT M & CALLIE K JT	1492 W 1800 NORTH	PLEASANT GROVE	UT	84062
596	JOHNSON, DAMON L & KELLEY K JT	1009 N 1300 WEST	PLEASANT GROVE	UT	84062
597	JOHNSON, DAVID N & MARY L JT	822 E 540 SOUTH	SALEM	UT	84653
598	JOHNSON, DEVIN	33 E SIENA DR	PLEASANT GROVE	UT	84062
599	JOHNSON, DONALD C SUCTEE	2390 W 2200 NORTH	LEHI	UT	84043
600	JOHNSON, FRED M TEE	1148 NATHANIEL DR	PLEASANT GROVE	UT	84062
601	JOHNSON, FRED M TEE	289 N 300 EAST	OREM	UT	84057
602	JOHNSON, JAY DREW ET AL	582 W 850 NORTH	PLEASANT GROVE	UT	84062
603	JOHNSON, JOEL R & CATHY P JT	1286 MURDOCK DR	AMERICAN FORK	UT	84003
604	JOHNSON, JOHN V	321 E STATE RD #10	AMERICAN FORK	UT	84003
605	JOHNSON, LARRY A & SALLY JT	1891 GLENDON CIR	PLEASANT GROVE	UT	84062
606	JOHNSON, MARLIN D & DIANE B JT	2251 N 600 WEST	PLEASANT GROVE	UT	84062
607	JOHNSON, MERN D & LORA JT	381 E 300 SOUTH	PLEASANT GROVE	UT	84062
608	JOHNSON, MILTON G & MILDRED F TEE	345 W 1600 SOUTH	OREM	UT	84058
609	JOHNSON, MILTON K & GINNY O JT	929 W 670 SOUTH #4	PLEASANT GROVE	UT	84062
610	JOHNSON, NED L & LINDA W JT	570 N 100 EAST	PLEASANT GROVE	UT	84062
611	JOHNSON, ROBERT M	1275 E 1000 SOUTH	PLEASANT GROVE	UT	84062
612	JOHNSON, SHAD L & AMY L JT	433 S 300 EAST	PLEASANT GROVE	UT	84062
613	JOHNSON, TERRANCE B & MADGE E JT	1600 OLD HIGHWAY 99	GRANTS PASS	OR	97526
614	JOHNSTON, CLAY R & DEBY C JT	1979 TUSCANY WAY	PLEASANT GROVE	UT	84062
615	JOHNSTON, ERIC S & GREG	610 W 800 NORTH	PLEASANT GROVE	UT	84062
616	JOHNSTON, ERIC S & GREG	805 N 600 WEST	PLEASANT GROVE	UT	84062
617	JOLLEY, ROBERT S & AMY O JT	343 W 1700 SOUTH	OREM	UT	84058
618	JONES, AARON H & AMY E JT	3611 N 1590 WEST	PLEASANT GROVE	UT	84062
619	JONES, GERALD D & MONICA L JT	1338 GARDEN DR	PLEASANT GROVE	UT	84062
620	JONES, LENNIS A & PATRICIA A JT	1685 E 1000 SOUTH	PLEASANT GROVE	UT	84062
621	JONES, LOGAN R & ADELE M JT	3573 CANYON RD	PLEASANT GROVE	UT	84062
622	JONES, RANDALL & AMY K	35 S 100 EAST	PLEASANT GROVE	UT	84062
623	JONES, RONALD C & SUSAN P JT	878 N 1300 WEST	PLEASANT GROVE	UT	84062
624	JORGENSEN, HAROLD M & MAURINE TEES	1080 N 600 WEST	PLEASANT GROVE	UT	84062
625	JP PROPERTIES	PO BOX 236	PLEASANT GROVE	UT	84062
626	JUDKINS, AARON & MARCI JT	2033 N TUSCANY WAY	PLEASANT GROVE	UT	84062
627	K & L GURR HOLDINGS LLC	360 E 100 SOUTH	PLEASANT GROVE	UT	84062
628	KAESMEYER, DANIEL E & SUSAN M JT	110 W 1800 NORTH	PLEASANT GROVE	UT	84062
629	KALLAS, JEREMY J	929 W 670 SOUTH #12	PLEASANT GROVE	UT	84062
630	KEELER, SHIREE	159 S PLEASANT GROVE BLVD #18	PLEASANT GROVE	UT	84062
631	KEETCH, BRENT A & SUZANNE S JT	1730 N 100 EAST	PLEASANT GROVE	UT	84062
632	KEETCH, GARY V & DEANNE C JT	1047 W 2600 NORTH	PLEASANT GROVE	UT	84062
633	KELLY, GREG & NATALIE JT	2578 N 860 WEST	PLEASANT GROVE	UT	84062
634	KENDALL, ALAN R & LORA L TEE	2525 N 860 WEST	PLEASANT GROVE	UT	84062
635	KERR, ANN T	1378 E NORTH POND CIR	MAPLETON	UT	84664
636	KERR, BRIAN J & AMY D JT	1455 N 530 WEST	PLEASANT GROVE	UT	84062
637	KERR, JOHN R & KARI JT	1431 W 3300 NORTH	PLEASANT GROVE	UT	84062
638	KHATCHADOURIAN, MOVSES & GIGI JT	1695 E 1000 SOUTH	PLEASANT GROVE	UT	84062
639	KIESSLING, GERD	81 BENSON WAY	SANDY	UT	84070
640	KILLPACK, SHIRLEY	PO BOX 1132	PLEASANT GROVE	UT	84062
641	KIMBAL, GLORIA J & MITCH ET A JT	806 W 2800 NORTH	PLEASANT GROVE	UT	84062
642	KING, KEVIN & SHAUNA L JT	3295 N CANYON RD	PROVO	UT	84604
643	KING, KORMAN & KRISTY	1678 N 70 EAST	PLEASANT GROVE	UT	84062
644	KIRK, STEPHEN L & NANCY L JT	983 S 1320 EAST	PLEASANT GROVE	UT	84062
645	KJJ LCC	2004 COUNTRY DR	LEHI	UT	84005

646	KLOEY'S COVE LLC	36 RED PINE DR	ALPINE	UT	84004
647	KNAPTON, LISA CHRISTINE ET AL	1807 GARDEN DR	PLEASANT GROVE	UT	84062
648	KOEHLER, BRYAN F & MARILYNN	2532 N 600 WEST	PLEASANT GROVE	UT	84062
649	KOFFORD, JERALD D & UNA L JT	1476 RENAISSANCE PL	PLEASANT GROVE	UT	84062
650	KOHLER, BUD W & GLENNA E TEE	2150 N 600 WEST	PLEASANT GROVE	UT	84062
651	KRAVET, DANIEL ET AL	9860 N CANYON DR	PLEASANT GROVE	UT	84062
652	KRISER HOMES & COMMUNITIES INC	497 S 2220 WEST #102	PLEASANT GROVE	UT	84062
653	KRISER HOMES & COMMUNITIES INC	497 S 2220 WEST #201	PLEASANT GROVE	UT	84062
654	KRISER HOMES & COMMUNITIES INC	496 S 2150 WEST #201	PLEASANT GROVE	UT	84062
655	KRISER HOMES & COMMUNITIES INC	125 E MAIN ST #215	AMERICAN FORK	UT	84003
656	KRISER HOMES & COMMUNITIES INC	PO BOX 395	AMERICAN FORK	UT	84003
657	KRISER HOMES & COMMUNITIES INC	926 W 1420 SOUTH	PAYSON	UT	84651
658	KRISER HOMES & COMMUNITIES INC	410 N 2000 WEST	PLEASANT GROVE	UT	84062
659	KRISER HOMES & COMMUNITIES INC	497 S 2220 WEST #303	PLEASANT GROVE	UT	84062
660	KRISER HOMES & COMMUNITIES INC	496 S 2150 WEST #202	PLEASANT GROVE	UT	84062
661	KRISER HOMES & COMMUNITIES INC	496 S 2150 WEST #204	PLEASANT GROVE	UT	84062
662	KRISER HOMES & COMMUNITIES INC	9055 S 1300 EAT #110	SANDY	UT	84094
663	KRISER HOMES & COMMUNITIES INC	496 S 2150 WEST	PLEASANT GROVE	UT	84062
664	KRISER HOMES & COMMUNITIES INC	40270 JACINTO WAY	PALMDALE	CA	93551
665	KRISER HOMES & COMMUNITIES INC	1000 S 1000 EAST	MAPLETON	UT	84664
666	KRISER HOMES & COMMUNITIES INC	496 S 2150 WEST #102	PLEASANT GROVE	UT	84062
667	KRISER HOMES & COMMUNITIES INC	497 S 2220 WEST #304	PLEASANT GROVE	UT	84062
668	KRISER HOMES & COMMUNITIES INC	3383 BEAR CANYON LN	CEDAR HILLS	UT	84062
669	KROHN, KRISTOFFER A & KALENN JT	3214 N UNIVERSITY AV #116	PROVO	UT	84604
670	KUMMER, KARL J TEE	85 E 1500 SOUTH	OREM	UT	84058
671	LAD ENTERPRISES L.C.	787 N 400 EAST	LINDON	UT	84042
672	LAD ENTERPRISES L.C. ET AL	127 S 500 EAST #310	SALT LAKE CITY	UT	84102
673	LAKE CITY HOLDINGS LLC	6148 W 9680 NORTH	HIGHLAND	UT	84003
674	LAMBERT, CHARLES P & BETTY A JT	1841 W 1100 NORTH	PLEASANT GROVE	UT	84062
675	LAND WALKER LTD	PO BOX 171720	SAN ANTONIO	TX	78217
676	LANDCO DEVELOPMENT INC	1210 E 930 NORTH	PROVO	UT	84604
677	LANE, ELDWIN K & ANNA B JT	2687 CANYON RD	PLEASANT GROVE	UT	84062
678	LARSEN ACRES L.C.	1146 N 100 EAST	PLEASANT GROVE	UT	84062
679	LARSEN, ARTALEE T	864 N 360 EAST	AMERICAN FORK	UT	84003
680	LARSEN, ELIZABETH	993 W 1800 NORTH	PLEASANT GROVE	UT	84062
681	LARSEN, STEVEN T & ELIZABETH JT	993 W 1800 NORTH	PLEASANT GROVE	UT	84062
682	LARSON, BRYON & SUSANN JT	4051 W 9820 NORTH	CEDAR HILLS	UT	84062
683	LARSON, CRAIG S & JENNIFER S JT	665 N 1300 WEST	PLEASANT GROVE	UT	84062
684	LARSON, DE LOY & RAYE ET AL TEE	225 E STATE RD	PLEASANT GROVE	UT	84062
685	LARSON, JON W & HEATHER M JT	759 GROVE CREEK DR	PLEASANT GROVE	UT	84062
686	LASER, HEATHER A	518 S 2150 WEST #303	PLEASANT GROVE	UT	84062
687	LAW, KENNETH A & FERN JT	150 N 1300 WEST	PLEASANT GROVE	UT	84062
688	LAYCOCK, CORY E	648 N 1010 WEST	PLEASANT GROVE	UT	84062
689	LEADING TECHNOLOGY DEVELOPMENT LLC	444 N 7200 WEST	MENDON	UT	84325
690	LEAVITT, JEFFREY W	786 W 4230 NORTH	PLEASANT GROVE	UT	84062
691	LEAVITT, KENNETH P & LUCILLE JT	374 S 420 EAST	PLEASANT GROVE	UT	84062
692	LEAVITT, MELVIN W & PEGGY J	2693 N 1200 EAST	LEHI	UT	84043
693	LEETHAM, STEPHEN C & DEANNA TEE	1317 N 1300 WEST	PLEASANT GROVE	UT	84062
694	LEGACY PROPERTIES AND INVESTMENTS L.	1342 W STATE RD	PLEASANT GROVE	UT	84062
695	LEGACY PROPERTIES AND INVESTMENTS LC	1402 W STATE RD	PLEASANT GROVE	UT	84062
696	LEICO PROPERTIES LLC	50 N 1300 EAST	PLEASANT GROVE	UT	84062
697	LEONARD, HAL A	1420 E 300 NORTH	AMERICAN FORK	UT	84003
698	LEONARD, ROBERT H & ROBERT H	2221 N 1300 WEST	PLEASANT GROVE	UT	84062
699	LETHBRIDGE, BURTON ALLEN	950 S 1500 EAST	PLEASANT GROVE	UT	84062
700	LEVIN, ALFRED & EDELTRAUD B TEE	3939 W 9600 NORTH	CEDAR HILLS	UT	84062
701	LEWIS, KIMBALL U & MYRNA JT	PO BOX 539	MIDVALE	UT	84047
702	LEWIS, MARY ELLEN	270 N 900 WEST	PROVO	UT	84601
703	LI, ELSA	475 S 1230 WEST	OREM	UT	84058
704	LIAHONA FOUNDATION	801 N 300 EAST	PLEASANT GROVE	UT	84062
705	LINCOLN ACADEMY INCORPORATED	1582 W 3300 NORTH	PLEASANT GROVE	UT	84062
706	LINDBERG, DENISE	868 W 260 SOUTH	PLEASANT GROVE	UT	84062
707	LINDSTROM, JEFFREY P ET AL DBA	PO BOX 236	PLEASANT GROVE	UT	84062
708	LINDSTROM, JOHN P & SARA H TEE	1880 N 600 WEST	PLEASANT GROVE	UT	84062
709	LINEBAUGH, JOHN W & CAROL B TEE	2682 CANYON RD	PLEASANT GROVE	UT	84062
710	LISTON, BETTU M & CLAY M TEE	921 W 1100 NORTH	PLEASANT GROVE	UT	84062

711	LITTLE, VERNON	2897 N 900 WEST	PLEASANT GROVE	UT	84062
712	LLOYD, KALYN L & JEANNE M JT	407 W 2600 NORTH	PLEASANT GROVE	UT	84062
713	LOCKE, CHARESE	868 W 4230 NORTH	PLEASANT GROVE	UT	84062
714	LOCKHART NANCE, ELIZABETH ET AL	1830 N 820 WEST	PLEASANT GROVE	UT	84062
715	LONE PEAK DEVELOMENT PARTNERS LLC	38 RED PINE DR	ALPINE	UT	84004
716	LONE PEAK DEVELOPMENT PARTNERS LLC	688 W 2760 NORTH	PLEASANT GROVE	UT	84062
717	LONE PEAK DEVELOPMENT PARTNERS LLC	583 S 900 WEST #11-303	PLEASANT GROVE	UT	84062
718	LONE PEAK DEVELOPMENT PARTNERS LLC	1140 W 1800 NORTH	PLEASANT GROVE	UT	84062
719	LONE PEAK DEVELOPMENT PARTNERS LLC	1015 W 425 SOUTH	LEHI	UT	84043
720	LONE PEAK DEVELPMENT PARTNERS LLC	6072 W 11400 NORTH	HIGHLAND	UT	84003
721	LONG, DARRIN	399 E STATE RD	PLEASANT GROVE	UT	84062
722	LONG, MYRON	3687 AVANYU CT	CEDAR HILLS	UT	84062
723	LONGMAN, JOHN L & GEORGANN JT	4516 CANYON RD	PLEASANT GROVE	UT	84062
724	LOSEE, BARBARA J & FLOYD J JT	704 W 2600 NORTH	PLEASANT GROVE	UT	84062
725	LOVE, JAMES L	1791 GARDEN DR	PLEASANT GROVE	UT	84062
726	LOWDER, TRAVIS H & DANIEL B ET AL	2230 N UNIVERSITY PKY #7A	PROVO	UT	84604
727	LOWE, LYNETTE & KENNETH J JT	1295 N 1300 WEST	PLEASANT GROVE	UT	84062
728	LUKE, JOHNEY D	1050 N 600 WEST	PLEASANT GROVE	UT	84062
729	LUKE, MARJORIE & MARGENE JT	1197 E 1000 SOUTH	PLEASANT GROVE	UT	84062
730	LUKER, DAN R & DAWN JT	37 E 700 SOUTH	PLEASANT GROVE	UT	84062
731	LUND, TROY R & JACQUE L JT	468 W 1800 NORTH	PLEASANT GROVE	UT	84062
732	LUNDIN, JOHN L ET AL	1052 E 50 SOUTH	AMERICAN FORK	UT	84003
733	LUU L.L.C.	426 E STATE RD	PLEASANT GROVE	UT	84062
734	LUU, VINH & HUNG T	789 N 350 WEST	LINDON	UT	84042
735	LYTLE, JOSHUA	347 MILLCREEK RD	PLEASANT GROVE	UT	84062
736	M & M MORRIS PROPERTIES LC	3599 LITTLE ROCK DR	PROVO	UT	84604
737	MAC NEIL, STEPHEN M	11135 N 5730 WEST	HIGHLAND	UT	84003
738	MAGALEI, BENJAMIN S & MARTHA TEE	8913 PINE HOLLOW DR	CEDAR HILLS	UT	84062
739	MAGNUSSON, LONNIE R & LORI JT	2146 N 1300 WEST	PLEASANT GROVE	UT	84062
740	MAJOR, JOSEPH D & JAONA H JT	4549 CANYON RD	PLEASANT GROVE	UT	84062
741	MAKIN DREAMS LLC	1519 N 600 WEST	PLEASANT GROVE	UT	84062
742	MAKIN, KEITH L & RUTH A TEE	153 S 200 EAST	AMERICAN FORK	UT	84003
743	MALAN, DAVID S & NATALIE C JT	952 W 270 SOUTH #104	PLEASANT GROVE	UT	84062
744	MALONE, JAMES C & LEEANN ET AL	1599 N 100 EAST	PLEASANT GROVE	UT	84062
745	MALONE, JAMES M & JAMES M	3709 N 900 WEST	PLEASANT GROVE	UT	84062
746	MANGUM, WILLIAM B & ASHLEY	952 W 270 SOUTH #202	PLEASANT GROVE	UT	84062
747	MANILA CULINARY WATER COMPANY	8800 N 3910 WEST	PLEASANT GROVE	UT	84062
748	MANILA INVESTORS LC	5840 HIGHLAND DR	SALT LAKE CITY	UT	84121
749	MANN, SHIRLEY A	1384 RENAISSANCE PL	PLEASANT GROVE	UT	84062
750	MARGIN ENTERPRISES LLC	1285 E CENTER ST	PLEASANT GROVE	UT	84062
751	MARI-LEE MEADOWS INC	1650 FARNAM ST	OMAHA	NE	68102
752	MARSHALL, LANA K	1287 E 1000 SOUTH	PLEASANT GROVE	UT	84062
753	MARTINEZ, BECKY L ET AL	650 N 100 EAST	PLEASANT GROVE	UT	84062
754	MARTINEZ, KIMBERLY H & ANTHONY R	114 W 700 SOUTH	PLEASANT GROVE	UT	84062
755	MARTINEZ, LISA A	2208 N 600 WEST	PLEASANT GROVE	UT	84062
756	MARTINEZ, MARTHA R & HUGO JT	PO BOX 1904	PROVO	UT	84603
757	MARTINEZ, RENATO & HOLLY	111 E 100 NORTH	PLEASANT GROVE	UT	84062
758	MATTHEWS, HANNAH BETH M ET AL	1110 W 1800 NORTH	PLEASANT GROVE	UT	84062
759	MATTHEWS, LYNN I & GEANIE R JT	1040 W 1800 NORTH	PLEASANT GROVE	UT	84062
760	MATTHEWS, MATT P & MICHELLE JT	812 W 2800 NORTH	PLEASANT GROVE	UT	84062
761	MAVERIK COUNTRY STORES INC	880 W CENTER ST	NORTH SALT LAKE	UT	84054
762	MAYFIELD DEVELOPMENT LC	758 S 400 EAST	OREM	UT	84097
763	MAYNE, JACK & GWEN S TEE	789 W 2600 NORTH	PLEASANT GROVE	UT	84062
764	MAYNE, SHAD G	96 E 700 SOUTH	PLEASANT GROVE	UT	84062
765	MC CANN, GREG T	986 W 270 SOUTH	PLEASANT GROVE	UT	84062
766	MC CLAIN, RICHARD A	1825 TUSCANY WAY	PLEASANT GROVE	UT	84062
767	MC GEE, JAMES & ESCHE JT	399 S LOCUST AV	PLEASANT GROVE	UT	84062
768	MCALLISTER, BURTON JAMES	4019 N 900 WEST	PLEASANT GROVE	UT	84062
769	MCDONALD, TACY L TEE	1182 W 3420 NORTH	PLEASANT GROVE	UT	84062
770	MCHUGH, JOHN R & MATTHEW JT	221 POPLAR ST	ANACONDA	MT	59711
771	MCKINNON, WILLIAM M & LIN M JT	889 N 600 WEST	PLEASANT GROVE	UT	84062
772	MCPHERSON, BRYAN D	613 N 600 WEST	PLEASANT GROVE	UT	84062
773	MEDFORD, TROY J	1226 NORTHFIELD DR	PLEASANT GROVE	UT	84062
774	MELDRUM, FLOYD A TEE	601 S RANCHO DR #A10	LAS VEGAS	NV	89106
775	MELLOTT, CARSON A & KELLIE A	397 E 300 SOUTH	PLEASANT GROVE	UT	84062

