

Downtown Talent Master Plan

Traffic and Parking Analysis



Prepared for:
Talent Urban Renewal Agency
Talent, Oregon

Prepared by:
Robert Bernstein, P.E.
Consulting Transportation Engineer/Planner

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Downtown Talent Master Plan Traffic and Parking Analysis

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Downtown Talent Master Plan

Traffic and Parking Analysis

INTRODUCTION

In 2006, the City of Talent adopted in concept the West Valley View Vision Master Plan, which was prepared under the auspices of the Talent Urban Renewal Agency. One of the longstanding goals of the City of Talent is to establish a vital downtown that grows with the community, and the West Valley View area plays an essential role in expanding and enhancing the downtown core for businesses and citizens. The adopted Master Plan concept, as shown in **Figure 1**, envisions and promotes mixed use development, includes a new street network design for the master plan area, and provides community-oriented amenities. The Master Plan's goals are to provide a safe and efficient transportation system, open up properties for business development or re-development, address awkward lot configurations and street geometries, support historic preservation, provide community amenities, and support the downtown core area for businesses and for citizen use. The purpose of the transportation element of the Plan is to design a new street network for the area that will incorporate alleyways, pedestrian accesses, and shared parking options. This report documents the traffic and parking analyses prepared for the West Valley View Vision Master Plan.

Purpose

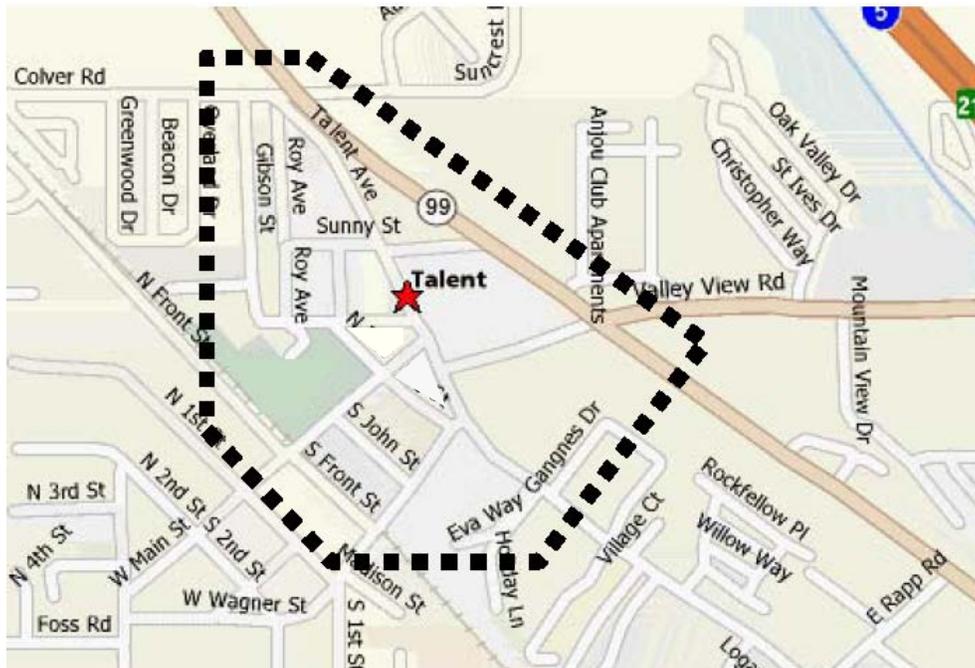
The basic purpose of the Traffic and Parking Analysis is to determine the traffic and parking needs of the initial stage and full buildout of the West Valley View Master Plan, as adopted in concept by the City Council. Within this general framework there are five specific purposes:

- (1) To ensure that the street improvements recommended by the West Valley View Vision Master Plan are integrated into the downtown Talent street system in a manner that maintains and enhances smooth convenient access and circulation throughout the downtown, including the Downtown Study Area (see **Figure 2**) and taking into consideration John Street and Ganges Drive;
- (2) To provide the traffic operations and parking needs analyses required by the City of Talent, to be included as an appendix to the Master Plan previously included as an amendment to the Comprehensive Plan and Transportation Systems Plan (TSP;)

Figure 1: Downtown Talent Master Plan



Figure 2: Study Area



- (3) To determine the street improvement needs to a level of detail and certainty that will allow engineering design to begin; and
- (4) To establish guidelines and recommendations for implementation of the Master Plan transportation elements, including phasing.
- (5) To address specific Issues of Concern (see Issues to be Addressed subsection, following).

Approach

The approach employed to prepare the Traffic and Parking Analysis for the West Valley View Vision Master Plan started with the Master Plan recommendations. As an initial step, the recommendations were reviewed in terms of their integration with the broader downtown Talent street and transportation system, and refinements were considered as appropriate.

The product of the Traffic and Parking Analysis is this report, which defines a complete and prioritized set of downtown Talent street and parking improvements, and documents the supporting technical analyses. The Traffic and Parking Analysis results were presented to URA officials, city staff and officials, and the public as appropriate.