776	MELVIN V AND MARY C FRANDSEN FAMILY	506 S 100 WEST	AMERICAN FORK	UT	84003
777	MEMMOTT, KELLY L & JANALYN W JT	935 N 100 EAST	PLEASANT GROVE	UT	84062
778	MERRELL, SCOTT & SHARI JT	681 W 2000 NORTH	PLEASANT GROVE	UT	84062
779	MERRYWEATHER, FRANK B & JOANN TEE	1130 E 900 SOUTH	PLEASANT GROVE	UT	84062
780	MESSERSMITH, VERNAL D & CORA R	1050 W 190 SOUTH	LEHI	UT	84043
781	MESSINGER, JEFF	523 W 2900 NORTH	PLEASANT GROVE	UT	84062
782	METLER BROTHERS CONSTRUCTION INC	973 S OREM BLVD	OREM	UT	84058
783	MICHAEL L ROBINSON PROPERTIES LC	116 W 2430 NORTH	PLEASANT GROVE	UT	84062
784	MILLER INVESTMENT COMPANY	886 E 900 SOUTH	PLEASANT GROVE	UT	84062
785	MILLER, ANNALISE	986 W 270 SOUTH #201	PLEASANT GROVE	UT	84062
786	MILLER, BRANDON & HEATHER M JT	1337 W 1800 NORTH	PLEASANT GROVE	UT	84062
787	MILLER, CLAYTON L & MICHELE	1243 W 1800 NORTH	PLEASANT GROVE	UT	84062
788	MILLER, JAMES R	3826 S 2300 EAST	SALT LAKE CITY	UT	84109
789	MILLER, KENDALL C	63 PELICAN DR	RUPERT	ID	83350
790	MILLER, LUTHER & DARLA J JT	2224 N 600 WEST	PLEASANT GROVE	UT	84062
791	MILLER, LYNN G & CHERRI H JT	1786 N 1200 WEST	PLEASANT GROVE	UT	84062
792	MILLET, MICHAEL B & DIXIE F JT	1454 E 1000 SOUTH	PLEASANT GROVE	UT	84062
793	MILLETT, KENNETH E & MARGARET JT	490 S 1100 EAST	PLEASANT GROVE	UT	84062
794	MINER, VINSON	952 W 270 SOUTH #102	PLEASANT GROVE	UT	84062
795	MIRA CONDOMINIUMS DEVELOPMENT LLC	1038 SILVERANCH DR	GARDNERVILLE	NV	89460
796	MIRAGLIA, STEPHEN J	986 W 270 SOUTH #102	PLEASANT GROVE	UT	84062
797	MISDOM, LEE & JERI L JT	1704 W 1060 NORTH	PLEASANT GROVE	UT	84062
798	MITCHELL, VONE J & GLENDA G	384 E 300 SOUTH	PLEASANT GROVE	UT	84062
799	MIYA, JAY	4211 MICHAEL AV	LOS ANGELES	CA	90066
800	MKKM PROPERTIES LLC	870 W 410 NORTH	LINDON	UT	84042
801	MONSON, ELSIE W	3971 CANYON RD	PLEASANT GROVE	UT	84062
802	MONSON, MARK S	986 W 270 SOUTH #204	PLEASANT GROVE	UT	84062
803	MONSON, MICHAEL VAL	9573 CANYON RD	PLEASANT GROVE	UT	84062
804	MONSON, ROSS E & GLORIA D JT	9561 CANYON RD	PLEASANT GROVE	UT	84062
805	MONTOYA, DAVID E & ERENDIRA M JT	770 GROVE CREEK DR	PLEASANT GROVE	UT	84062
806	MOON, JONATHAN D & RICHELLE E JT	3636 LITTLE ROCK DR	PROVO	UT	84604
807	MOORE, BONNIE	PO BOX 22268	SALT LAKE CITY	UT	84122
808	MOORE, EDWARD A & HILLARY J ET AL	698 W 2600 NORTH	PLEASANT GROVE	UT	84062
809	MOORE, KEVIN L & COURTNEY JT	1146 MUSTANG LN	LEHI	UT	84045
810	MOORE, RICHARD E & FAYE L	555 W 2600 NORTH	PLEASANT GROVE	UT	84062
811	MORGAN, JUSTIN & STEPHANIE JT	87 N 1620 WEST	PLEASANT GROVE	UT	84062
812	MORGAN, STEPHANIE	75 N 1620 WEST	PLEASANT GROVE	UT	84062
813	MORRISON, WILLIAM M & SHEILA JT	3284 N 1450 WEST	PLEASANT GROVE	UT	84062
814	MORSE, ANTHONY T & DEIDREY JT	4262 N 900 WEST	PLEASANT GROVE	UT	84062
815	MORTENSEN, SIDNEY G & JANICE JT	1466 E 1000 SOUTH	PROVO	UT	84606
816	MOULTON, RALPH R & ALIDA E TEE	PO BOX 319	PLEASANT GROVE	UT	84062
817	MOUNTAIN EXPANSION LLC	583 N 1100 EAST	AMERICAN FORK	UT	84003
818	MOWER, DOUGLAS R ET AL	820 N 1300 WEST	PLEASANT GROVE	UT	84062
819	MOWER, NATHAN N & CAROLYN G JT	2247 N 1300 WEST	PLEASANT GROVE	UT	84062
820	MUHLESTEIN, DANIEL H & LA NAE JT	787 N 400 EAST	LINDON	UT	84042
821	MUNDAY, CHRISTOPHER B & LOUIS JT	812 W 4230 NORTH	PLEASANT GROVE	UT	84062
822	MUNICIPAL BUILDING AUTHORITY OF PLEA	70 S 100 EAST	PLEASANT GROVE	UT	84062
823	MURDOCK, GARY L & DEBRA A JT	660 W STATE RD	PLEASANT GROVE	UT	84062
824	MURIE, BENNY & LINDA JT	1135 N 100 EAST	PLEASANT GROVE	UT	84062
825	MURPHY, WAYNE C & KONNIE JT	517 E 300 SOUTH	PLEASANT GROVE	UT	84062
826	MYLER, LISA R	1278 S 800 EAST	OREM	UT	84097
827	MYLROIE, MICHAEL W & DANIELLE JT	497 N 1300 WEST	PLEASANT GROVE	UT	84062
828	NAUMANN, GUILLERMO & JOAN JT	106 W 725 NORTH	LINDON	UT	84042
829	NAUMANN, STERLING W & KELLIE JT	1779 N 390 WEST	PLEASANT GROVE	UT	84062
830	NAVARRO, RICARDO	494 E 200 SOUTH	PLEASANT GROVE	UT	84062
831	NEHRING, CARSON D & KARIN P	1015 N 600 WEST	PLEASANT GROVE	UT	84062
832	NELSON, DALLIN B & AMY M JT	1308 W 2600 NORTH	PLEASANT GROVE	UT	84062
833	NELSON, DENNIS K & SHERRI JT	114 E 2150 NORTH	PLEASANT GROVE	UT	84062
834	NELSON, DUANE	3214 N UNIVERSITY AV #116	PROVO	UT	84604
835	NEMROW, SCOTT	1951 N 100 EAST	PLEASANT GROVE	UT	84062
836	NFSCO PROPERTIES LLC	PO BOX 1138	PLEASANT GROVE	UT	84062
837	NICHOLS, DANIEL L	1451 E 1000 SOUTH	PLEASANT GROVE	UT	84062
838	NICHOLSON, TERRENCE D & NANCY JT	1206 W 3300 NORTH	PLEASANT GROVE	UT	84062
839	NICKELL, DARYLENE B & KENNETH TEE	965 W 2600 NORTH	PLEASANT GROVE	UT	84062
840	NICOL, SCOTT & SUE JT	9850 CANYON RD	PLEASANT GROVE	UT	84062

841	NIELSEN, DOUGLAS R & HOLLY M JT	4392 CANYON RD	PLEASANT GROVE	UT	84062
842	NIELSEN, L JAY	241 N VINE ST #1206	SALT LAKE CITY	UT	84103
843	NIELSEN, RICHARD P ET AL	1455 S STATE ST #B	OREM	UT	84097
844	NIELSON, ANDREW J	175 S 1300 WEST	PLEASANT GROVE	UT	84062
845	NIELSON, DARRIN ET AL	3654 PAIGE LN	CEDAR HILLS	UT	84062
846	NIELSON, JAMES R & MARY E TEE	2124 N 600 WEST	PLEASANT GROVE	UT	84062
847	NIELSON, KEITH R & LAURA E JT	1135 W 1800 NORTH	PLEASANT GROVE	UT	84062
848	NOAH CORPORATION	1716 W 1825 NORTH	PROVO	UT	84604
849	NOAH CORPORATION	1441 UTE BLVD #100	PARK CITY	UT	84098
850	NORMAN, JAMES M & VERNA H JT	1386 E 1000 SOUTH	PLEASANT GROVE	UT	84062
851	NORTON INVESTMENT COMPANY	627 GROVE CIR	ALPINE	UT	84004
852	NUTTALL, RONALD D & BIRGITTA JT	9645 N 8000 WEST	LEHI	UT	84043
853	O DONNELL, ADELAIDE	PO BOX 227	PLEASANT GROVE	UT	84062
854	OBERHANSLEY, GARTH H & CHERYL JT	929 W 670 SOUTH #8	PLEASANT GROVE	UT	84062
855	OCKEY, PAUL TEE	812 VINE CREEK CIR	SALT LAKE CITY	UT	84107
856	OFFER, JENNIE L	119 E BATTLE CREEK DR	PLEASANT GROVE	UT	84062
857	OGDEN, KRISTOL M & SAMUEL P JT	1561 W 80 SOUTH	PLEASANT GROVE	UT	84062
858	OLIPHANT, JAMES R & MARYLIN	1011 W 2600 NORTH	PLEASANT GROVE	UT	84062
859	OLSEN, ARTHUR G & DELMA K	1977 N 1300 WEST	PLEASANT GROVE	UT	84062
860	OLSEN, GARY	735 N 1300 WEST	PLEASANT GROVE	UT	84062
861	OLSEN, GARY G & REBECCA L ET JT	35 W 725 NORTH	LINDON	UT	84042
862	OLSEN, GORDON L & MELODY A JT	9757 CANYON RD	PLEASANT GROVE	UT	84062
863	OLSEN, GORDON L & MELODY B JT	4209 CANYON RD	PLEASANT GROVE	UT	84062
864	OLSEN, SHAUN D & RACHEL K JT	354 S 420 EAST	PLEASANT GROVE	UT	84062
865	OLSEN, VERLYN L & BETH L TEE	350 E 300 SOUTH	PLEASANT GROVE	UT	84062
866	OLSON, LINDA M TEE	45 S 1100 EAST	AMERICAN FORK	UT	84003
867	OLSON, R KIM & BARI L TEE	691 W 4000 NORTH	PLEASANT GROVE	UT	84062
868	ORSO, LINDA	PO BOX 252	PLEASANT GROVE	UT	84062
869	ORTON, HOWARD & O HOWARD AKA	970 E 900 SOUTH	PLEASANT GROVE	UT	84062
870	ORTON, MARK W & ROBIN L JT	1114 N 1270 EAST	AMERICAN FORK	UT	84003
871	ORTON, SEAN & TINA JT	1927 GLENDON CIR	PLEASANT GROVE	UT	84062
872	ORTON, STERLING W & CONNIE R JT	1204 W 3420 NORTH	PLEASANT GROVE	UT	84062
873	ORVIS, VICTOR R & LINDA L ET JT	305 SUMMERWOOD DR	BOUNTIFUL	UT	84010
874	OSBORNE, BOBBY W & HEATHER P JT	680 W 2000 NORTH	PLEASANT GROVE	UT	84062
875	OSBORNE, BOBBY W & HEATHER P JT	146 E 100 SOUTH	AMERICAN FORK	UT	84003
876	OSCARSON, ROBERT A & BETTY JT	89 S 800 EAST	PLEASANT GROVE	UT	84062
877	OSMOND DEVELOPMENT LLC	9611 OLD ORCHARD LN	CEDAR HILLS	UT	84062
878	OVALLE, HECTOR	309 S 100 EAST	PLEASANT GROVE	UT	84062
879	OVERLY, BRAD W & MARY P TEE	1442 W 3300 NORTH	PLEASANT GROVE	UT	84062
880	PACE, DARLENE LA REE ET AL TEE	1010 W 1800 NORTH	PLEASANT GROVE	UT	84062
881	PACE, SANDRA D ET AL TEE	93 E CENTER ST	PLEASANT GROVE	UT	84062
882	PACIFICORP	1407 W NORTH TEMPLE #110	SALT LAKE CITY	UT	84116
883	PACK, ERVIN E & BARBARA M JT	1260 W 1800 NORTH	PLEASANT GROVE	UT	84062
884	PACK, GLEN A & RENEE J	2335 N 1150 WEST	PLEASANT GROVE	UT	84062
885	PACK, GLEN A & RENEE J	1830 N 1300 WEST	PLEASANT GROVE	UT	84062
886	PACK, HEATHER & BRADFORD JT	1020 N 100 EAST	PLEASANT GROVE	UT	84062
887	PACK, KENNETH E & MARILYN K TEE	2273 N 1300 WEST	PLEASANT GROVE	UT	84062
888	PAJELA, MINA R	1088 E 390 SOUTH	AMERICAN FORK	UT	84003
889	PALACIOS, FLAVIA CAROLINA	1573 W 80 SOUTH	PLEASANT GROVE	UT	84062
890	PALMER, BRUCE W & KAYE T TEE	381 W 800 NORTH	LINDON	UT	84042
891	PALMER, EVAN M & DIANE J	450 S LOCUST AV	PLEASANT GROVE	UT	84062
892	PANKHURST, RICHARD & KRISTIN JT	430 MARMORE RD	CHICO	CA	95928
893	PARK, LILAS LEE	910 N 100 EAST	PLEASANT GROVE	UT	84062
894	PARKINSON, DAVID O ET AL AN INT	265 N COUNTRY MANOR LN	ALPINE	UT	84004
895	PARRISH, LAFE A & JOYCE B ET TEE	1445 E 300 NORTH	AMERICAN FORK	UT	84003
896	PARRY, DOUGLAS C & LINDA H JT	760 N 1300 WEST	PLEASANT GROVE	UT	84062
897	PATTERSON CONSTRUCTION INC ET AL	11009 N 6400 WEST	HIGHLAND	UT	84003
898	PATTERSON, JESSE W & HEATHER JT	159 S PLEASANT GROVE BLVD #19	PLEASANT GROVE	UT	84062
899	PECK, STEVEN L & LORI L JT	1211 E 1000 SOUTH	PLEASANT GROVE	UT	84062
900	PELAYO, MAGDALENA G TEE	111 E 700 SOUTH	PLEASANT GROVE	UT	84062
901	PEN & INK LTD	1199 W 700 SOUTH	PLEASANT GROVE	UT	84062
902	PEREZ, RUBEN & NORMA L JT	90 W 700 SOUTH	PLEASANT GROVE	UT	84062
903	PERKINS, HAL C	2501 N 860 WEST	PLEASANT GROVE	UT	84062
904	PERSONAL PROPERTIES	PO BOX 357	AMERICAN FORK	UT	84003
905	PETERSEN, JOY D	185 N 1630 WEST	PLEASANT GROVE	UT	84062

906	PETERSEN, MARK L & BECKY JT	PO BOX 462	PLEASANT GROVE	UT	84062
907	PETERSEN, VINCE L	1091 N 600 WEST	PLEASANT GROVE	UT	84062
908	PETERSON, FERN C TEE	31130 S GENERAL KEARNY RD #63	TEMECULA	CA	92591
909	PETERSON, JARED W & BARBARADE JT	25 E 700 SOUTH	PLEASANT GROVE	UT	84062
910	PETERSON, JOHN L & JO ANN TEE	1846 MAIN ST	HUNTINGTON BEACH	CA	92648
911	PETERSON, JOSEPH D & PATRICIA JT	1060 N 600 WEST	PLEASANT GROVE	UT	84062
912	PETERSON, MATTHEW T & KIMBERL JT	120 W 725 NORTH	LINDON	UT	84042
913	PETERSON, OREN V & SYLVIA S TEE	1250 W 2600 NORTH	PLEASANT GROVE	UT	84062
914	PETERSON, RON B & BONNIE P JT	1210 N 1300 WEST	PLEASANT GROVE	UT	84062
915	PETERSON, SCOTT & REBECCA JT	986 W 270 SOUTH #303	PLEASANT GROVE	UT	84062
916	PETRONI, CLORINDA CARMEN	375 W 800 NORTH	LINDON	UT	84042
917	PETRONI, SILVIA L	393 W 800 NORTH	LINDON	UT	84042
918	PETRONI, WALTER SANTIAGO	369 W 800 NORTH	LINDON	UT	84042
919	PETTY, CRAIG & TIFFANY JT	355 N 100 EAST	PLEASANT GROVE	UT	84062
920	PG VILLAS LLC	65 E 1250 NORTH	AMERICAN FORK	UT	84003
921	PGALF LLC	563 W 500 SOUTH #250	BOUNTIFUL	UT	84010
922	PHELON, KATHRYN R TEE	1040 E 900 SOUTH	PLEASANT GROVE	UT	84062
923	PHELON, KEVIN M & BECKIE D JT	759 E 200 SOUTH	PLEASANT GROVE	UT	84062
924	PHILLIPS, DAVID O ET AL	2009 N 1300 WEST	PLEASANT GROVE	UT	84062
925	PILCH, JOSHUA & JENNIFER ET A JT	91 N 1620 WEST	PLEASANT GROVE	UT	84062
926	PINCOCK, DAVID W & MICKEY J JT	1692 N 70 EAST	PLEASANT GROVE	UT	84062
927	PINNACLE HOMES AND DEVELOPMENT LLC	479 W 30 NORTH	AMERICAN FORK	UT	84003
928	PINNACLE POINT L.C.	1846 MAIN ST	HUNTINGTON BEACH	CA	92648
929	PITCHER, ADAM & CHERI JT	1726 W 1060 NORTH	PLEASANT GROVE	UT	84062
930	PITTS, STEVEN L	4200 N 650 EAST	PROVO	UT	84604
931	PLATT, JOSEPHINE	339 E 300 SOUTH	PLEASANT GROVE	UT	84062
932	PLEASANT DEVELOPMENT LLC	574 S STATE ST	OREM	UT	84058
933	PLEASANT GROVE DEVELOPMENT PARTNERS	304 S MAIN ST	CENTERVILLE	UT	84014
934	PLEASANT GROVE PLAZA LC	200 WILMOT RD	DEERFIELD	IL	60015
935	PLEASANT SPRINGS LLC	8058 BARNWOOD WAY	SANDY	UT	84094
936	POLLMANN, RAY D & ANNE JT	466 W 1800 NORTH	PLEASANT GROVE	UT	84062
937	PONT, LANE M & SAMANTHA JT	190 N 100 EAST	PLEASANT GROVE	UT	84062
938	PONTIOUS, TIMOTHY & NANCY	472 W 2600 NORTH	PLEASANT GROVE	UT	84062
939	POPE, CHAD L & ANGIE B	132 W 1800 NORTH	PLEASANT GROVE	UT	84062
940	PORTER, PAUL E & DENICE T JT	495 E 300 SOUTH	PLEASANT GROVE	UT	84062
941	PORTER, TROY & AMY JT	820 N 1300 WEST	PLEASANT GROVE	UT	84062
942	POWELL, MICHAEL & REAGAN JT	1535 W 80 SOUTH	PLEASANT GROVE	UT	84062
943	PRENTICE, TOM & BONNIE L JT	620 W 1800 NORTH	PLEASANT GROVE	UT	84062
944	PRICE, DARRYN M	2711 KINGS FOREST DR	KINGWOOD	TX	77339
945	PRICE, JOEL & ABAGAIL JT	2588 N 600 WEST	PLEASANT GROVE	UT	84062
946	PROCTOR, R RAY & JOY R TEE	90 S PROCTOR LA	PLEASANT GROVE	UT	84062
947	PROCTOR, ROBERT R & JOY JT	90 S 1300 WEST	PLEASANT GROVE	UT	84062
948	PROCTOR, THOMAS R & AFTON P JT	230 S 1300 WEST	PLEASANT GROVE	UT	84062
949	PROFESSIONAL PLAZA AT THE GROVE LLC	220 S PLEASANT GROVE BLVD	PLEASANT GROVE	UT	84062
950	PROVO LAND EXCHANGE II LC	255 E 100 SOUTH	PROVO	UT	84606
951	QUIK FIX INC	7356 N 6500 WEST	AMERICAN FORK	UT	84003
952	QUINTERO, ROBERT A & HILLARY JT	902 W 260 SOUTH	PLEASANT GROVE	UT	84062
953	R J ESTATES LLC	775 REDFORD DR	PROVO	UT	84604
954	R W INVESTMENT LLC	115 N GENEVA RD	OREM	UT	84057
955	R.A.D. INVESTMENTS LTD UTAH LIMITED	55 E CENTER ST	PLEASANT GROVE	UT	84062
956	RADMALL, MELVIN R & DENISE D	360 N 500 EAST	AMERICAN FORK	UT	84003
957	RAFF, DAYNE	1974 W 1500 NORTH	LEHI	UT	84043
958	RAFINER, LARRRY L & JOLENE W JT	371 E 500 SOUTH	PLEASANT GROVE	UT	84062
959	RAGAN, SHERRY E ET AL	637 N 1010 WEST	PLEASANT GROVE	UT	84062
960	RAI CORPORATION ET AL AN INT	210 N PRESTON DR	ALPINE	UT	84004
961	RAMESON, TAMERA B & RICHARD M JT	1736 N 70 EAST	PLEASANT GROVE	UT	84062
962	RAMOS, LOURDES	3454 MIRROR CIR	SARATOGA SPRINGS	UT	84045
963	RAPIER, RYAN & ADRA R JT	1809 GARDEN DR	PLEASANT GROVE	UT	84062
964	RASBAND, RYAN D & REVA J JT	4625 FERGUSON WAY	CEDAR HILLS	UT	84062
965	RASMUSSEN, DENNIS A & SANDRA TEE	864 S 1150 EAST	PLEASANT GROVE	UT	84062
966	RASMUSSEN, MILTON K & CHERYL JT	1524 W 1800 NORTH	PLEASANT GROVE	UT	84062
967	RAWLINGS, JAN LORIS	147 E 400 NORTH	PLEASANT GROVE	UT	84062
968	RDF PROPERTIES LLC ET AL	10568 N 5900 WEST	HIGHLAND	UT	84003
969	REASON, MICHAEL A	121 E 1500 NORTH	PLEASANT GROVE	UT	84062
970	REBER, ROBERT J	325 S 100 EAST	PLEASANT GROVE	UT	84062

971	REDWING PROPERTIES LLC	11019 N 5500 WEST	HIGHLAND	UT	84003
972	RENAISSANCE AT INDIAN SPRINGS HOMEOW	1391 RENAISSANCE PL	PLEASANT GROVE	UT	84062
973	RENSHAW, LANCE G	349 E 280 SOUTH	ALPINE	UT	84004
974	RENSHAW, STEPHEN R & JOSLYN JT	2725 CANYON RD	PLEASANT GROVE	UT	84062
975	REYNOLDS, DAVID J & JULIE A JT	1042 W 500 NORTH	PLEASANT GROVE	UT	84062
976	RHA COMMUNITY SERVICES OF UTAH INC	3060 W PEACHTREE RD #1150	ATLANTA	GA	30305
977	RICHARDS, MONICA H & DAVID M JT	402 S 420 EAST	PLEASANT GROVE	UT	84062
978	RICHARDSON, GREGORY L & HOLLY JT	882 W 2800 NORTH	PLEASANT GROVE	UT	84062
979	RICHINS, IDONNA E	542 W 2600 NORTH	PLEASANT GROVE	UT	84062
980	RICHMITCH PROPERTIES LLC	695 W STATE RD	PLEASANT GROVE	UT	84062
981	RICKERS, ED	372 N 1130 EAST	LINDON	UT	84042
982	RIGGS, JOSEPH W	2337 N 1050 WEST	PLEASANT GROVE	UT	84062
983	RIGHTSELL, JIMMY L & COLLEEN JT	65 N 100 EAST	PLEASANT GROVE	UT	84062
984	RIRIE, CRAIG M & BECKY A JT	141 W 2600 NORTH	PLEASANT GROVE	UT	84062
985	RJJJ INVESTMENTS LC	492 S 250 WEST	PLEASANT GROVE	UT	84062
986	RLK PROPERTIES L.C.	570 W 100 SOUTH	LINDON	UT	84042
987	RMAK HOLDINGS LLC	10245 DOWNING DR	CEDAR HILLS	UT	84062
988	ROBBINS, TYRAN J & KRISTEN B JT	717 W 2240 NORTH	PLEASANT GROVE	UT	84062
989	ROBERTS, KONNIE	2931 N 1130 WEST	PLEASANT GROVE	UT	84062
990	ROBERTSON, JOHN M & C KAIRA JT	317 E 1640 NORTH	PLEASANT GROVE	UT	84062
991	ROBINSON, GARY N & TRACIE R JT	54 W 1800 NORTH	PLEASANT GROVE	UT	84062
992	ROBINSON, GENE B & KAREN T JT	PO BOX 1832	OREM	UT	84059
993	ROBINSON, JAY K & JEAN B JT	375 PAHVANT DR	RICHFIELD	UT	84701
994	ROBINSON, JEFFERY L & EILEEN JT	998 W 2600 NORTH	PLEASANT GROVE	UT	84062
995	ROBISON, JASON & AUBREY JT	963 W 670 SOUTH #16	PLEASANT GROVE	UT	84062
996	ROCKY MOUNTAIN WELDING HOLDING LC	PO BOX 397	PLEASANT GROVE	UT	84062
997	RODDA, LORELL L	4004 SAWGRASS	CEDAR HILLS	UT	84062
998	ROGERS, DONALD R & WENDY S JT	7300 BEIJING PL	DULLES	VA	20189
999	ROHMER, BRETT F & KAY W	1830 N 1300 WEST	PLEASANT GROVE	UT	84062
1000	ROMERO, CYNTHIA D	613 N 600 WEST	AMERICAN FORK	UT	84003
1001	RONALD P FAKLER FAMILY LIMITED PARTN	2572 STONEBURY LOOP RD	SPRINGVILLE	UT	84663
1002	ROSS, JACOB & MELANIE JT	838 E 500 NORTH	AMERICAN FORK	UT	84003
1003	ROTHE, EDGAR F & LU ANN	1362 RENAISSANCE PL	PLEASANT GROVE	UT	84062
1004	ROTHE, RUTH H ET AL TEE	1432 RENAISSANCE PL	PLEASANT GROVE	UT	84062
1005	ROUNDY, MICHAEL & BECKY JT	4554 CANYON RD	PLEASANT GROVE	UT	84062
1006	ROUTSONG, NATHAN & TARA JT	3647 PAIGE LN	CEDAR HILLS	UT	84062
1007	ROWLEY, DENNIS E & DENICE C ET AL	128 S 100 WEST	AMERICAN FORK	UT	84003
1008	ROWLEY, GRANT A	695 W 1285 NORTH	OREM	UT	84057
1009	RSP LTD	PO BOX 345	PLEASANT GROVE	UT	84062
1010	RUIZ, CHRIS D & ANITA ET AL JT	1161 W 1800 NORTH	PLEASANT GROVE	UT	84062
1011	RUIZ, MIGUEL	1365 W 50 NORTH	PLEASANT GROVE	UT	84062
1012	S & T PROPERTIES LC	897 W 2225 SOUTH	WOODS CROSS	UT	84087
1013	SADERUP, BRUCE	1156 ALTON WAY	SALT LAKE CITY	UT	84108
1014	SADLER, SHELDON M	355 W 3340 NORTH	PLEASANT GROVE	UT	84062
1015	SAGE, TERRY M & ELEANOR L TEE	660 W STATE RD	PLEASANT GROVE	UT	84062
1016	SAGER, D LORRAINE ET AL	357 N 950 EAST	AMERICAN FORK	UT	84003
1017	SALMON, DAVID C	1555 N 150 EAST	PLEASANT GROVE	UT	84062
1018	SAMPSON, DALE W & CYNTHIA D JT	410 S LOCUST AV	PLEASANT GROVE	UT	84062
1019	SAMPSON, HELEN	95 N 1620 WEST	PLEASANT GROVE	UT	84062
1020	SANFORD, CHRISTEL B TEE	13478 OAKRIDGE DR	ALPINE	UT	84004
1021	SANTAI MEHRIZY, REZA ET AL	1087 N 1050 EAST	OREM	UT	84097
1022	SAPP, GREGORY L & JAYNE A JT	365 E 300 SOUTH	PLEASANT GROVE	UT	84062
1023	SARGENT, HAROLD	112 E 700 SOUTH	PLEASANT GROVE	UT	84062
1024	SAVAGE, LARAE T	9093 CANYON HEIGHTS DR	CEDAR HILLS	UT	84062
1025	SAVAGE, NEAL & LA RAE ET AL	6340 S 3000 EAST #600	SALT LAKE CITY	UT	84121
1026	SAVAGE, NEAL & T LUKE ET AL	6340 S 3000 EAST #600	SALT LAKE CITY	UT	84121
1027	SCHAEFER, DARIN S & GRACE S JT	1865 N 100 EAST	PLEASANT GROVE	UT	84062
1028	SCHMUHL, SANDRA L	91 E 700 SOUTH	PLEASANT GROVE	UT	84062
1029	SCHOUTEN, DAVID J	641 N 1300 WEST	PLEASANT GROVE	UT	84062
1030	SCHOW'S RANCHETTE FAMILY LIMITED PAR	2445 CANYON RD	PLEASANT GROVE	UT	84062
1031	SCHOW, ROBERT	3548 NORTH 900 WEST	PLEASANT GROVE	UT	84062
1032	SCHOW, CRAIG W & SUSAN M JT	2547 N 100 EAST	PLEASANT GROVE	UT	84062
1033	SCHRAM, MATTHEW & ANAHI JT	295 N 100 EAST	PLEASANT GROVE	UT	84062
1034	SCOTT, KAY LAMAR	931 W 1800 NORTH	PLEASANT GROVE	UT	84062
1035	SCOTT, RONALD E & ANNA M JT	2148 N 1300 WEST	PLEASANT GROVE	UT	84062

1036	SCS INVESTMENTS LLC	PO BOX 1043	PLEASANT GROVE	UT	84062
1037	SEARLE, L KENT & LUANA G TEE	40 E 1120 NORTH	AMERICAN FORK	UT	84003
1038	SEDIVY, PATRICK & ALLYSE JT	2105 TUSCANY WAY	PLEASANT GROVE	UT	84062
1039	SHADYWOOD LLC	6084 S 900 EAST #202	SALT LAKE CITY	UT	84121
1040	SHARDLOW, PAULA JANIECE	2566 RENAISSANCE PL	PLEASANT GROVE	UT	84062
1041	SHAW, JONATHAN & STEPHANIE V JT	283 N 960 EAST	PLEASANT GROVE	UT	84062
1042	SHELLEY, BRIAN G & GINA L JT	270 W 1800 NORTH	PLEASANT GROVE	UT	84062
1043	SHELLEY, KRISTINA L & AARON K JT	9804 CANYON RD	PLEASANT GROVE	UT	84062
1044	SHEPHERD, PAUL & SANDY	538 S LOCUST AV	PLEASANT GROVE	UT	84062
1045	SHEPHERD, RODNEY & CAROLYN	540 E 500 NORTH	LINDON	UT	84042
1046	SHILL, MATTHEW P & JUBALEN JT	3688 N 1270 WEST	PLEASANT GROVE	UT	84062
1047	SHOELL, JOHN F & MARIANNE T	73 E 1200 NORTH	PLEASANT GROVE	UT	84062
1048	SHUMSON PROPERTIES LLC	915 S 500 EAST #100	AMERICAN FORK	UT	84003
1049	SHUMWAY, KAY G & LINDA JT	120 E 700 SOUTH	PLEASANT GROVE	UT	84062
1050	SHURTLIFF, DONALD C & JOAN TEE	9027 FERNDALE AV	FONTANA	CA	92335
1051	SIBLEY, TROY R & CANDACE C JT	1385 N MURDOCK DR	PLEASANT GROVE	UT	84062
1052	SIDDOWAY, WILLIAM R & NILA TEE	672 E 900 SOUTH	PLEASANT GROVE	UT	84062
1053	SIDING GUYS INC THE	PO BOX 50624	PROVO	UT	84605
1054	SILVER CREEK DEVELOPMENT GROUP L.L.C	3651 N 100 EAST #350	PROVO	UT	84604
1055	SIPE, DAVID A ET AL	180 MAPLE LN	PLEASANT GROVE	UT	84062
1056	SJA PROPERTIES LC UTAH LLC	330 S MAIN ST	PLEASANT GROVE	UT	84062
1057	SKPC INC	3548 N 900 WEST	PLEASANT GROVE	UT	84062
1058	SLADE, RYAN L	134 W 725 NORTH	LINDON	UT	84042
1059	SMART, JOYCE M & JOYCE M ET A TEE	201 S MAIN ST #1100	SALT LAKE CITY	UT	84111
1060	SMART, SIDNEY L & KAREN B JT	9775 N 4000 WEST	PLEASANT GROVE	UT	84062
1061	SMITH, BETTY J & DON L TEE	371 E 700 NORTH	PLEASANT GROVE	UT	84062
1062	SMITH, CLAYN R & KAREN O JT	1822 TUSCANY WAY	PLEASANT GROVE	UT	84062
1063	SMITH, CLAYTON R & MISTY K JT	155 MAPLE LN	PLEASANT GROVE	UT	84062
1064	SMITH, COLLEEN MARY TEE	591 N 600 WEST	PLEASANT GROVE	UT	84062
1065	SMITH, CRAIG H & LINDA D JT	1690 N 100 EAST	PLEASANT GROVE	UT	84062
1066	SMITH, DAVID K & JANET S	635 E 1000 SOUTH	PLEASANT GROVE	UT	84062
1067	SMITH, GARRETT B & HOLLY M JT	2162 VERONA CIR	PLEASANT GROVE	UT	84062
1068	SMITH, GLENN B & KATHY R TEE	471 W 2600 NORTH	PLEASANT GROVE	UT	84062
1069	SMITH, JAMES G & DOROTHY H TEE	1121 GROVE CREEK DR	PLEASANT GROVE	UT	84062
1070	SMITH, JERRY	135 W CENTER	PLEASANT GROVE	UT	84062
1071	SMITH, JERRY P & BARBARA J TEE	448 W 2900 NORTH	PLEASANT GROVE	UT	84062
1072	SMITH, JERRY P & BARBARA J ET TEE	224 S MAIN ST #456	SPRINGVILLE	UT	84663
1073	SMITH, MINDY	952 W 270 SOUTH #201	PLEASANT GROVE	UT	84062
1074	SMITH, PAUL C	501 E 300 SOUTH	PLEASANT GROVE	UT	84062
1075	SMITH, SCOTT LEROY ET AL	2920 ROBINWOOD DR	TAYLORSVILLE	UT	84118
1076	SMITH, STANLEY B & MARY K JT	362 N 2000 WEST	PLEASANT GROVE	UT	84062
1077	SMITH, TARA J & JASON P TEE	2071 N 1300 WEST	PLEASANT GROVE	UT	84062
1078	SMITH, WADE R & PATRICIA JT	1786 N 270 WEST	PLEASANT GROVE	UT	84062
1079	SMITHS FOOD & DRUG CENTERS INC	3336 E 32ND ST #217	TULSA	OK	74135
1080	SMOOT, ROBERT S & GAYLIA A TEE	1436 RENAISSANCE PL	PLEASANT GROVE	UT	84062
1081	SNELL, JOY B TEE	765 W 2600 NORTH	PLEASANT GROVE	UT	84062
1082	SNYDER, GARY & LYNETTE TEE	2966 W 880 NORTH	PROVO	UT	84601
1083	SOFOIFA, MARLON E & SANDRA K JT	1122 N 1300 WEST	PLEASANT GROVE	UT	84062
1084	SOLARI, PATRICIA OSWOOD	PO BOX 5628	OROVILLE	CA	95966
1085	SORENSEN, RODNEY S & REBECCA JT	1884 GLENDON CIR	PLEASANT GROVE	UT	84062
1086	SORENSEN, SHANE D & CHRISTINE A	375 S LOCUST AV	PLEASANT GROVE	UT	84062
1087	SORENSEN, WESLEY R & PAMELA E JT	803 W 1500 NORTH	PLEASANT GROVE	UT	84062
1088	SORENSON, B DONALD & MARILYN JT	884 N 600 WEST	PLEASANT GROVE	UT	84062
1089	SOUTHAM, LESLIE R & NANCY A ET AL	450 W STATE RD	PLEASANT GROVE	UT	84062
1090	SOUTHWORTH, LARRY & MARTY JT	3805 VALLEY VIEW DR	CEDAR HILLS	UT	84062
1091	SPINAL REHAB PROPERTIES LLC	9472 AZTEC DR	CEDAR HILLS	UT	84062
1092	SRM REAL ESTATE LLC	1151 CEDAR RIDGE RD	LEHI	UT	84043
1093	STAKER, SCOTT	690 S 50 WEST	PLEASANT GROVE	UT	84062
1094	STANGER, MARK T & JENNY L JT	968 APPLE GROVE LN	PLEASANT GROVE	UT	84062
1095	STAPLETON, HEATHER & ROBERT B JT	929 W 670 SOUTH #5	PLEASANT GROVE	UT	84062
1096	STAR 6 CONSTRUCTION LLC	986 E 1480 NORTH	AMERICAN FORK	UT	84003
1097	STEINAKER, JOHN & MARY JT	149 S 950 EAST	PLEASANT GROVE	UT	84062
1098	STEPHENS, TIM A	5725 W 9600 NORTH	HIGHLAND	UT	84003
1099	STEPHENSON, JOHN	365 W 800 NORTH	LINDON	UT	84042
1100	STEVENS, BRIAN W & SARI K JT	1560 W 1800 NORTH	PLEASANT GROVE	UT	84062

1101	STEVENS, BRYCE & KRISTA JT	640 W 2100 NORTH	PLEASANT GROVE	UT	84062
1102	STEVENS, EARL W & LORI A JT	1322 W 2100 NORTH	PLEASANT GROVE	UT	84062
1103	STEVENS, MARK DEVERL JR ET AL	1316 W 540 NORTH	PLEASANT GROVE	UT	84062
1104	STEVENS, ROBERT K & THEA L TEE	1901 N 100 EAST	PLEASANT GROVE	UT	84062
1105	STEWART, CHARLES W & KELLY L TEE	854 E 1100 SOUTH	AMERICAN FORK	UT	84003
1106	STEWART, WILLIAM D & JANET K JT	9473 CANYON RD	PLEASANT GROVE	UT	84062
1107	STILL, JUDITH A	320 N 100 EAST	PLEASANT GROVE	UT	84062
1108	STIRLING, DAVID N	2449 N 600 WEST	PLEASANT GROVE	UT	84062
1109	STODDARD, CURTIS K & NANCY L JT	5425 SE BYRON DR	PORTLAND	OR	97267
1110	STORY, KEITH D & JOYCE L TEE	1080 E 900 SOUTH	PLEASANT GROVE	UT	84062
1111	STOTT, PETER A & MARIE A JT	516 E 200 SOUTH	PLEASANT GROVE	UT	84062
1112	STRATTON, KEN	9736 N 4800 WEST	AMERICAN FORK	UT	84003
1113	STRAY INVESTMENTS LLC	12712 WHISPER BEND DR	DRAPER	UT	84020
1114	STREET, DON EDWIN	195 N 850 EAST	PLEASANT GROVE	UT	84062
1115	STUBBS, CHAD M	1913 GLENDON CIR	PLEASANT GROVE	UT	84062
1116	STUHLMACHER, LA FAITH TEE	PO BOX 1196	AMERICAN FORK	UT	84003
1117	SUN, ANGEL	1530 GOUGH ST #303	SAN FRANCISCO	CA	94109
1118	SUNDANCER HOLDINGS LLC	3376 MAGIC VIEW DR	SALT LAKE CITY	UT	84121
1119	SUNDERLAND, DAVID W & NIKKI	986 W 270 SOUTH #304	PLEASANT GROVE	UT	84062
1120	SUOJANEN, KARI T & KRISTY L JT	9547 CANYON RD	CEDAR HILLS	UT	84062
1121	SUOJANEN, KARI T & KRISTY L TEE	9541 CANYON RD	PLEASANT GROVE	UT	84062
1122	SUTCH, ROBERT L & CYNTHIA P TEE	752 W 1800 NORTH	PLEASANT GROVE	UT	84062
1123	SUTTON, JAMES & LAURA E JT	180 W 1800 NORTH	PLEASANT GROVE	UT	84062
1124	SWALBERG, JERALDENE	693 E 990 SOUTH	PLEASANT GROVE	UT	84062
1125	SWEET CHARITY INC	211 E 300 SOUTH #212	SALT LAKE CITY	UT	84111
1126	SWENSON, NATHAN B & BRENDA J JT	1315 N 100 EAST	PLEASANT GROVE	UT	84062
1127	SWENSON, SHIRLEY RUTH TEE	301 W 2600 NORTH	PLEASANT GROVE	UT	84062
1128	T B L LLC	1360 W STATE RD	PLEASANT GROVE	UT	84062
1129	T&J COMMERCIAL PROPERTIES LLC	100 E STATE RD	PLEASANT GROVE	UT	84062
1130	TAGGART, TODD B & JULIE K JT	1269 E 100 SOUTH	PLEASANT GROVE	UT	84062
1131	TANNER, BYRON V	518 S 2150 WEST #302	PLEASANT GROVE	UT	84062
1132	TANNER, HOWARD S & PATRICIA A TEE	2858 N 900 WEST	PLEASANT GROVE	UT	84062
1133	TAYLOR, CHRISTINE	940 N 600 WEST	PLEASANT GROVE	UT	84062
1134	TAYLOR, M HARVEY & JANET R JT	175 MAPLE LN	PLEASANT GROVE	UT	84062
1135	TAYLOR, ROBERT D & JANET L JT	1342 RENAISSANCE PL	PLEASANT GROVE	UT	84062
1136	TAYLOR, RODGER L & GERALDINE JT	1075 N 600 WEST	PLEASANT GROVE	UT	84062
1137	TAYLOR, RON & SONDRA JT	2568 RENAISSANCE PL	PLEASANT GROVE	UT	84062
1138	TAYLOR, STEPHEN C & SUE A JT	986 W 270 SOUTH #202	PLEASANT GROVE	UT	84062
1139	TAYLOR, THOMAS J & JEAQUETTA	9367 AVANYU DR	CEDAR HILLS	UT	84062
1140	TEEMSMA, DONALD L & BARBARA A TEE	5534 TRINITY WAY	SAN DIEGO	CA	92120
1141	TEMPLE VIEW MEDICAL COMPLEX L.C.	830 N 2000 WEST	PLEASANT GROVE	UT	84062
1142	TEN BOSCH, SVEN S & LUCINDA C	1505 W 80 SOUTH	PLEASANT GROVE	UT	84062
1143	TERRY, KEITH	2179 N 600 WEST	PLEASANT GROVE	UT	84062
1144	TEUSCHER, BRUCE E & LYNETTE C JT	1778 N 390 WEST	PLEASANT GROVE	UT	84062
1145	THAYER, PHILLIP & STEPHANIE G JT	920 N 100 EAST	PLEASANT GROVE	UT	84062
1146	THAYNE, DENNIS R & KARLA JT	4087 CANYON RD	PLEASANT GROVE	UT	84062
1147	THAYNE, DENNIS R & KARLA ET AL	634 W 4000 NORTH	PLEASANT GROVE	UT	84062
1148	THAYNE, EDITH ANN	385 S MAIN ST	PLEASANT GROVE	UT	84062
1149	THE LYLE J SMART FAMILY LIMITED PART	2511 N 180 WEST	PLEASANT GROVE	UT	84062
1150	THOMAN, DEBRA C	PO BOX 364	PLEASANT GROVE	UT	84062
1151	THOMAS, CHARLES W & MELISSA K JT	1335 W 2180 NORTH	PLEASANT GROVE	UT	84062
1152	THOMAS, DEBRA C SUCTEE	754 W 4000 NORTH	PLEASANT GROVE	UT	84062
1153	THOMAS, LYNDSIE TEE	3968 W 9600 NORTH	PLEASANT GROVE	UT	84062
1154	THOMAS, MICHAEL D & ADRIENNE TEE	2440 N 600 WEST	PLEASANT GROVE	UT	84062
1155	THOMPSON, DARRELL & LORI JT	16 S 600 WEST	LINDON	UT	84042
1156	THOMSON, PHYLLIS POULSON	235 N 100 EAST	PLEASANT GROVE	UT	84062
1157	THORNE, MARGARET A & MARGARET TEE	2344 ARNETTE DR	SALT LAKE CITY	UT	84109
1158	THORNTON, RUSSELL S	2076 N JANICE CIR	PLEASANT GROVE	UT	84062
1159	THORNTON, TY & NATALIA JT	533 N 600 WEST	PLEASANT GROVE	UT	84062
1160	THORNTON, WAYNE L	49 E 700 SOUTH	PLEASANT GROVE	UT	84062
1161	TIMOTHY, WILLIAM A & SUSAN J TEE	745 N 100 EAST	PLEASANT GROVE	UT	84062
1162	TIMP RIDGE DEVELOPMENT INC	65 N 100 EAST	PLEASANT GROVE	UT	84062
1163	TITERA, WILLIAM R TEE	29267 NOTINGHAM CT	WESTLAKE	OH	44145
1164	TKM REAL ESTATE LLC	122 E 2000 NORTH	OREM	UT	84057
1165	TOLEN, WILLIAM CHRISTOPHER	1233 E 1000 SOUTH	PLEASANT GROVE	UT	84062

1166	TOLMAN, LARRY E & DARLYNN A JT	118 S 1100 EAST	AMERICAN FORK	UT	84003
1167	TOMLINSON, TERRY L & TERRIE L TEE	246 E 800 NORTH	LINDON	UT	84042
1168	TRADITIONAL LIVING LLC	376 E 400 SOUTH #304	SALT LAKE CITY	UT	84111
1169	TRIAD AUTO SALES INC	848 S STATE RD	PLEASANT GROVE	UT	84062
1170	TRIPLE FOCUS LC	1402 W STATE RD	PLEASANT GROVE	UT	84062
1171	TRUONG, THAI & LAURA B JT	9249 CANYON RD	CEDAR HILLS	UT	84062
1172	TUCKETT, GLADE B ET AL	10939 N ALPINE HWY #121PMB	HIGHLAND	UT	84003
1173	TURNER, JARED & CRYSTAL JT	1363 W 2180 NORTH	PLEASANT GROVE	UT	84062
1174	TWIGGS, SCOTT H & CORAL L JT	2035 N 1300 WEST	PLEASANT GROVE	UT	84062
1175	ULLMAN, CHRISTIAN & JENALE JT	1788 N 350 WEST	PLEASANT GROVE	UT	84062
1176	UNICE, JOHN & BARBARA JT	84 W 1800 NORTH	PLEASANT GROVE	UT	84062
1177	UNTHANK, KENNETH L & GWENDOLY TEES	1890 N 100 EAST	PLEASANT GROVE	UT	84062
1178	UNUTOA, ERIC & DORA A JT	1036 W 500 NORTH	PLEASANT GROVE	UT	84062
1179	UNZAGA, HUMBERTO F & LUCIA R JT	2535 CANYON RD	PLEASANT GROVE	UT	84062
1180	UTAH COMMUNITY FEDERAL CREDIT UNION	1900 N CANYON RD	PROVO	UT	84604
1181	UTAH COMMUNITY FEDERAL CREDIT UNION	188 RIVER PARK DR	PROVO	UT	84604
1182	UTAH VALLEY REAL ESTATE LLC	76 N BALD MOUNTAIN DR	ALPINE	UT	84004
1183	VAL WARNICK FAMILY LLC THE	PO BOX 145	MIDWAY	UT	84049
1184	VALENTINE, BRETT & AIRAMINTA JT	575 E 1000 SOUTH	PLEASANT GROVE	UT	84062
1185	VALLEJO, NOEL	10146 N MAPLE CT	CEDAR HILLS	UT	84062
1186	VAN ZANT, DOUGLAS L	9560 N CANYON RD	PLEASANT GROVE	UT	84062
1187	VANDERWILT, CHRISTOPHER B & S JT	1320 W 600 NORTH	PLEASANT GROVE	UT	84062
1188	VELLA, J-MARLAN & CHRISTINA I JT	62 W 725 NORTH	LINDON	UT	84042
1189	VEST, FLOYD & LARRY ET AL TEE	7277 N 4850 WEST	AMERICAN FORK	UT	84003
1190	VILLAGE SQUARE AT PLEASANT GROVE L.C	3575 N 100 EAST #175	PROVO	UT	84604
1191	VINCENT, JEFF L	1625 W 140 NORTH #62	PLEASANT GROVE	UT	84062
1192	VINCENT, STEVEN L & STEPHANIE JT	342 MILLCREEK RD	PLEASANT GROVE	UT	84062
1193	VIROONCHATAPAN, EKAPOP & NITN JT	4986 EL MIRLO DR	OCEANSIDE	CA	92057
1194	VISTA DEL GROVE LEGACY LC	2521 CHERRY GROVE WAY	SOUTH JORDAN	UT	84095
1195	WADLEY DEVELOPMENT CO LLC	2405 W CENTER ST	PROVO	UT	84601
1196	WADLEY, ALEXANDER & NELDA B TEE	2508 CANYON RD	PLEASANT GROVE	UT	84062
1197	WADLEY, ARVIL W & HELEN H TEE	90 N 100 EAST	PLEASANT GROVE	UT	84062
1198	WADLEY, CLIFTON J & MARY R TEE	2362 N 100 EAST	PLEASANT GROVE	UT	84062
1199	WADLEY, DON F & BRENDA B JT	1041 W 4000 NORTH	PLEASANT GROVE	UT	84062
1200	WADSWORTH, ENOCH A	159 S PLEASANT GROVE BLVD #23	PLEASANT GROVE	UT	84062
1201	WAITKEVICH, STEPHEN A	3826 S 2300 EAST	SALT LAKE CITY	UT	84109
1202	WAKAMATSU, NANETTE M & WARREN JT	125 E CENTER ST	PLEASANT GROVE	UT	84062
1203	WALDRON, ANN M	65 N 1620 WEST	PLEASANT GROVE	UT	84062
1204	WALDVOGEL, STACEY B & STACEY B	1013 N 1600 WEST	PLEASANT GROVE	UT	84062
1205	WALKER, BILLY R & PATRICIA JT	2554 N 600 WEST	PLEASANT GROVE	UT	84062
1206	WALKER, CHARLES S & MELISSA S JT	578 S STATE ST	OREM	UT	84058
1207	WALKER, CLARENCE	2195 N 1300 WEST	PLEASANT GROVE	UT	84062
1208	WALKER, JAY R & CAROL H JT	1470 W 1800 NORTH	PLEASANT GROVE	UT	84062
1209	WALKER, KENT W & JILL F TEE	3865 N 900 WEST	PLEASANT GROVE	UT	84062
1210	WALKER, LLOYD J & VERLA T TEE	480 N 100 EAST	PLEASANT GROVE	UT	84062
1211	WALKER, MILDRED C TEE	860 N 100 EAST	PLEASANT GROVE	UT	84062
1212	WALKER, RICHARD M & AMY JT	1246 W 3300 NORTH	PLEASANT GROVE	UT	84062
1213	WALKER, RONALD & VERA D TEE	345 E CENTER ST	LINDON	UT	84042
1214	WALKER, RONALD G & VERA D JT	930 N 100 EAST	PLEASANT GROVE	UT	84062
1215	WALL, KENNETH K & ANGELA JT	1727 W 1060 NORTH	PLEASANT GROVE	UT	84062
1216	WALLENTINE, DAVID A & DIANA TEE	632 N MURDOCK DR	PLEASANT GROVE	UT	84062
1217	WALTERS, DWAYNE C & EVELYN JT	680 S 1300 WEST	PLEASANT GROVE	UT	84062
1218	WALTERS, DWAYNE C & EVELYN F JT	655 S 1300 WEST	PLEASANT GROVE	UT	84062
1219	WALTERS, JOSEPH A & PATSY J TEE	23 W 800 NORTH	PLEASANT GROVE	UT	84062
1220	WANGEMANN, PAUL & VONDA JT	793 N LOCUST AV	LINDON	UT	84042
1221	WANLASS, CHRIS P	4454 CANYON RD	PLEASANT GROVE	UT	84062
1222	WARBURTON'S INC	453 W 700 SOUTH	PLEASANT GROVE	UT	84062
1223	WARBURTON, PAUL B & NINA TEE	1770 N 1520 WEST	PLEASANT GROVE	UT	84062
1224	WARD, DOUGLAS B & DEBORAH R JT	94 W 725 NORTH	LINDON	UT	84042
1225	WARDELL, MARTIN W & LINDA M JT	9730 CANYON RD	CEDAR HILLS	UT	84062
1226	WARNER, DIANE S TEE	9675 CANYON RD	CEDAR HILLS	UT	84062
1227	WARNICK, BRYSON J & EMILY K JT	80 S 1485 WEST	PLEASANT GROVE	UT	84062
1228	WARNICK, CARL F & JUNE W JT	1136 W 3300 NORTH	PLEASANT GROVE	UT	84062
1229	WARNICK, DOUGLAS R & SHARON R JT	2552 N 860 WEST	PLEASANT GROVE	UT	84062
1230	WARNICK, JACQUELYN W	3277 N 1450 WEST	PLEASANT GROVE	UT	84062

1231	WARNICK, KENT E & SHELLIE L JT	1309 W 3300 NORTH	PLEASANT GROVE	UT	84062
1232	WARNICK, KYLE F	1756 N 390 EAST	PLEASANT GROVE	UT	84062
1233	WARNICK, MARK DOUGLAS	1434 W 3300 NORTH	PLEASANT GROVE	UT	84062
1234	WARNICK, PAUL R & LISA P	1492 W 2600 NORTH	PLEASANT GROVE	UT	84062
1235	WARNICK, STEPHEN L & NELDA S JT	1454 W 2600 NORTH	PLEASANT GROVE	UT	84062
1236	WARNICK, THOMAS L & JODI L JT	4438 W 8800 NORTH	AMERICAN FORK	UT	84003
1237	WARNICK, WILLIAM W & DIANA TEE	2785 N 1450 WEST	PLEASANT GROVE	UT	84062
1238	WARNOCK, D CARL & CINDY H JT	1977 W 800 NORTH	PLEASANT GROVE	UT	84062
1239	WARREN, MICHAEL & CHARLENE JT	2415 N 1050 WEST	PLEASANT GROVE	UT	84062
1240	WATERS, MARY L	986 W 270 SOUTH #101	PLEASANT GROVE	UT	84062
1241	WE PROPERTY II LLC	2845 N 900 WEST	PLEASANT GROVE	UT	84062
1242	WEBB, PETER J & FRANKIE T JT	648 E 80 NORTH	AMERICAN FORK	UT	84003
1243	WEBER, ROBBY L & SHELLY JT	2448 N 1300 WEST	PLEASANT GROVE	UT	84062
1244	WELCH, DAVID TEE	1641 W 50 NORTH	PLEASANT GROVE	UT	84062
1245	WELCH, GOLDEN & EMILEE JT	189 N 1630 WEST #70	PLEASANT GROVE	UT	84062
1246	WELLESLEY, CRAIG H & CYNTHIA JT	1393 N 100 EAST	PLEASANT GROVE	UT	84062
1247	WELLS, KENT C & JANET M JT	515 W 2600 NORTH	PLEASANT GROVE	UT	84062
1248	WELLS, ROBERT K	2472 N 600 WEST	PLEASANT GROVE	UT	84062
1249	WEST, DON & HEATHER D JT	345 W 200 SOUTH	PLEASANT GROVE	UT	84062
1250	WEST, KENNETH D & DORORTHY F TEE	910 E 400 NORTH	PLEASANT GROVE	UT	84062
1251	WEST, KERRY J	1842 N 1200 WEST	LEHI	UT	84043
1252	WEST, LANCE C & LESLIE G	397 E 500 SOUTH	PLEASANT GROVE	UT	84062
1253	WEST, LELA M TEE	340 S LOCUST AV	PLEASANT GROVE	UT	84062
1254	WEST, MARY	540 GROVE CREEK DR	PLEASANT GROVE	UT	84062
1255	WEST, PHYLLIS GARLAND TEE	385 E 500 SOUTH	PLEASANT GROVE	UT	84062
1256	WEST, ROYAL J	1090 E 900 SOUTH	PLEASANT GROVE	UT	84062
1257	WEST, ROYAL J	1100 E 900 SOUTH	PLEASANT GROVE	UT	84062
1258	WEST, STEVEN D & DIANE N TEE	200 N 950 EAST	PLEASANT GROVE	UT	84062
1259	WESTROC INC	670 W 220 SOUTH	PLEASANT GROVE	UT	84062
1260	WHALEY, ROBERT J & CHRISTINE JT	67 E 700 SOUTH	PLEASANT GROVE	UT	84062
1261	WHITAKER, CAROL A ET AL	2815 N 1020 WEST	PLEASANT GROVE	UT	84062
1262	WHITAKER, MATTHEW A & CAROL A JT	2816 N 1020 WEST	PLEASANT GROVE	UT	84062
1263	WHITELEY, KAYLON T & JAN JT	791 W 600 NORTH	LINDON	UT	84042
1264	WIGERT, JOHN R ET AL	1467 W 80 SOUTH	PLEASANT GROVE	UT	84062
1265	WILDE, L CLAIR	10641 JACOB ASTOR WAY	SOUTH JORDAN	UT	84095
1266	WILLIAMS, CHRISTOPHER GEORGE VAUGHN	845 N 100 EAST	PLEASANT GROVE	UT	84062
1267	WILLIAMS, DAVID M & ANGIE B JT	361 W 800 NORTH	LINDON	UT	84042
1268	WILLIAMS, KENT S & CHARLENE	1075 N 100 EAST	PLEASANT GROVE	UT	84062
1269	WILLIAMS, MELAYNE W	3810 VALLEY VIEW DR	CEDAR HILLS	UT	84062
1270	WILLIAMSON FARMS L.L.C.	250 BEECHWOOD DR #120	BOISE	ID	83709
1271	WILLIAMSON INVESTMENTS L.C.	168 N 1200 EAST	OREM	UT	84097
1272	WILLIAMSON, ROBERT	445 E STATE RD	PLEASANT GROVE	UT	84062
1273	WILLIAMSON, ROBERT LEON TEE	3531 CANYON RD	PLEASANT GROVE	UT	84062
1274	WILSON, BRUCE J & MARNAE B JT	236 W 310 NORTH	OREM	UT	84057
1275	WILSON, CRIS E & DEBRA C	1752 N 70 EAST	PLEASANT GROVE	UT	84062
1276	WILSON, DEVIN E & MELISSA ET AL	1579 W 80 SOUTH	PLEASANT GROVE	UT	84062
1277	WILSON, GRANT M & RETA R JT	172 S 350 EAST	OREM	UT	84058
1278	WILSON, KEITH L & DANA L JT	1793 N 1300 WEST	PLEASANT GROVE	UT	84062
1279	WILSON, KEVEN L & KAREN M JT	345 W 700 SOUTH	PLEASANT GROVE	UT	84062
1280	WILSON, MATTHEW J & CARRIE J JT	1635 E MURDOCK DR	PLEASANT GROVE	UT	84062
1281	WILSON, TYLER W	297 S RIDGECREST DR	OREM	UT	84058
1282	WILTBANK, JAMES & BOBI J JT	2928 W 160 NORTH	PROVO	UT	84601
1283	WINDSOR, BRADNER L & KATHLEEN JT	2345 N 600 WEST	PLEASANT GROVE	UT	84062
1284	WINSLOW, ERNEST P SR TEE	517 CENTRAL AV	ALAMEDA	CA	94501
1285	WINTERS, ELMA MERMA PROCTOR TEE	71 S 1025 EAST	LINDON	UT	84042
1286	WINWARD, JULIE A	83 N 1620 WEST	PLEASANT GROVE	UT	84062
1287	WISE, JAMES L & RAQUEL TEE	2211 N 600 WEST	PLEASANT GROVE	UT	84062
1288	WLM MANAGEMENT COMPANY 401K P AN INT	758 S 400 EAST	OREM	UT	84097
1289	WMS PROPERTIES LLC	6213 W 10830 NORTH	HIGHLAND	UT	84003
1290	WOOD, TRAVIS E & RACHELLE L JT	994 W 600 NORTH	PLEASANT GROVE	UT	84062
1291	WOODARD, RUSSELL D & JANA L JT	2634 CANYON RD	PLEASANT GROVE	UT	84062
1292	WOODBURY, W RICHARDS ET AL TEE	2733 PARLEYS WAY #300	SALT LAKE CITY	UT	84109
1293	WOODEN, MEL J & JULENE JT	PO BOX 169A	SPRINGVILLE	UT	84663
1294	WOODIS, CHARLES EMERSON	226 N OREM BLVD	OREM	UT	84057
1295	WOODS, JAMES E & VIRGINIA S JT	3824 CANYON RD	PLEASANT GROVE	UT	84062

1296	WOODS, RANDY & JOY G	385 W 800 NORTH	LINDON	UT	84042
1297	WOODSIDE HOMES CORPORATION	127 S 500 EAST #600	SALT LAKE CITY	UT	84102
1298	WOODWARD, ROCK A & PAMELA K JT	1368 W 2600 NORTH	PLEASANT GROVE	UT	84062
1299	WOOLF, RICHARD & LISA	1625 W 50 NORTH	PLEASANT GROVE	UT	84062
1300	WOOTTON, JANET S TEE	11022 N 5600 WEST	HIGHLAND	UT	84003
1301	WOOTTON, JANET S TEE	11022 N 5600 WEST	HIGHLAND	UT	84003
1302	WOOTTON, JEFFREY L & EMILY JT	860 N 100 EAST	PLEASANT GROVE	UT	84062
1303	WRIGHT, DEREK & KATRESE JT	3323 N 1270 WEST	PLEASANT GROVE	UT	84062
1304	WRIGHT, JANELL	1643 W 140 NORTH #65	PLEASANT GROVE	UT	84062
1305	WRIGHT, MATTHEW H & SOKUNNARY JT	2083 TUSCANY WAY	PLEASANT GROVE	UT	84062
1306	YANG, KYUNG A ET AL TEE	5093 RIVER PARK WAY	PROVO	UT	84604
1307	YOUNG, DAYNE A & KIMBERLEY H JT	1517 W 80 SOUTH	PLEASANT GROVE	UT	84062
1308	YOUNG, J STERLING & TONYA A JT	1850 N 100 EAST	PLEASANT GROVE	UT	84062
1309	YOUNG, MELVIN J & DEANNA C JT	1009 W 1800 NORTH	PLEASANT GROVE	UT	84062
1310	YOUNG, RICHARD J & GWEN K	1820 N 100 EAST	PLEASANT GROVE	UT	84062
1311	YUZON, CRAIG P & ELLAVEE P JT	228 S PROCTOR LA	PLEASANT GROVE	UT	84062
1312	ZABRISKIE, GARY K	1740 W 700 SOUTH	PLEASANT GROVE	UT	84062
1313	ZENKIC, ESAD	9580 CANYON RD	CEDAR HILLS	UT	84062
1314	ZITTING, BENJAMIN B & JEAN S	334 MILLCREEK RD	PLEASANT GROVE	UT	84062
1315	ZONTS, JARED	150 N 100 EAST	PLEASANT GROVE	UT	84062
1316	ZUPAN, DENNIS B & BETTY JT	3985 N 900 WEST	PLEASANT GROVE	UT	84062

Pleasant Grove
Utah's City of Trees

Spring Edition
May 2009
www.plgrove.org

MAYOR'S MESSAGE

The City's fiscal year begins July 1, 2009. We are in the process of reviewing the budget for the 2009-2010 fiscal year. A special Council meeting will be held on Saturday, May 16th at 9am in the Council chambers. During this session, the Council will review the budget submission, ask questions and direct any changes.

With the national recession upon us, sales tax revenues have fallen behind previous years by about 4%. This prompted staff to trim the current budget spending in January to meet forecasted revenues. As a result, the City is on track to stay within revenue and expense projections without compromising essential services to the citizens and businesses.

Why is Pleasant Grove in stable financial condition during this recession? In 2007, the City was informed by Lindon that they would not be contracting for public safety with Pleasant Grove in 2008-2009. This amounted to a $1.8M reduction in revenue. The staff and Council set out over the remainder of 2007 and the beginning of 2008 to adjust its spending to match the reduced revenue. It achieved the new targets by July 1, 2008 in time for the current fiscal year. In addition, the City has maintained a conservative approach to budgeting and savings for the past 10 years.

When the recession hit during the latter part of 2008, the City was still in an ultra-conservative spending mode. This allowed the City to continue to operate and provide all essential functions and services without affecting staff, residents and businesses. We plan to continue this approach with the 2009-2010 budget to safe-guard the City from this economic downturn.

No single individual is credited with this financial good fortune. The entire staff and the Council worked together over the course of a year to tighten up, repair, reuse and conserve. The citizens understood the financial condition of the economy and were patient with the City by not requesting expanded services during this time. As a result, we are all benefiting from a conservative budget policy.

Please join us during our special budget session to observe how staff and Council work together to manage your resources. Please let the Council know of your approval and concerns about the 2009-2010 budget. Your comments are always encouraged and welcome.

Mayor@PGCity.Org.
Michael W. Daniels, Mayor

2009 CONCERTS IN THE PARK

East Side of the new Community Center
Every Sunday at 7:30 pm

June 7 . . . . . .Pleasant Grove Orchestra
June 14 . . . . . .Utah Children's Choir
June 21 . . . . . .Skyline Chorus
June 28 . . . . . .Walker Brothers

BUILDING PERMIT REQUIRED FOR ACCESSORY BUILDINGS: Please remember to obtain building permits for all accessory buildings larger than 120 square feet in size. Also, before building any accessory building, check with Community Development for the proper setbacks, so you don't have to move your buildings after they are constructed or installed

Pleasant Grove Firefighters
announce the annual

Fireman's Breakfast

Please come join us for breakfast at the fire station,
110 South 100 East, Pleasant Grove.
Saturday, May 30, 2009, 6:00 a.m. to 11:00 a.m.
Good Food, Good Friends, Good Fun
Be There or Be Hungry!!!
Tickets are available at the station
or at the door the morning of the breakfast.

TRANSPORTATION MASTER PLAN OPEN HOUSE

On Wednesday May 13, 2009 from 6:30 to 8:00 p.m. Representatives from the City and Horrocks Engineers will present updates to the
Transportation Master Plan and take comments from the public. Themeeting will be held in the City Council Chambers at 86 East 100 South.

A draft copy of the plan will also be available on the City Website.

UTAH COUNTY FAIR TIME:

Now is the time to begin planning and perfecting projects for the Utah County Fair. Check out the website for Open Class entry information. The Open Class contestants will include: gardeners, quilters, Dutch Oven enthusiasts, photographers, cooks and canners. For the first time, the Utah County Fair hosts a Dutch Oven cook-off, judged by the Dutch Oven National Champion.

As always, there is plenty of family friendly fare at the Fair: Carnival, animals, kids events and entertainment every day of the Fair.

Keep checking on the County Fair website.

YOU'RE INVITED!

Kiwanis is a global organization of volunteers dedicated to changing the world, one child and one community at a time. The Pleasant Grove Kiwanis Club is a active group of men and women working together to make a difference in individual lives and community programs. Current opportunities to serve include: Hope of America awards, Strawberry Days events and rebuilding Kiwanis Park at the mouth of Battle Creek Canyon. We welcome your suggestions for the park and involvement in our organization. Learn more at http://www.pgkiwanis.org/ or call Mike Chamberlain at (801) 830-5585.

UTAH CO. BEEKEEPERS

The Utah County Beekeepers Association (UCBA) would like to offer the citizens of your area the service of honey bee swarm removal (at no charge). Honeybees swarm from March to July and the event, although relatively harmless, can create quite a stir to the uninitiated. To facilitate the removal of swarms, your contact people can either call me directly or instruct the citizen(s) to do so utilizing the information below. (phone, email or web visit). Once the call is received, they will call the beekeepers on our list to retrieve the swarm. Alternately, a copy of local beekeepers is also available on our website, if you prefer to call the beekeeper for your area directly. If you have any questions, please Call Neil Shelley at 801-822-4114, or visit the website at utahcountybeekeepers.org.

48 HOUR PARKING ON STREETS: Please be reminded of the City parking ordinance, which does not allow for more than 48 hour parking on the street.

DEAR RESIDENT OR HOME OWNER

This letter is help you better understand the process of the Pressurized Irrigation Water System (secondary water).

Spring: The City is starting to pressurize the secondary water system at this time, please check your valve to make sure that is has been turned off from the winter months. About April 15th we start supplementing the lines to the system from the aqueduct; even though there is water in the system we ask that you wait until May 1st to start watering. You should open your valve slowly to check for leaks and broken pipes. If you have a broken pipe it is most likely to have been frozen throughout the winter months. The broken line could be from a low spot in the pipe where the water couldn't drain properly and froze. We suggest that you put a drain in where the pipe was broken when you fix your pipe.

In order for us to operate the system more efficiently, until the final tank is completed in mid august, we are asking you to help balance the system by following a watering schedule. This requires watering during the day as well as at night. We recognize that watering during the day is less efficient, but it is necessary to better balance water use with supply. We ask that if you have an even house number to water during the hours of 6:00 a.m. to 6:00 p.m. and those with odd house numbers water during the hours of 6:00 p.m. to 6:00 a.m. Please remember that we only water 6 days a week, Monday through Saturday and no watering on Sunday.

Fall: The watering period is normally complete in October. Typically the water to the aqueduct is turned off about October 10th. We will begin draining the system at this point. You can drain your lines and shut off the valves to your system anytime after this date. Failure to do this may cause damage to your system come next spring. The cities responsibility ends at the city valve.

If you have any questions please call the Public Works Office at 801-785-2941.

Thank you

Pleasant Grove City Public Works

GUTTER CLEAN UP: Now is a good time to make sure your gutters and storm drains are cleaned to prevent flooding.

PGBA GOLF TOURNAMENT!

Spring's in full swing! Dust off your golf clubs and gather your teams for the annual *Pleasant Grove Business Alliance Golf Tournament!* Thursday, June 4, 2009. Registration at 7:30 am, Scramble Format start at 9:00 am. Cost is $400 per team or $100 per person. Price includes green fees, breakfast, lunch, snacks, gift bags. Prizes will be awarded. Registration deadline is May 20, 2009. For more information, or to register your team, call 801-380-3179 or visit the PGBA website *www.pbgaut.com.*

Please join the Pleasant Grove Business Alliance the second Friday of each month for our *Monthly Member Meeting.* May's meeting features Representative Craig Frank speaking about recent legislative changes that may affect your business. Come prepared with questions or concerns. Meeting is free to attend and is open to all businesses and citizens. A $9 lunch is available for purchase. You must RSVP to reserve a lunch. Call 801-380-3179 or visit the PGBA website, *www.pgbaut.com.

FOX HOLLOW GOLF CLUB

We were so excited about the number of families that took advantage of the special last month that we decided to run it again in May. This is the time to work out all the kinks in your swing on the driving range.

Please bring a copy of your newsletter into the Pro Shop for this special offer.

Buy one small bucket of Balls and get the second one free!
Offer good until the end May 2009

Watch for future specials throughout the year.

We are also looking for a few volunteers to help throughout the year at the golf course. If you are interested or have questions please call Judy at 801-319-2291 and leave you name and number.

CENSUS TO BEGIN ADDRESS CANVASSING OPERATIONS

Beginning in late March 2009 the Census Bureau will be sending out address canvassers as a part of early operations. This workforce will walk or drive through neighborhoods to check that all addresses are in our database when the questionnaire is delivered in March 2010. This early operation is vital to ensuring a complete and accurate count. Each address canvasser will be equipped with a laptop or a hand held computer.

Census workers wear an official identification badge. Many address canvassers carry U.S. Census Bureau bags, making them easier to identify.

Many people don't realize that the Address Canvassing operation occurs as much as a year ahead of the official Census day on April 1, 2010. Address Canvassing is the first large field operation for the 2010 Census and it is designed to identify all housing units and other living quarters. Listers will use hand held computers with maps on them to verify and list structures, including the collection of GPS coordinates for each location. All information collected by Address Canvassers and other Census employees is kept strictly confidential and cannot be shared with any other persons, institutions, or agencies.

If you have questions or concerns please contact your local census office at 801-736-5040. For more information about the 2010 Census visit www.census.gov.

GREETINGS FROM YOUR FIRE CHIEF

April's showers have brought us May's flowers. No, we didn't plant a garden. We did begin another renovation project in the fire station. This one began as a small April sprinkle and ended in a deluge. Our small project, that began with moving just one little wall, exploded into a thunder storm demolition and re-building.

If you are familiar with the station, you will notice a big change. If you're not too familiar with this building, things may not seem extraordinary to you, but they are.

The changes we have made will help us serve you better and provide better facilities for the fire fighters.

I owe a bucket full of thanks to the fire fighters. Every crew worked tirelessly to accomplish this change. Plus, each crew has been somewhat displaced for the better part of the month. I appreciate their patience.

However, there are two local companies that stepped up and really made a difference. These companies participated in different facets of this project and generously supplied materials and labor. It is impossible for me to even calculate the value of their work, because it goes far and away beyond any assigned dollar figure. Because of them, this project turned out so well. Muddy Boys Full-Service Drywall generously donated much of the materials and labor for this project and Jespersen Painting provided the finish work. I would like to publically thank Mr. Ray Taylor, aka Muddy Boys Inc., and Mr. Brett Jespersen, for the donation of the quality work, and materials. In these times of economic difficulties, I understand the significance and impact of their generous donation. Their donation truly optimizes community service. Thank you!

We hope to see ya'll at the Fireman's Breakfast on May 30th, 6:00 am to 11:00 am. If you can't make it to the breakfast, drop by any time for a quick tour of the station, we would love to show you around.

TIMPANOGOS SPECIAL SERVICE DISTRICT GREENWASTE/COMPOST

Please be advised that the greenwaste/compost facility has changed thehours of operation. This change is effective April 20, 2009. Greenwaste may be dropped off Monday - Friday from 7:00 a.m. to 5:00 p.m. and on Saturday from 7:00 a.m. to 4:30 p.m. Compost may be picked up Wednesday - Friday from 7:00 a.m. to 5:00 p.m. and Saturday from 7:00 a.m. to 4:30 p.m. The facility will be open on Memorial Day and Labor Day but will beclosed for the other major holidays.

STRAWBERRY DAYS CONCERT

Strawberry Days Concert is June 16 starting at 7:30 in Veterans Park. The concert will feature Flashback Brothers with free strawberries and cream--

The Flashback Brothers will take you back to the days when bands played for dances and events.

They are a group of seasoned musicians who grew up playing and dancing to live music.

You will hear classic rock hits from the 50's, 60's, 70's and 80's; everyone a guaranteed crowd pleaser.

SENIOR NEWS

Senior Citizen News for May
Every Tues @ 10.30 AM Free Bingo
Every Thur @ 1.00 PM Free Movie
Friday, May 1, 12 noon. Presentation on upcoming tour to Hawaii
Wed, May 6th Free Blood Pressure / Blood Sugar Clinic
Fri, May 8th Life Screening Pre-registration Call 1-800-679-5192
Wed, May 20th Wendover Out-N-Back $20.00 Call for reservations 801-785-2818

PG BEAUTIFICATION/ SHADE TREE COMMISSION

It's a good time to make sure your sprinklers are watering effectively. For a FREE sprinkler check, call Julia Tuck at 801-851-8467 and leave your name, phone number, address and city, or send her an email at juliatuck@usu.edu The fine folks do these checks will come to your home or business, check the roots of your grass, your soil type, your water pressure and will set our cups to see how evenly your water is distributed. Optimize your water usage by setting an appointment today.

To receive a weekly email advisory informing you of potential problems and recommended solutions regarding fruit and ornamental tree problems, send an email to Marion Murray at marion.murray@usu.edu and ask to be put on the "Integrated Pest Management Tree Fruit Advisory" email list.

The Pleasant Grove Beautification Commission members will be giving out "Yard of the Month" awards again this year in June, July and August. Have fun creating in your yard and you just may be the recipient of this coveted award!

More article is available at www.plgrove.org.

RECREATION NEWS

For more detailed information please visit the Pleasant Grove Website at www.pgcity.org and click on recreation.

Soccer Registration (4 yrs old to 8th Grade) – Registration is May 22nd thru June 20th. League season will start on Saturday, July 27.

Jr. High Age Dance – School's Out For Summer Stomp – Friday, May 22nd from 7:00 to 9:30 p.m. Cost: With ID $3, Without ID $4. SCHOOL DRESS CODE REQUIRED! Parents are welcome.

Adult Coed Softball – (16 yrs & older) Registration will begin Friday, May 1st and go until filled.

We have some openings still available in the following camps and clinics. Call the Recreation Department for details.

Itty Bitty Ball (3 & 4 yr olds) – June 9, 11, 16, and 18
Soccer Camp Session I (6 to12 yrs) - June 1 - 4
Soccer Camp Session II (6 to 12 yrs) – June 8-11
Golf Club (7 to18 yrs) - Month of June (Tuesdays)
Volleyball Camp (7 yrs & older) – July 13 - 16
Basketball Camp (1st to 6th Grades) – July 20 – 23

SUMMER GYMNASTICS - This 6-week program (AM classes) begins June 22nd and goes through July 31st. To register call Kim Christensen at 492-3961.

The Jr. Olympic Skills Competition is a FREE skills competition that provides both, boys and girls ages 8 to 13, the opportunity to showcase their athletic abilities in four sports. Age groups consist of 8/9, 10/11, 12/13. Age is determined as of Aug. 31, 2009. Saturday, May 9th, 9:00am to 11:30am at the Pleasant Grove Community Center and PGHS Track & Field

Swimming Lessons - Lessons begin Monday, June 1st. New sessions will begin every other Monday through the summer.

Swim Team - Registration April 27-30 3:30 – 6:00 p.m.

Pleasant Grove Resident Passes

Swimming Pool - You MUST bring your city bill for proof of residence. (This is for the benefit of the P.G. taxpayer) Non-resident prices will be charged unless presented. Driver's Licenses and addresses on checks are not acceptable.

Early Sign-ups for lessons, passes, and parties
Registrations for lessons, passes & parties will be at the swimming pool on the following days from 3:30 until 6:00 p.m.
April 27- 30 Pleasant Grove Residents Only
May 4-7 and 11-14 All Others
Regular sign ups will begin Mon, May 18th

More programs are listed at the city website visit www.pgcity.org and click on recreation

PG ARTS COMMISSION

The Pleasant Grove Arts Commission is seeking volunteers to help with a variety of programs. Discover the rewards of serving your community by offering your hands, skills, knowledge, great ideas, talents and most of all, your willing heart. Lily Tomlin said, "I always wondered why somebody didn't do something about that. Then I realized I was somebody". Get involved! For more information, please visit the library to pick up an application, or download it from our website at http://www.pgcity.org/pgarts. You may also contact Wendy Vincent at utahwendy@gmail.com for more information.

UNITED WAY SUMMER OF SERVICE

United Way of Utah County is excited to announce its Summer of Service Program. The program consists of weekly service projects organized for youth volunteers throughout the county during the months of May-August.

We feel strongly that the Jr.High and High School-aged students of Utah County will benefit greatly as they become involved in meaningful and edifying service events. Not only will their participation provide a wholesome alternative to summer boredom, anxiety, loneliness or mischief, it will also open their hearts and minds--giving them a greater vision of their personal future. If you want more information, please contact Raquel Lopez, United Way of Utah County at 801-691-5330.

WATERING/IRRIGATION GUIDE--

Division of Water Resources ~ North Central Utah

March - No irrigation reccomended; April - No irrigation reccomended; May - 21 minutes every 4 days; June - 21 minutes every 3 days; July - 21 minutes every 3 days; August - 21 minutes every 3 days; September - 21 minutes every 6 days.

Minutes shown are to spray heads, double time zones for rotor heads.

If you have a poor-draining soil type like clay, water 3 separate times for 7 top 9 minutes.

DRIVER SAFETY CLASS

An AARP “Driver Safety class for those 50 and older will be taught at the Jacobs Senior Center (242 W. 200 S., Pleasant Grove) May 4th from 1:00 to 5:00 PM. This is a new 4 hour course. To register, call the Senior Center (785-2818). Fees for taking the class are as follows. AARP members with their membership card $12.00. Those who don’t present their card and others' $14.00. Checks made out to AARP are preferred. Completion of the class may qualify participant for a discount on their automobile insurance.

PARKING VEHICLES ON FRONT LANDSCAPING AREA OF RESIDENCE: City Code does not allow for parking of vehicles on the front landscape portion of residences. This includes cars, trucks, boats, trailers, sheds, etc.

WATER QUALITY REPORT

The Pleasant Grove Water Department is pleased to present the 2008 Water Quality Report. A copy of the report may be viewed online at www.pgcity.org. You may also pick up a copy of the report at City Hall, 70 South 100 East or Public Works, 323 West 700 South. Our goal is to provide you with safe and dependable drinking water by continually improving the water treatment process and protecting our water resources.

LIBRARY NEWS

Children’s Book Week **-** May 11th to 15th. All activities begin each evening at 7:00 pm downstairs of the library.

- Monday- Mad Science. Spark Children interest in science with this presentation. Designed to amaze and delight children of all ages.
- Tuesday- Twilight Tales Enjoy madness with Miss Kammi!
- Wednesday- “Rockin Utah.”Discover what families can do in Utah State Parks from the Rockin' Utah (Reaching Out Connecting Kids in Nature) Program representatives
- Thursday- Read with Great Reads! The book review will be "Sarah Plain and Tall"with games and crafts. Everyone invited!
- Friday-Pajamas and a movie night. Come enjoy "Bedtime Stories" starring Adam Sandler.

Great Reads for Girls: A Mother Daughter Book Club: Girls ages 8-16 with Mom or other caring adult. Join us for lively discussions, activities, friendship and fun! Sign up and Pick up a "Great Reads" booklist at the front desk. This month's book is "Sarah Plain and Tall" by Patricia MacLachlan.

ITeens: 1st and 3rd Tuesdays at 4:30 pm. The Teen Book group is for 7th grade and up. Games, crafts, book reviews. Also hear about many other great books from other teen readers!

R.E.A.D. Book Group: 10:00 am. Second Thursday of the month. Everyone who is interested is invited. This month will be "Home" by Marilynne Robinson. Reviewed by Tammra Salisbury.

BookEnders: 7:00 pm on the last Thursday of the month. Adults. BookEnders is a new discussion and reading book group. This month's book is "Pope Joan" by Donna Cross.

Summer Reading "Be Creative @ Your Library"
Registration starts May 12th.
Classes are limited in size.
Online registration, phone calls or in person.
Cost $5.00 for 8 weeks of Creativity!
Check it out on line!

DOOR TO DOOR SALES

With warmer weather coming residents of Pleasant Grove will probably notice an increase in solicitation by door-to-door solicitors. We would like to remind you that it is illegal to solicit door-to-door in Pleasant Grove without an approved Solicitor’s License. Solicitors are required to apply for a city license and obtain a BCI background investigation. Each solicitor will be issued a solicitors identification badge to be carried on their person. Company information and solicitor’s photo identification will be included on this badge. These requirements and procedures are set in place for the welfare and safety of all residents of Pleasant Grove City.

As a reminder, a majority of solicitors knocking on your door have not contacted the city, or followed city requirements, and will not have a solicitor’s license. What can you do to protect yourself from having a stranger come to your door trying to sell something? First, you should always ask the individual, “Can I see you’re Pleasant Grove City Solicitor’s Badge?” If the solicitor cannot produce this badge, it is recommended that you decline to do business with them and contact the police department at 801-785-3506.

Another procedure that can be done is to post a “No Soliciting” sign at the door. Per City code, by displaying this sign which ‘shall be posted on or near the main entrance door or on or near the property line adjacent to the sidewalk leading to the residence, constitutes to any solicitor that the inhabitant of the residence does not desire to receive and/or does not invite solicitors.’ If such a sign is posted, it is a violation of the ordinance for any solicitor to engage or attempt to engage in door-to-door solicitation. (Chap. 3-15-17, 18)

For more questions about the City’s solicitation ordinance please contact the Business Licensing Office at 801-785-5045.

Open House Attendance List

PLEASANT GROVE CITY TRANSPORTATION MASTER PLAN

OPEN HOUSE ATTENDANCE LIST

	NAME	ADDRESS	PHONE NO.	EMAIL ADDRESS
1	K. Craig Allred	1268 Hillside Drive P.G.	801-796-8059	Craig.Allred@DOT.gov
2	Gaylon and Merma Winters	71 South 1025 East Lindon	801-785-5801	
3	Liz Britt	637 South 1300 West	801-785-5218	ittybittie@hotmail.com
4	Debbie Levin	866 West 4000 North P.G.	801-701-0440	debilevin@hotmail.com
5	Greg Warburton	779 East Center P.G.	801-785-0099	greg779@gmail.com
6	Jeff Thompson	617 Canyon View Dr. P.G.	801-785-6881	jeff_thompson@byu.edu
7	David Flinders	482 West 3300 North P.G.	801-785-6452	
8	Philip Blake	29 South 2000 West P.G.	801-756-9234	
9	Bryant Burkett	523 North 300 West P.G.		
10	Robert Briem	793 North 390 East P.G.	801-756-9142	robbriem@gmail.com
11	David Told	501 South Main P.G.	801-836-419	davet@toldplumbing.com
12	Mario Gonzalez	1119 East 100 North	435-701-7822	ajamario@gmail.com
13	David Martinez	650 North 100 East	801-372-2371	
14	Coral Hicks	1030 North 60 West	801-785-3496	
15	David Pincock	1692 North 70 East P.G.	801-796-1397	docp@q.com
16	Frank Mills	466 East 100 South P.G.		
17	Mack Hall	1990 North 1300 West P.G.		
18	Stanley B. Smith	362 North 200 West P.G.	801-809-2350	
19	Dennis Hullinger	637 West 4000 North P.G.	801-785-5991	hull810@alpine.k12.ut.us
20	Dale Warburton	795 East 350 North	801-785-4040	
21	Trudi Levin	3939 West 9600 North	801-785-3356	trudilevin@hotmail.com
22	Fred Levin	3939 West 9600 North	801-785-3356	
23	Ralph Levin	866 West 4000 North P.G.	801-701-4040	Ralph.6444@hotmail.com
24	Debbie Levin	866 West 4000 North P.G.	801-701-4040	
25	David Phelon	1040 East 900 South P.G.	801-796-9346	
26	Kathy Phelon	1040 East 900 South P.G.	801-785-3705	
27	Wendy Vincent	28 South 850 East P.G.	801-796-8575	utahwendy@gmail.com
28	Jerry Brooks	183 East 100 North P.G.	801-770-4715	
29	David Bair	183 East 100 North P.G.	801-770-4715	davevb_99@yahoo.com
30	Lutie Larsen	993 West 1800 North	801-785-5130	
31	Jim and Raquel Wise	2211 North 600 West	801-796-1321	
32	Mark and Linda Hales	770 North 350 East P.G.	801-785-5659	lhales@pgcity.org
33	Tyler Yorgason	1267 North 750 West P.G.	801-796-8082	
34	Wendy Rupper	445 Valley View Dr	801-796-7520	wendy.rupper@gmail.org
35	Andrew Wooley	715 Apple Grove Ln	801-796-0671	
36	John & Eileen Johannesmeyer	1069 West 810 North	801-785-9778	johnj.email@gmail.com
37	David Howard	1645 East 1000 South	801-785-0647	howardd@digis.net
38	Deb Thoman	P.O. Box 364 P.G.	801-362-1337	
39	Matthew Wilson	1635 East Murdock Dr. P.G.	801-691-3495	
40	Clark Evans	752 North Locust Ave. Lindon	801-836-9902	cevans1950@gmail.com
41	Cindy Boyd	668 West 4000 North P.G.	801-836-8064	cindy_boyd@hotmail.com
42	Heidi Petter	634 West 4000 North P.G.	801-822-6434	heidigoose@hotmail.com
43	Jeff Lindstrom	396 South 100 East P.G.	801-870-1616	JP@Professionalheating.com

OPEN HOUSE ATTENDANCE LIST

PLEASANT GROVE CITY TRANSPORTATION MASTER PLAN UPDATE

MAY 13, 2009

Pleasant Grove
Utah's City of Trees

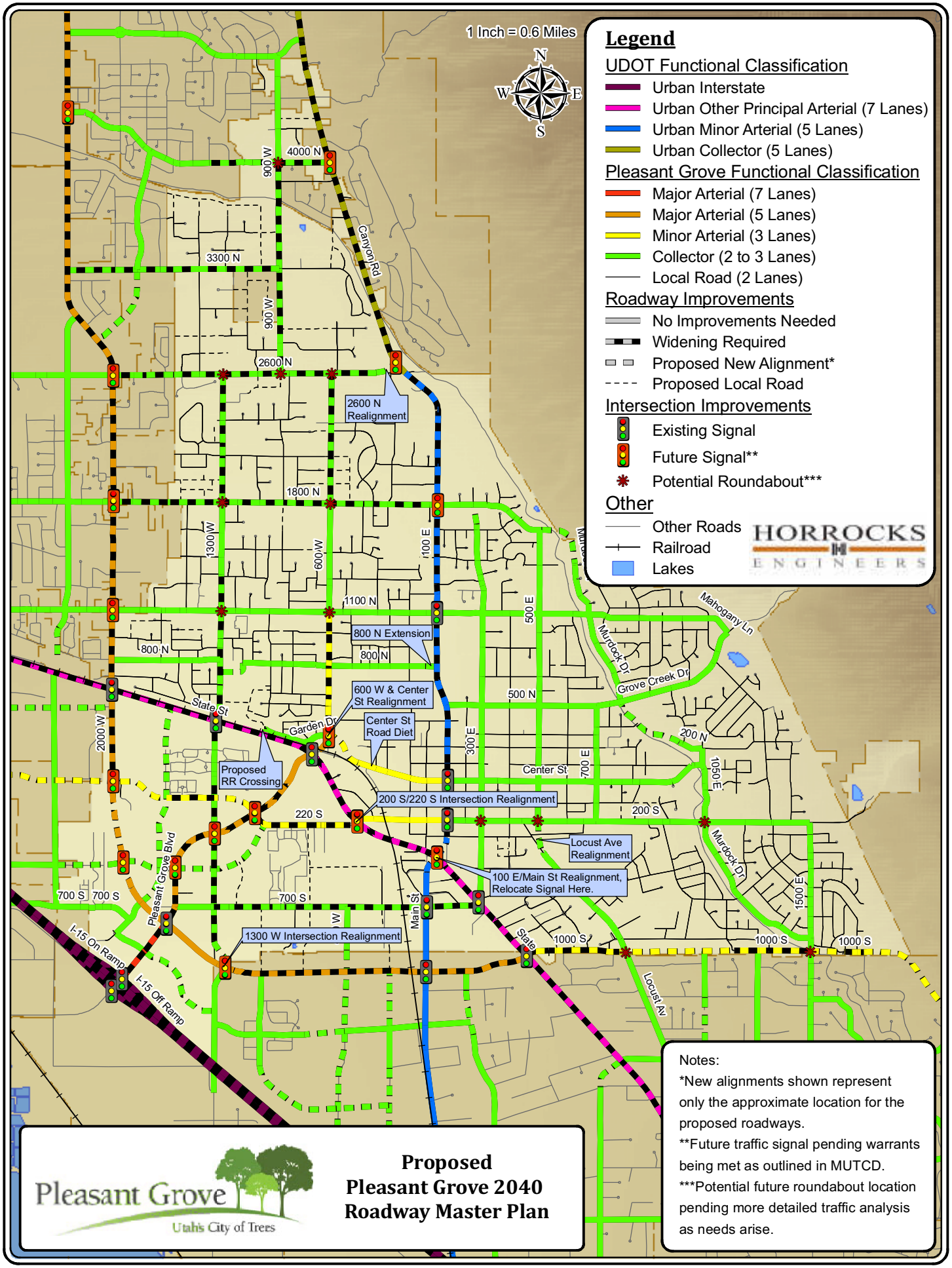
	Name (please print clearly)	Address	Telephone No.	E-mail
1	K. Craig Allred	1268 Hillside Dr, PG	801 796 8057	Craig.Allred@DOT.Gov
2	Haydon & Merna Winters	71 So 1025 E Lindon	801-785-5801	
3	Liz Brett	637 S. 1300 W	801-785-5217	ittybittie@hotmail.com
4	Debbi Levin	866 W 4000 N PG	801-701-0440	debilevin@hotmail.com
5	Greg Warburton	779 E Center P.G.	801-785-0079	greg779@gmail.com
6	Jeff Thompson	617 Canyon View Dr. PG.	801-785-6881	jeff_thompson@byu.edu
7	David Flinders	482 W. 3300 N. PG	801 785-6452	
8	P.L. Blake	29 S 2000 W P.G.	801-756-9234	
9	Bryant Burkett	523 N 1300 W PG		
10	Robert Brien	793 N. 390 E. AF	801-756-9142	robbriem@gmail.com
11	David Told	501 So main P.G.	801-836-4129	dave@toldplumbing.com
12	J. Mario Gonzalez	1119 EAST 100 NORTH	435-201-7822	ajamario@gmail.com
13	David Martinez	650 N 100 E	801 372 2371	
14	Coral Fields	1030 N 60 W	801 785 5491	
15	David Pincock	1692 N 70 E PG	801-796-1397	docp1@g.com
16	Frank Mills	466 E 100 So P.G		
17	Mack Hall	1990 N. 1300 W P.G.		
18	Stanley B Smith	367 N. 2000 W. P.G	801-809-2350	
19				
20				
21				
22				
23				
24				
25				

Pleasant Grove
Utah's City of Trees

	Name (please print clearly)	Address	Telephone No.	E-mail
26	Dennis Hollinger	637 West 4000 N PG	801 785 5991	hull81ø@alpine.k12.ut.us
27	Dale Warburton	795 E 3500	785-4040	
28	Trudi Levin	3939 W 9600 N	785-3356	trudi.levin@hotmail.com
29	Fred Levin	" "	" "	" "
30	Ralph Levin	866 W 4000 N	701-0440	Ralph.6444@hotmail
31	Debbie Levin	"	"	
32	David Phelon	1040 E 900 S. PG	801 796-9376	
33	Kathy Phelon	1040 East 900 South PG	801 785-3705	
34	Wendy Vincent	28 S 890 E PG	801 796 8575	utahwendy@gmail.com
35	Jerry Brooks	183 E. 100 N. Pl Grove	801 770-4715	
36	David Bair	1839 100 N pl grove	801 770-4715	Davevb_99@yahoo.com
37	Justin Larsen	993 W 1800 No	801-785-5730	
38	Jim & Raquel Wise	2211 N 600 W	796-1321	
39	Mark & Linda Hales	770 N 350 E Pl. Grove	785-5659	lhales@pgcity.org
40	Tyler Jorgensen	1267 N 750 W PG	796-8082	
41	Wendy Rupper	445 Valley View Dr	801 796-7520	wendy.rupper@gmail.org
42	Andrew Wooley	715 Apple Grove Ln	801 796 0671	
43	John & Eileen Johannesmeyer	1069 W 810 N	801-785-9778	johnj.email@gmail.com
44	David Howard	1645 E 1000 So.	801-785-0647	howardd@digis.net
45	Deb Thoman	P.O. Box 364 P.G.	801-362-1337	
46	Matthew Wilson	1635 E murdock dr PG	801 691-3495	wilsonscott@aol.com
47	CLARK EVANS	752 NORTH LOCUST AVE. LINDON	801-836-9902	cevans1950@GMAIL.com
48	Cindy Boyd	668 W. 4000 No PG	801-836-8064	cindy_boyd@hotmail.com
49	Heidi Potter	1034 W. 4000 N. PG.	801-822-6434	heidigoose@hotmail.com
50	Jeff Lindstrom	396 So 100 E PG	870-1616	JP@professionalheating.com

Send Scott Thompson info

Open House Displays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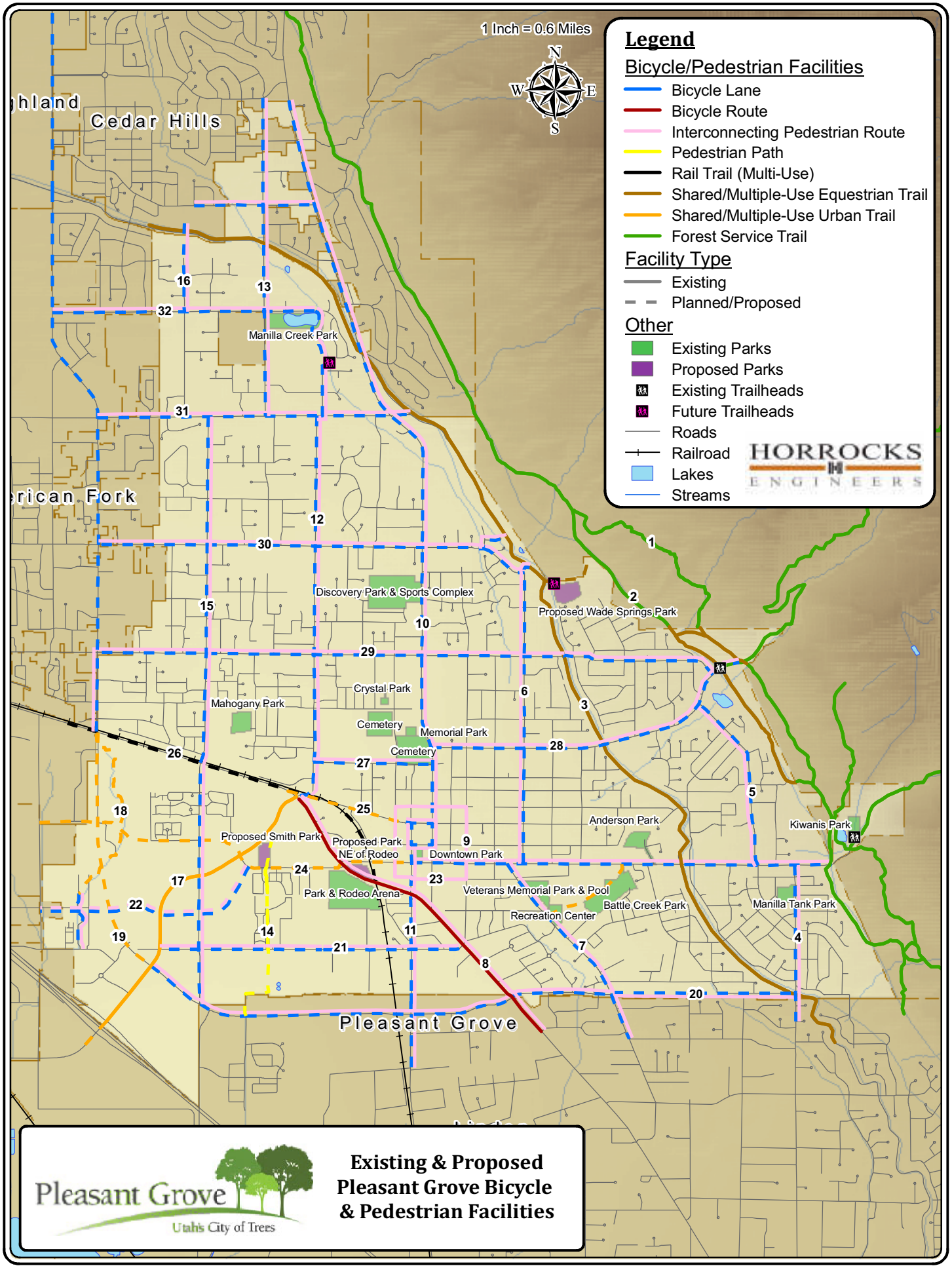
UDOT Functional Classification
Urban Interstate
Urban Other Principal Arterial (7 Lanes)
Urban Minor Arterial (5 Lanes)
Urban Collector (5 Lanes)
Pleasant Grove Functional Classification
Major Arterial (7 Lanes)
Major Arterial (5 Lanes)
Minor Arterial (3 Lanes)
Collector (2 to 3 Lanes)
Local Road (2 Lanes)
Roadway Improvements
No Improvements Needed
Widening Required
Proposed New Alignment*
Proposed Local Road
Intersection Improvements
Existing Signal
Future Signal**
Potential Roundabout***
Other
Other Roads
Railroad
Lakes
HORROCKS ENGINEERS
4000 N
900 W
3300 N
Canyon Rd
2600 N
2600 N Realignment
1800 N
1300 W
600 W
100 E
1100 N
800 N Extension
800 N
500 E
Mahogany Ln
Murdock Dr
Grove Creek Dr
500 N
600 W & Center St Realignment
Center St Road Diet
State St
Garden Dr
2000 W
Proposed RR Crossing
300 E
200 N
1050 E
Center St
700 E
200 S/220 S Intersection Realignment
220 S
200 S
Locust Ave Realignment
Pleasant Grove Blvd
700 S
100 E/Main St Realignment, Relocate Signal Here.
Main St
1500 E
1300 W Intersection Realignment
I-15 On Ramp
I-15 Off Ramp
1000 S
Locust Av
Pleasant Grove
Utah's City of Trees
Proposed
Pleasant Grove 2040
Roadway Master Plan
Notes:
*New alignments shown represent only the approximate location for the proposed roadways.
**Future traffic signal pending warrants being met as outlined in MUTCD.
***Potential future roundabout location pending more detailed traffic analysis as needs arise.


1 Inch = 0.6 Miles
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Bicycle/Pedestrian Facilities
Bicycle Lane
Bicycle Route
Interconnecting Pedestrian Route
Pedestrian Path
Rail Trail (Multi-Use)
Shared/Multiple-Use Equestrian Trail
Shared/Multiple-Use Urban Trail
Forest Service Trail
Facility Type
Existing
Planned/Proposed
Other
Existing Parks
Proposed Parks
Existing Trailheads
Future Trailheads
Roads
Railroad
Lakes
Streams
HORROCKS ENGINEERS
Cedar Hills
Pleasant Grove
Manilla Creek Park
Discovery Park & Sports Complex
Proposed Wade Springs Park
Crystal Park
Mahogany Park
Cemetery
Memorial Park
Cemetery
Proposed Smith Park
Proposed Park NE of Rodeo
Downtown Park
Park & Rodeo Arena
Anderson Park
Kiwanis Park
Veterans Memorial Park & Pool
Recreation Center
Battle Creek Park
Manilla Tank Park
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Pleasant Grove
Utah's City of Trees
Existing & Proposed
Pleasant Grove Bicycle
& Pedestrian Facilities

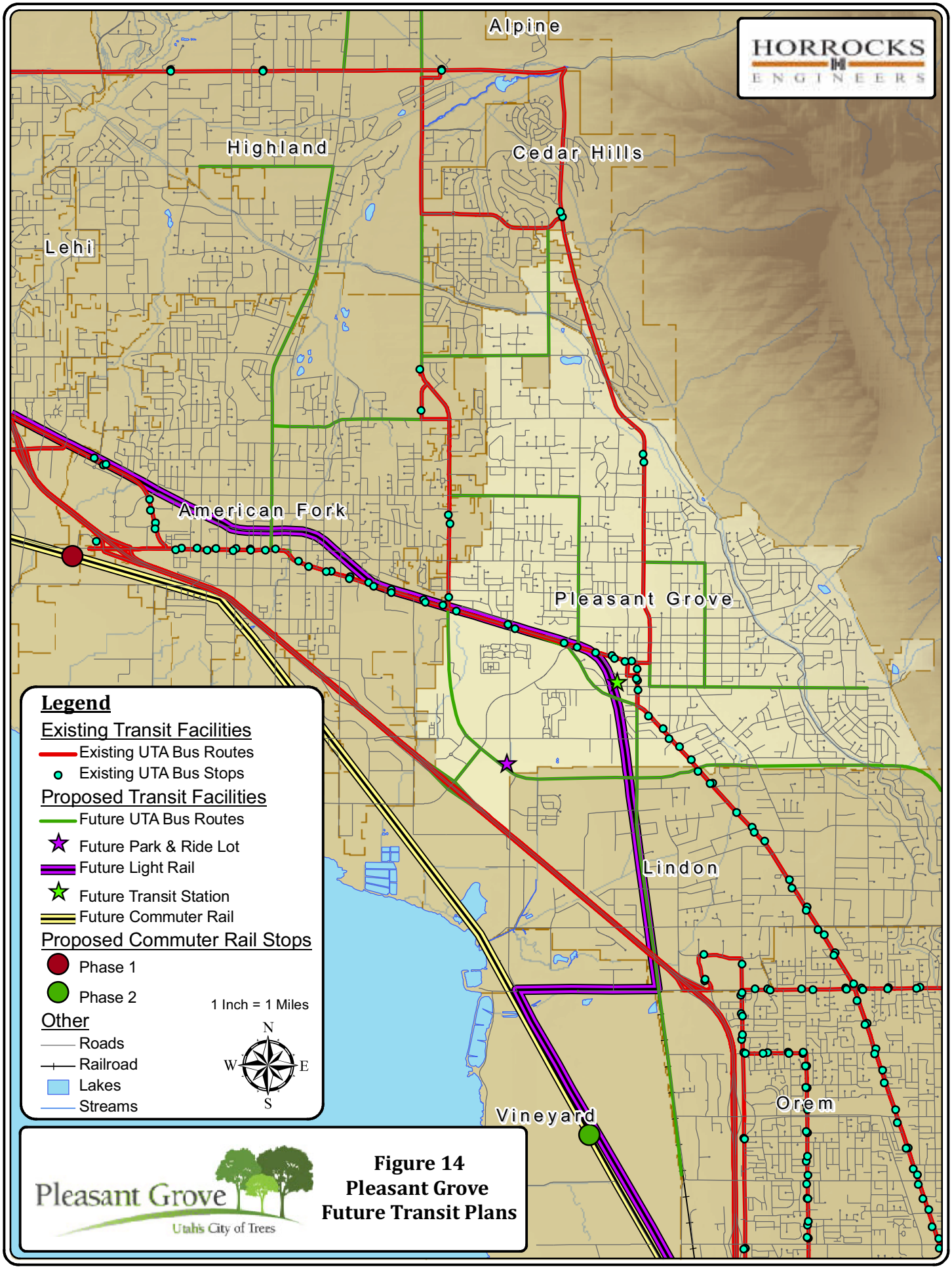

Figure 14
Pleasant Grove
Future Transit Plans

Open House Comments and Responses

Fold Here

Place
Postage
Stamp
Here

PLEASANT GROVE CITY
86 EAST 100 SOUTH
Pleasant Grove, UT 84062

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

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Name: _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

Phone Number: _____ **E-mail:** _____

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☐ If no, why?

_____

_____

_____

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☐ No ☐ If no, why?

_____

_____

_____

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☐ If no, why?

_____

_____

_____

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

_____

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PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: Muriel Elliott

Address: 665 W 4000 N

City: Pleasant Grove **State:** Ut **Zip:** 84062

Phone Number: 801-785-5647 **E-mail:** MurielKElliott@yahoo.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ **If no, why?**

It is much safer the way it is. Cars will go much faster with a wider road. It would destroy our environment and cost a fortune (This 9600 N or 3800 N pg)

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☑ No ☐ **If no, why?**

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☑ **If no, why?**

I'm not sure - We already have bus stops close.

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

I've known it was coming for a long time. I think there are ways that would not have such an impact on so many people

PLEASANT GROVE CITY
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Name: Wade & KayLee Fox

Address: 3905 N. 900 W.

City: Pleasant Grove **State:** UT **Zip:** 84062

Phone Number: 801-796-3903 **E-mail:** WFox3903@MSN.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ If no, why?

We disagree with the roundabout proposal @ 4000 N. 900 W. There is not enough growth or traffic flow potential to ever support or justify a roundabout at that location.

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☐ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☐ If no, why?

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

We also feel that 3 roundabouts on 2600 N. are unnecessary.

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: MARIO GONZALEZ

Address: 1119 EAST 100 NORTH

City: PG **State:** UT **Zip:** 84062

Phone Number: 435-201-7822 **E-mail:** ajamario@gmail.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☒ No ☐ If no, why?

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☒ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ☒ No ☐ If no, why?

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

BEING A RECENT MOVE-IN, I CAN SEE THE NEEDS TO IMPROVE TRAFFIC/TRANSPORTATION PLANS. FROM WHAT I HAVE SEEN IN THE MASTERPLAN, THE CHANGES ARE NECESSARY AND VITAL TO THE CONTINUED GROWTH OF PLEASANT GROVE.

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: Dennis Zullinger

Address: 637 West 4000 North

City: Pleasant Grove **State:** Ut **Zip:** 84062

Phone Number: 801 785 5991 **E-mail:** hull810@alpine.k12.ut.us

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ If no, why?

Houses on 4000 North are too close to the road - if widened to a 70' road or 106' right of way nearly every house on the road would need to be condemned. It would be better to have the original road plan where the next road to the South is the 70 road. It's already that wide.

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☐ No ☐ If no, why?

The Trails look good, but there should be more Access into Mt. Mahogany from more points than just the Forest Service Trail

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☒ If no, why?

UTA is a joke. It serves only those along State Street. Pleasant Grove shouldn't even participate unless they really serve our community. The Canyon Rd run is just twice a day

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

If 4000 North is widened the hill on Canyon Rd to the North would need to be removed. A stop light there would cause many Accidents unless the hill were removed. I have a hard time turning South of 4000 N without being run over. So far the widening of 4000 N is being done on just the South side. It needs to be widened equally on both sides.

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: Lutie Larsen

Address: 993 West 1800 No

City: Pleasant Grove **State:** UT **Zip:** 84062

Phone Number: 801-785-5130 **E-mail:** lutielarsen@ mcc.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ (somewhat) **If no, why?**

I think it is too much even with the growth we have had; things are much slower. I would like to see good basic road repair throughout. I am afraid the Master Plan will lock the citizens into a situation where we are forced to participate. I am even more concerned about getting into a citizen vs city scenario

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☐ No ☐ **If no, why?**

I don't think the bike lanes are good in the streets. I think they should be located off road -

3. Are you in favor of the proposed Transit Master Plan? Yes ☒ No ☐ **If no, why?**

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

Go a little more slowly. Don't sneak it through the City Council before people are aware. This is a big deal - and will require public support. Maybe do it in stages especially since the citizens are struggling economically. If PG is doing so well we should have money to put into street repair (maintenance)

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: Debbie Levin

Address: 866 W 4000 N

City: Pleasant Grove **State:** Ut **Zip:** 84062

Phone Number: 801-701-0440 **E-mail:** debilevin@hotmail.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☐ If no, why?

I think that the intersection at 900 West 4000 North is way to steep to have a light, you can't stop in the winter or you get stuck! It is a very dangerous road to get onto. I think this road should be a one way road or a dead end.

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☐ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☐ If no, why?

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

I will never agree to ever have our trees removed to widen the road. They are very historical over 150 years old. This would be a disaster to have this happen. Words can't discribe what this would do to alot of people.

This is our little lane! Please leave us alone!!

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: Fred + Trudi Levin

Address: 3939 W 9600 N

City: Cedar Hills **State:** UT **Zip:** 84062

Phone Number: 801-785-3356 **E-mail:** trudilevin@hotmail.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ If no, why?

If road is widened on 4000 N most of the houses will have to be condemned. A better solution would be to widen the road just south because it is already at least 70 feet wide. If traffic light @ 4000 N + canyon would be placed a major security issue will be put in place

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☐ No ☒ If no, why?

There really is not enough access to the trails

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☒ If no, why?

It is almost impossible to use UTA because the stops are not convenient + too far apart and the time is not frequent enough to assist us in our travel

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

If 4000 N. should be widened the street should be widened on either side. Again, the road south of 4000 N is wide enough to accomadate the proposed road.

PLEASANT GROVE CITY
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Utah's City of Trees

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Name: Ralph Levin

Address: 866 W 4000 N

City: PG **State:** **Zip:**

Phone Number: 801 701 0440 **E-mail:** Ralph-6444@hotmail.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ **If no, why?**

The intersection @ 900 West & 4000 North is a steep hill and people get stuck at top of the hill and when they attempt to go out on to Canyon road they create ALOT of near misses and accidents

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☒ No ☐ **If no, why?**

3. Are you in favor of the proposed Transit Master Plan? Yes ☒ No ☐ **If no, why?**

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

4000 North needs to be a one way street going down hill only to eliviate accidents, and the plan to put in a round about @ the bottom of that hill would require removal of my 150 year old trees which WILL NOT HAPPEN!!! Over my dead body will those trees be messed with - Once again the solution is to make 4000 Nort a ONE WAY STREET or possibly a dead end street

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: Kathryn R. Phelon

Address: 1040 East 900 South

City: Pleasant Grove **State:** Ut **Zip:** 84062-4207

Phone Number: (801) 785-3705 **E-mail:**

1. Are you in favor of the proposed Roadway Master Plan? Yes ☒ No ☐ If no, why?

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☒ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ☒ No ☐ If no, why?

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

When will you finish 1000 South between Locust and 1150 East?

My property borders this road. Will I have access to get onto this road from my back yard?

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TRANSPORTATION MASTER PLAN

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Utah's City of Trees

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Name: Heidi Potter

Address: 634 W. 4000 N.

City: Pleasant Grove **State:** UT **Zip:** 84062

Phone Number: 801-822-6434 **E-mail:** heidigoose@hotmail.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ **If no, why?**

Cars already go way too fast down 4000 N., and don't see us when pulling out of the driveways because of all the trees. It is just too dangerous to bring more traffic → (cont.)

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☒ No ☐ **If no, why?**

3. Are you in favor of the proposed Transit Master Plan? Yes ☒ No ☐ **If no, why?**

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

→ down this road, especially on a steep hill. We pull several cars out of the ditches in the winter for going too fast. This will be a disaster, especially during winter months. Please don't take away the beautiful trees and somewhat peaceful atmosphere we have enjoyed on this road for years!

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove

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Name: Randy & Jan Robinson

Address: 3745 N. 900 W.

City: Pl. Grove **State:** UT **Zip:** 84062

Phone Number: 801-785-2224 **E-mail:** randyjrobinson@gmail.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☒ **If no, why?**

Too costly for the population to justify the cost - Let the developers figure it out when Wadleys property is sold & developed

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☐ No ☐ **If no, why?**

Didn't see it - Sounds like a good idea - we have a fair amount of bicyclist & people exercising on these back roads

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☒ **If no, why?**

The one in front of Lone Peak High School we are -

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

Seems like an exhorbitant amount of money for the amount of cars we see use these roads at this point in time - We would like to know who did the survey of 20,000 cars daily - Maybe in a week or two - Not warranted at this time -

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

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Name: Wendy Rupper

Address: 445 Valley View Dr

City: Pleasant Grove **State:** UT **Zip:** 84062

Phone Number: (801)796-7520 **E-mail:** Wendy.rupper@gmail.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☒ **No** ☐ **If no, why?**

The locust realignment is a wonderful idea, however the saftey of the roundabout at locust + 200 concerns me. Stop signs are much safer for pedestrian traffice and I walk that way frequently

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☒ **No** ☐ **If no, why?** sidewalks needed also on Loader

Sidewalks, in my opinion, are a greater priority than widening for bike lanes. If its either or pick sidewalks! Have you considered Interconnecting **HANDICAP** routes as well. The magority of sidewalks in my neighborhood DO NOT have handicap ramps

3. Are you in favor of the proposed Transit Master Plan? Yes ☒ **No** ☐ **If no, why?**

Wishful thinking for 20 years in the Future

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

I'm in desperater need of sidewalks with handicap ramps especially on the NE corner of Locust and Orchard PLEASE make this a priority! The new recreation center makes much more pedestrian traffic on Locust; and, at the speed most people drive on that road, it is unsafe for pedestrians to walk on the side of the road.

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TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

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Name: Jeff Thompson

Address: 617 Canyon View Dr.

City: PG **State:** UT **Zip:** 84062

Phone Number: _____ **E-mail:** _____

1. Are you in favor of the proposed Roadway Master Plan? Yes ☒ No ☐ If no, why?

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☒ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ☒ No ☐ If no, why?

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

Love the idea of improving access to downtown and making it more attractive. Roundabouts would be a nice touch. Like bike trails, etc. as well

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Utah's City of Trees

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Name: _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

Phone Number: _____ **E-mail:** _____

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ■ If no, why?

Totally opposed to "roundabouts" anywhere

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ■ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ■ No ☐ If no, why?

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

600 West needs to be widened at two properties at 2211 N that stick out 12' into an otherwise straight street.

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Name: KENT & JILL WALKER

Address: 3805 NORTH 900 WEST

City: PLEASANT GROVE State: UT Zip: 84062

Phone Number: 801-796-7974 E-mail: _____

1. Are you in favor of the proposed Roadway Master Plan? Yes ☒ No ☒ If no, why?

1. HARVEY BLVD. DOES NOT HAVE THE TRAFFIC COUNT TO JUSTIFY IT AS A MAIN ARTERIAL STREET. THE SCHOOL AREA WILL NOT LEND ITSELF TO SPEEDS THAT OCCUR ON SUCH THOROUGH FARES.

2. THERE APPEARS TO BE A LACK OF COORDINATION WITH ADJOINING COMMUNITIES - ESPECIALLY IN OUR AREA (CEDAR HILLS/AMERICAN FORK)

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☒ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ☐ No ☐ If no, why?

DID NOT REVIEW

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

3. ROUNDABOUTS ARE A POPULAR (BUT NOT PROVEN SOLUTION) TO MOVING TRAFFIC BUT THE 3 ON 2600 NORTH DON'T MAKE ANY SENSE - (3 WAY?)

4. IN OUR AREA THE MAIN TRAFFIC FLOW SEEMS TO MOVE TO THE SOUTH & TO THE WEST. THE MASTER PLAN DOES NOT APPEAR TO TAKE THIS INTO CONSIDERATION (THERE ARE NO DESTINATION 'NODES' NORTH OR EAST OF OUR AREA EXCEPT A.F. CANYON.

5 THE GRID PLAN PROPOSED IN NORTH P.G. STARTS TO LOOK LIKE THE LAYOUT FOR OREM - (YUCK) AND YOU WILL LOOSE ALL SENSE OF NEIGHBORHOOD!

PLEASANT GROVE CITY
TRANSPORTATION MASTER PLAN

Pleasant Grove
Utah's City of Trees

Please submit this comment form before leaving the meeting tonight, or mail your comments to PLEASANT GROVE CITY, 86 EAST 100 SOUTH, Pleasant Grove, UT 84062. You may also e-mail comments to dlewis@pgcity.org; all comments must be received by the City on or before May 28, 2009. We greatly appreciate your input and participation in this process.

Name: Dennis + Betty Zupan

Address: 3985 N. 900 W

City: Pleasant Grove **State:** UT **Zip:** 84062

Phone Number: 801 796 5361 **E-mail:** bdzupan@yahoo.com

1. Are you in favor of the proposed Roadway Master Plan? Yes ☐ No ☑ If no, why?

Too many round abouts.
Not coordinated with the other Citys

2. Are you in favor of the proposed Trail/Bicycle Master Plan? Yes ☑ No ☐ If no, why?

3. Are you in favor of the proposed Transit Master Plan? Yes ☑ No ☐ If no, why?

4. Please list any comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.

The best way across the Valley, East-West is 2600 N. - Three round abouts would be too much of a change, slowing down traffic on the best road - a Signal light on 4000 N. + ST. Rd. 146 or Canyon Rd is not a good choice - move it south to the Cedar Hills Rd. The Round about at 4000 N. + 9th West is an over kill there is not and can not be enough traffic to Justify it.

Last Name	First Name	Street	City	State	Zip	Phone	Email	1. Are you in favor of the proposed Roadway Master Plan? If no, why?	2. Are you in favor of the proposed Trail/Bicycle Master Plan? If no, why?	3. Are you in favor of the proposed Transit Master Plan? If no, why?	4. Please list any additional comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.	Response
Larsen	Lutie	993 West 1800 North	Pleasant Grove	UT	84062	801-785-5430	lutielarsen@mac.com	No/Somewhat I think it is too much even with the growth we have had, things are much slower. I would like to see good basic road repair throughout. I am afraid the master plan will lock the citizens into a situation where we are forced to participate. I am even more concerned about getting into a citizen vs city, scenario	I don't think the bike lanes are good in the streets. I think they should be located off road.	Yes	Go a little more slowly. Don't sneak it through the city council before people are aware this is a big deal - and will requires public support. Maybe do it in stages especially since the citizens are struggling economically. If PG is doing so well we should have money to put into the street repair (maintenance)	1 & 4 - The TMP is intended to be a dynamic document that will be updated on a regular basis (every few years). The TMP is not intended to commit the City or its citizens to building specific improvements; however, it is intended to be used as a tool to assist the City as new development is built throughout the City. 2-There are certain safety concerns with bikes using roads with cars and trucks. However, streets are supposed to accommodate multiple modes of transportation, including bicycles. Properly designed on-street bike facilities, such as bike lanes and streets with wide shoulders, are reasonable safe and allow bicyclists the opportunity to get around, which is their right. With proper signage, pavement markings, and other measures, the safety of the bicyclist can be maximized.
Potter	Heidi	634 West 4000 North	Pleasant Grove	UT	84062	801-822-6434	heidigoose@hotmail.com	Cars already go way too fast down 4000 North and don't see us when pulling out of the driveways because of all the trees. It is just too dangerous to bring more traffic down this road, especially on a steep hill. We pull several cars out of the ditches in the winter for going too fast. This will be a disaster, especially during winter months. Please don't take away the beautiful trees and somewhat peaceful atmosphere we have enjoyed on this road for years!				1 - Comment noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns.
Gonzalez	Mario	1119 East 100 North	Pleasant Grove	UT	84062	435-201-7822	ajamario@gmail.com				Being a recent move-in, I can see the needs to improve traffic/transportation plans. From what I have seen in the master plan, the changes are necessary and vital to the continued growth of Pleasant Grove	4 - Comment noted.
Levin	Debbie	866 West 4000 North	Pleasant Grove	UT	84062	801-701-0440	debilevin@hotmail.com	I think that the intersection at 900 West 4000 North is way to steep to have light. You can't stop in the winter or you will get stuck! It is a very dangerous road to get onto. I think this road should be a one way road or dead end.			I will never agree to ever have our trees removed to widen the road. They are very historical over 150 years old. This would be a disaster to have this happen. Words can't describe what this would do to a lot of people. This is our little lane! Please leave us alone!!	1 & 4 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns.
Elliott	Muriel	655 West 4000 North	Pleasant Grove	UT	84062	801-785-5647	murielkelliott@yahoo.com	It is much safer the way it is. Cars will go much faster with a wider road. It would destroy our environment and cost a fortune (9600 North or 3800 North PG)		I'm not sure - we already have bus stops close.	I've known it was coming for a long time. I think there are ways that would not have such an impact on so many people	1 & 4 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns. 3-In the future, more than bus stops and express bus service will be needed as Utah County and Pleasant Grove grow. Plans include availability of and access to commuter rail service through the Intercity Connector facility, which is being developed as a high frequency bus route between Spanish Fork and Eagle Mountain and anticipated to be operational by 2015. Local circulator bus service will also be increased throughout the communities of Utah County, including Pleasant Grove.
Rupper	Wendy	445 Valley View Drive	Pleasant Grove	UT	84062	801-796-7520	wendy.rupper@gmail.com	The locust realignment is a wonderful idea, however the safety of the roundabout at locust and 200 concerns me. Stop signs are much safer for pedestrian traffic and where walking is frequent.	Sidewalks, in my opinion, are a greater priority than widening for bikes lanes. If its either or pick sidewalks! Have you considered interconnecting HANDICAP routes as well. The majority of sidewalks in my neighborhood do NOT have handicap ramps.	Wishful thinking for 20 years in the future	I'm in desperate need of sidewalks with handicap ramps especially on the NE corner of Locust and Orchard. PLEASE make this a priority! The new recreation center makes much more pedestrian traffic on Locust; and at the speed most people drive in that road, it is unsafe for pedestrians to walk on the side of the road	1 - Roundabouts have proven to be just as safe, if not safer than stop-signs for pedestrians when properly designed. If a roundabout is determined to be the best control for this intersection, the latest information will be used to design the roundabout to safely accomodate pedestrians. 2-There is no question that sidewalks should be the highest priority. However, they are more costly to construct and many times require additional right-of-way, making them more difficult to implement in comparison to painting a bicycle lane onto the pavement of an existing street. Handicap routes that are ADA compatible are also needed, but as with sidewalks, implementation of ADA facilities since there are relatively few ADA compatible sidewalks in the City, and therefore more problematic to implement. In order to implement more sidewalk and ADA compatible facilities, the City will need to allocate more financial resources on a regular basis for these improvements. 3-Plans identify transit projects for both long as well as short range implementation. To implement the transit element of the Plan will require substantial financial resources which the Mountainland Association of Governments (MAG) Plan has accounted for. 4- Comment noted.

Last Name	First Name	Street	City	State	Zip	Phone	Email	1. Are you in favor of the proposed Roadway Master Plan? If no, why?	2. Are you in favor of the proposed Trail/Bicycle Master Plan? If no, why?	3. Are you in favor of the proposed Transit Master Plan? If no, why?	4. Please list any additional comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.	Response
Levin	Fred & Trudi	3939 West 9600 North	Cedar Hills	UT	84062	801-785-3356	trudilevin@hotmail.com	If the road is widened on 4000 North most of the houses will have to be condemned. A better solution would be to widen the road just south because it is already at least 70 feet wide. If traffic light at 4000 North and canyon would be placed a major security issue will be put in place	There really is not enough access to the trails	It is almost impossible to use UTA because the steps are not convenient and too far apart and the time is not frequent enough to assist us in our travel	If 4000 North should be widened the street should be widened on either side. Again, the road south of 4000 North is wide enough to accommodate the proposed	1 & 4 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns. 3-It must be agreed that there is much to be desired about the current transit (bus) service in many parts of Utah County, including Pleasant Grove. That is why transit projects have been identified in the Regional Transportation Plan that hopefully will meet the transit needs in both the long and short term.
Thompson	Jeff	617 Canyon View Drive	Pleasant Grove	UT	84062						Love the idea of improving access to down town and making it more attractive. Roundabouts would be a nice touch. Like bike trails ect. as well.	4 - Comment noted.
Zullinger	Dennis	637 West 4000 North	Pleasant Grove	UT	84062	801-785-5991	hull810@alpine.k12.ut.us	Houses on 4000 North are too close to the road if widened to a 70 foot road or 106 foot right of way nearly every hose on the road would need to be condemned it would be better to have the original road plan where the next road to the south is the 70 foot road. It's already that wide.	The trails look good, but there should be more access into Mt. Mahogany from more points than just the Forest Service Trail	UTA is a joke. It serves only those along State Street. Pleasant Grove shouldn't even participate unless they really serve our community. The Canyon Road run is just twice a day	If 4000 North is widened the hill on Canyon Road to the north would need to be removed. A stop light there would cause many accidents unless the hill were removed. I have a hard time turning south of 4000 North without being run over. So far the widening of 4000 North is being done on just the south side. It needs to be widened equally on both sides.	1 & 4 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns. 2- We agree with you that more access points are needed to the Forest Service lands and Mt. Mahogany to the east of the City. In response to your comment, the City has added more planned trailheads to the Draft Transportation Master Plan that would allow greater access to the natural areas east of the City. Starting from the Pleasant Grove/Lindon City boundary and working northward the planned trailheads are: Murdock Drive Trailhead, Murdock Estates Trailhead, Wade Springs Park Trailhead, Wadley Springs Trailhead, Manila Creek Trailhead, and Harvey Boulevard Trailhead (Murdock Canal). The existing trailheads are: Kiwanis Park Trailhead, and Grove Creek Trailhead. 3-As with the response made above to the Levin comment, the transit or bus service in Utah County generally, and Pleasant Grove specifically can and should be significantly improved. Plans call for the addition of commuter Rail, light right, the Intercity Connector, Bus Rapid Transit, and expansion of local circulator bus service within the next 4 to 20 years. These improvements will make a difference in the ability of Pleasant Grove's residents to get around.
Levin	Ralph	866 West 4000 North	Pleasant Grove	UT	84062	801-701-0440	Ralph-6444@hotmail.com	The intersection at 900 West 4000 North is a steep hill and people get stuck at the top of the hill and when they attempt to go out onto Canyon Road they create A LOT of near misses and accidents			4000 North needs to be a one way street going down hill only to elevate accidents, and the plan to put in a roundabout at the bottom of that hill would require removal of my 150 year old trees which WILL NOT HAPPEN!!! Over my dead body will those trees be messed with - once again the solution is to make 4000 North a ONE WAY STREET or possibly a dead end street.	1 & 4 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns.
Phelon	Kathryn	1040 East 900 South	Pleasant Grove	UT	84062	801-785-3705					When will you finish 1000 South between Locust and 1150 East? My property borders this road. Will I have access to get onto this road from my back yard?	4 - The extension of 1000 South is a high priority (0 to 5 years); however, the actual implementation of this improvement is dependent on available funding. With this road being classified as a minor arterial, access will be restricted. Therefore, if your property is already accessible from the front, a secondary access would not be granted.
Wise	Jim	2211 North 600 West	Pleasant Grove	UT	84062			Totally opposed to "roundabouts" anywhere			600 West needs to be widened at two properties at 2211 North that stick out 12' into an otherwise straight street.	4 - As development occurs along this roadway, developers will be responsible to widen this roadway and install curb & gutter, park strips, and sidewalks.
Robinson	Randy & Jan	3945 North 900 West	Pleasant Grove	UT	84062	801-785-2224	randyw.robinson@gmail.com	too costly for the population to justify the cost - Get the developers figure it out when Wadley property is sold, and developed	Didn't see it - Sounds like a good idea - we have a fair amount of bicyclist people exercising on these back roads	The one in front of Lone Peak High School we are	Seems like an exorbitant amount of money for the amount of cars we see use these roads at this point in time - We would like to know who did the survey of 20,000 cars daily-maybe in a week or two- Not warranted at this time	1 & 4 - It is unclear to which part of the City you are referring. The cost of the recommended improvements will not be solely covered by the City. Impact Fees will be collected from developers and other funds are available to the City to construct some of the recommended improvements. It should also be noted that these improvements will be spreadout over atleast the next 20 to 30 years as land continues to be developed. 2-We agree with you that the development of bicycle and pedestrian facilities in the City is a good idea.

Last Name	First Name	Street	City	State	Zip	Phone	Email	1. Are you in favor of the proposed Roadway Master Plan? If no, why?	2. Are you in favor of the proposed Trail/Bicycle Master Plan? If no, why?	3. Are you in favor of the proposed Transit Master Plan? If no, why?	4. Please list any additional comments, concerns, and/or suggestions you may have relating to the overall Transportation Master Plan.	Response
Walker	Kent & Jill	3865 North 900 West	Pleasant Grove	UT	84062	801-796-7974		1. Harvey Blvd does not have the traffic count to justify it as a main arterial street. The school area will not lend itself to speeds that occur on such thorough fares 2. There appears to be a lack of coordination with adjoining communities-especially in our area (Cedar Hills/American Fork) 3. Roundabouts are a popular (but not proven solution) to moving traffic but the 3 on 2600 North don't make any sense -(3 way) 4. In our area the main traffic flow seems to move to the south and to the west. The master plan does not appear to take this into consideration (there are not destination "nodes" north or east of our area except American Fork Canyon. 5. The grid plan proposed in north Pleasant Grove starts to look like the layout for Orem (uck) and you will loose all sense of neighborhood!				1 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns. - Roundabouts have proven to be safer and just as efficient at moving traffic as a traffic signal when properly designed. If roundabouts are determined to be built along 2600 North, the latest design standards will be used to assure they operate as efficiently as possible.
Fox	Wade & Kaylee	3905 North 900 West	Pleasant Grove	UT	84062	801-796-3903	wfox3903@msn.com	We disagree with the roundabouts proposal at 4000 North 900 West. There is not enough growth or traffic flow potential to ever support or justify a roundabout at that location.			We also feel that 3 roundabouts on 2600 North are unnecessary	1 & 4 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns. - Roundabouts have proven to be safer and just as efficient at moving traffic as a traffic signal when properly designed. If roundabouts are determined to be built along 2600 North, the latest design standards will be used to assure they operate as efficiently as possible.
Zupan	Dennis & Betty	3985 North 900 West	Pleasant Grove	UT	84062	801-796-5301	bdzupan@yahoo.com	too many roundabouts. Not coordinated with other cities			The best way across the valley, East-West is 2600 North. Three roundabouts would be too much of a change, slowing down traffic on the best road - A signal light on 4000 North and State Road 146 or Canyon Road is not a good choice - move it south to the Cedar Hills Road. The roundabouts at 4000 North 9th West is an overkill there is not and cannot be enough traffic to justify it.	1 & 4 - Comments noted. Since the regional transportation master plan by MAG shows a need for an east/west regional facility in this area, City will continue to work with MAG, UDOT, surrounding cities, and local residents to develop a solutions to the transportation needs in this area. The City has developed four alternatives that are being considered. For the time being, the City has not decided on a specific alternative and will continue to study the issues to appropriately address residents concerns. - Roundabouts have proven to be safer and just as efficient at moving traffic as a traffic signal when properly designed. If roundabouts are determined to be built along 2600 North, the latest design standards will be used to assure they operate as efficiently as possible.

Appendix E: Resolution & Staff Report

RESOLUTION NO. 2009-016

A RESOLUTION AMENDING THE PLEASANT GROVE CITY TRANSPORTATION MASTER PLAN AS PROVIDED IN CHAPTER 5 OF THE PLEASANT GROVE CITY GENERAL PLAN, AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the transportation and circulation system of any community can be considered the framework of that community; and

WHEREAS, The City's goal is to have a good transportation system that provides quality circulation, regulates traffic appropriately, and that has vision for future growth; and

WHEREAS, concerns regarding transportation issues have increased as development has increased in the City of Pleasant Grove (the "City"); and

WHEREAS, to address said impacts and concerns, the City retained Horrocks Engineers Inc, to provide expert transportation consulting services and to assist in preparing an update of the Pleasant Grove City Transportation Master Plan; and

WHEREAS, the Mayor established a Transportation Master Plan Advisory Committee (the "Advisory Committee") to study transportation issues and work with Horrocks Engineers, Inc in preparing the Major Street Plan update; and

WHEREAS, Horrocks Engineers Inc, working with the Advisory Committee and City technical staff, prepared amendments to update the City's Transportation Master Plan; and

WHEREAS, on May 13, 2009 a public open house was held to review with the public the proposed amendments to the Transportation Master Plan and to receive input from the public on aspects of the amendments including:600 West alignment, 4000 North options, and 100 East widening.

WHEREAS, on June 23, 2009 the Pleasant Grove Planning Commission held a duly noticed public hearing to consider the proposed amendments of the City's Transportation Master Plan, and after such public hearing and upon considering the recommendation of Horrocks Engineers Inc, the Advisory Committee, and the public, the Planning Commission recommended that the City Council adopt the update of the Transportation Master Plan with amendments; and

WHEREAS, on June 23, 2009 the City Council held a duly noticed public hearing to consider the recommendation of the Planning Commission to update the Transportation Master Plan; and

WHEREAS, after considering the Planning Commission's recommendations, and the facts and comments presented to the City Council, the Council finds that the proposed update of the Pleasant Grove City Transportation Master Plan reasonably furthers the health, safety and

general welfare of the citizens of Pleasant Grove.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Pleasant Grove City, Utah County, State of Utah, as follows:

SECTION 1. Chapter 5 "Transportation" of the Pleasant Grove City General Plan is hereby amended as shown on Exhibit "A" which is attached hereto and incorporated herein by this reference.

SECTION 2. SEVERABILITY. The sections, paragraphs, sentences, clauses, and phrases of this Resolution are severable. If any such section, paragraph, sentence, clause, or phrase shall be declared invalid or unconstitutional by the valid judgment or decree of a Court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any of the remaining sections, paragraphs, sentences, clauses, or phrases of this Resolution.

SECTION 3. THIS RESOLUTION APPROVED and ADOPTED by the City Council of Pleasant Grove City, Utah County, Utah, this 23rd day of June, 2009.

Michael W. Daniels, Mayor

ATTEST:

Kathy T. Kresser, City Recorder

(SEAL)

Pleasant Grove
Utah's City of Trees

COMMUNITY DEVELOPMENT DEPARTMENT
86 East 100 South
Pleasant Grove, UT 84062
(801) 785-6057 Fax: (801) 785-5667
www.pgcity.org

PLANNING COMMISSION & CITY COUNCIL STAFF REPORT

Meeting Date: June 23, 2009 **Agenda Item Number: 1**

Issue: Public hearing to consider adoption of a Resolution regarding the adoption of the updated Pleasant Grove City Transportation Master Plan.

From: Degen Lewis
City Engineer

Applicant: Pleasant Grove City

Zoning: All zones

BACKGROUND:

Over the last four months Pleasant Grove City has been working on an update to the transportation master plan. The current plan was adopted in 2001 and significant growth has occurred within the City since that time. The update anticipated a refinement of the current plan with no major changes expected. Growth and street expansion since 2001 needed to be accounted for in road maps and the Capital Facilities plan. Staff has also noted a need for formal guidance and standards on access management for roads classified at collector level or higher. There was also a desire to include several road realignments that the City has considered at various times in the past. Need for these changes appears greater now and staff wanted them formally included in the plan so that development can be appropriately directed to accommodate the anticipated changes.

A draft of the plan was presented for review by the public at an Open House on May 13, 2009. The comments were generally positive. The most common concerns verbalized that evening focused on how Canyon Road was accessed from 4000 North. This area is more specifically addressed later. Written comments on the proposed plan update are included in an appendix in the final document along with a summary of these comments and how they were addressed in the plan.

The revised Pleasant Grove City Transportation Master Plan update includes:

(1) Amendment of the text of the Plan in its entirety. Most sections were expanded in scope and detail. The areas of access management and future street layout planning have had significant expansion. A discussion of traffic calming measures has been added. Trail and alternative transportation (non automobile) modes are discussed more fully.

(2) Amendment of the Street Master Plan Map. The Street Master Plan Map has been expanded in the information shown.

Local Street Vicinity Map
City ordinance requires the Planning Commission not only to adopt and maintain a Major Street Plan but also to adopt and maintain a vicinity map for the long range planning of local streets. Potential local streets are now shown on the Roadway Master Plan Map. The map is subdivided into a more detailed view in figures 8-10.

Roadway Realignments Or New Connections
There are several locations throughout the City where roads that need realignment or new connections to provide better long term traffic flow. They include:

- Shift of 1300 West (Proctor Lane) at 700 North in Lindon to reestablish the connectivity of Proctor lane south toward Utah Lake.
- Shift of 600 West and Center Street north of State Street so that 600 West connects directly with State Street and Center Street connects to 600 West to the north.
- Shift of 100 East and Geneva Road so that the two streets meet in a single intersection at State Street. This also includes a disconnection of Main Street from State Street.
- Shift of Murdock Drive east of 1500 East to the south so that it lines up with 1000 South. The existing Murdock Drive would disconnect from 1500 East but still service all homes along the street.
- Shift of 200 South and 220 South to align with each other and cross State Street at a right angle. Currently being accomplished through UDOT's project to widen State Street.
- Shift or 2600 North to the north as it connects to Canyon Road so that the intersection is squared up and widened to improve safety.
- New connection between Garden Drive and State Street at approximately 1000 West.

Intersection Improvements
The map now includes information regarding the type of traffic control ultimately needed at certain locations (primarily the intersections of collectors and arterials). Signals are shown where traffic volumes are anticipated to grow to levels that will meet the standards for traffic signals. Roundabouts (traffic circles) are shown at intersections where expected traffic demand will exceed the ability of a multi-way stop to handle but where a traffic signal would be unwarranted.

There are several routes where the expansion needed has changed from the previous plan and maps. Streets previously identified for expansion in the previous plan which no longer need expansion or the required expansion is less than previously forecast are listed below:

- 2600 North will function adequately as a three lane collector rather than a five lane arterial.
- 1100 North will function adequately as a three lane collector rather than a five lane arterial.
- 220 South from Pleasant Grove Boulevard to State Street and 200 South from State Street and Main Street will function adequately as a three lane collector rather than a five lane arterial.
- Center Street can be reduced from a five lane arterial to a three lane collector (road diet) and still convey the anticipated traffic. This may allow for additional park, trail, open space, or parking options along this portion of Center Street.

One street, 100 East from State Street to 1100 North was previously identified as a three lane collector, but is not expected to function at an acceptable level unless expanded to a five lane width. 100 East north of 1100 North had previously been identified as a five lane arterial.

(3) Amendment and/or inclusion of other Transportation Master Plan Maps, to include: 1) Roadway Functional Classifications Map, 2) Bicycle & Pedestrian Facilities Map, 3) Future Transit Plans Map, 4) Signal Inventory Map, 5) Transportation Improvement Program Map.

(4) Additional illustrations of potential roadway cross-sections, including a new class of road called residential sub-local which is narrower than a standard residential street. There are specific guidelines as to where these roads would be allowed.

DISCUSSION:

There is one area where staff desires specific guidance. This is the plan for improvements to 4000 North. This area generated the bulk of the written comment on the draft plan. Due to the feedback a separate discussion of this area and possible alternatives are listed in Chapter Five (see pages 48-50).

From an engineering point of view the option shown in the current transportation master plan is not recommended as it expects motorists to use a longer route with required left and right turns at an additional intersection while a more direct route exists. Experience indicates that motorists will use to most direct route (from a travel time standpoint). The option to widen 4000 North as shown in figure 17 is first recommended option. Widening 4000 North to a collector width will likely move the roadway within the standard setback for some homes and would be a significant change from the historical roadway. However, even installing a standard residential street would be a significant change from the current street.

A second alternative to provide a direct connection to Canyon Road would be to swing 4000 North south to line up with Monson Drive. This option would also remove the turns at the intersections and the realignment would take place on largely undeveloped land. There would be one home on 900 West that would need to be removed to make the new connection to the west. This option would also require Cedar Hills to modify their plans for 9600 North which would include reconstruction and abandonment of already completed collector status road improvements.

A third alternative is to continue with offset route as illustrated in the current plan. It will likely create congestion that would otherwise be avoided in the previous options and it is unusual to offset a collector roadway for such a short distance.

A fourth option of "Do Nothing" is outlined in the document but since option three above has previously been adopted by the City it is not really an option.

RECOMMENDATION:

Due to tonight's joint meeting, there are two actions needed. The Planning Commission needs to make a recommendation to approve / disapprove the proposed plan along with any recommended changes to the final document. After this the City Council needs approve / disapprove the final document along with any changes required.

PLANNING COMMISSION –

Staff recommends approval of the updated Pleasant Grove City Transportation Master Plan, based upon the following findings:

1. The process to update the Transportation Master Plan has been provided good opportunity for input from the public, staff, and the Planning Commission.
2. The updated Transportation Master Plan is consistent with the City's goals as represented in the General Plan.

CITY COUNCIL –
Based on the recommendations given in the forgoing action of the Planning Commission regarding the revised Transportation Master Plan and based on the above and other findings listed by the Commission, Staff recommends adoption of the resolution adopting the 2009 Pleasant Grove City Transportation Master Plan.

MODEL MOTION:
PLANNING COMMISSION –
Sample Motion for Approval – "I move the Commission to forward a positive recommendation to the City Council to approve the proposed 2009 Pleasant Grove City Transportation Master Plan, including the maps and exhibits therein, as attached.

List any additional findings....

Sample Motion for Denial – "I move the Commission to forward a recommendation to the City Council to deny the proposed 2009 Pleasant Grove City Transportation Master Plan, based on the following findings:"

List findings for denial....

CITY COUNCIL –
Sample Motion for Approval – "I move we adopt the Resolution #____ adopting the adopting the 2009 Pleasant Grove City Transportation Master Plan, including the maps and exhibits therein, as attached.

List any additional findings....

Sample Motion for Denial – "I move we deny Resolution #____ adopting the proposed 2009 Pleasant Grove City Transportation Master Plan, based on the following findings:"

List findings for denial....