Issues to be Addressed

The specific “Issues of Concern” identified by the public and City and URA staff for additional study and inclusion in this report are listed below.

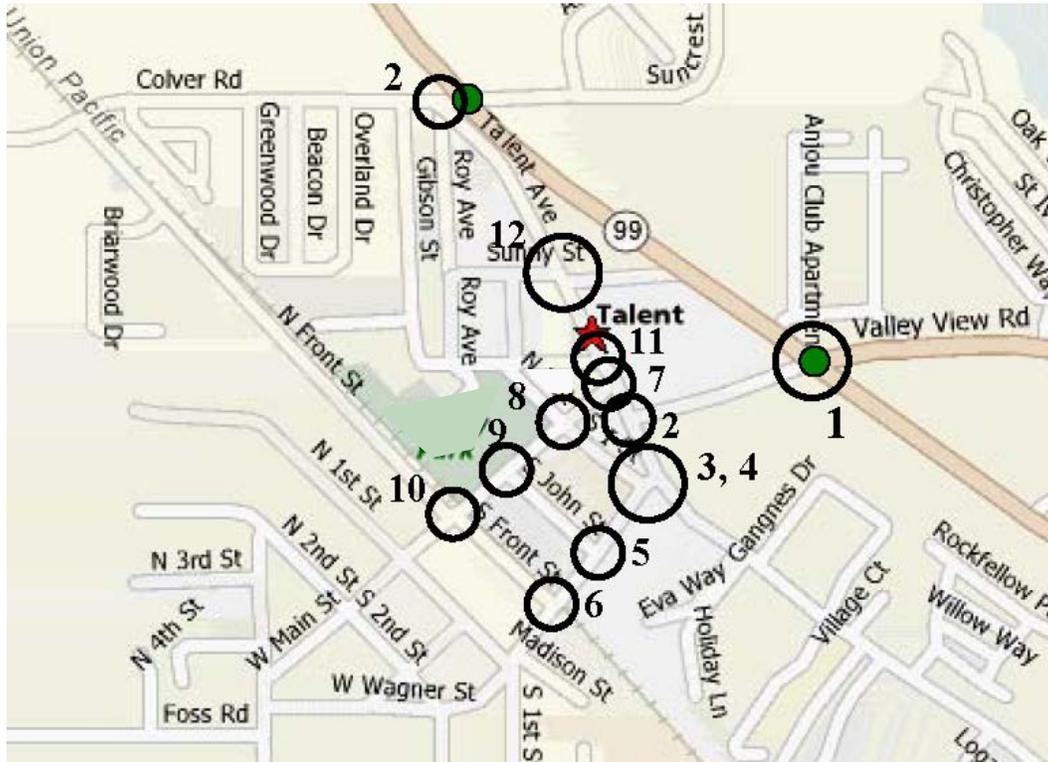
1. Lane configurations at all intersections (including feasibility or necessity for left turn lanes)
2. A second alternative to the Wagner Street extension (south of pottery buildings)
3. Phasing of Master Plan improvements (including interim plans for the new “roundabout” intersection and the remaining portions of West Valley View)
4. ODOT regulations regarding proximity of roundabouts to state highways
5. Options for improvement at intersection of Market Street (formerly I Street) and Wagner
6. Assessment of traffic signal warrant requirements at study area intersections
7. Perceived “narrowing” of Wagner extension between pottery buildings
8. Accommodation of all transportation modes (pedestrians, bicycles, RVTB bus service)
9. Compare parking analysis to existing parking ordinance and identify discrepancies or potential modifications to ordinance
10. Discuss methods for keeping through-traffic off of Gangnes
11. Deliveries/loading in alleys, marked zones, etc.

12. “Lining up” of alleys and minor streets
13. Shared parking opportunities adjacent to downtown study area (examples: Talent Friends Church parking lot, medical complex parking lot, etc.)

Study Area

The study area for the Traffic and Parking Analysis includes the streets and intersections potentially affected by Master Plan area traffic and street network changes. The study intersections are listed and shown in **Figure 3**.

Figure 3: Intersection Traffic Count Locations



- | | |
|-----------------------------|---------------------------------|
| (1) Hwy 99/W Valley View Rd | (2) Talent Ave/W Valley View Rd |
| (3) Talent Ave/Wagner St | (4) Market St/Wagner St |
| (5) John St/Wagner St | (6) Front St/Wagner St |
| (7) Talent Ave/Main St | (8) Market St/Main St |
| (9) John St/Main St | (10) Front St/Main St |
| (11) Talent Ave/LaPree St | (12) Talent Ave/Sunny St–New St |

EXISTING CONDITIONS

The existing conditions section contains a description of the existing transportation system and covers four topics: existing access and circulation, existing traffic volumes, existing traffic operations, and existing bus service.

Existing Access and Circulation

Roadway Configuration and Traffic Control

The street system providing access to/from the site is shown in **Figure 2** and **Figure 3**. Vehicular access into and out of downtown Talent is provided by West Valley View Rd to/from the east, Talent Ave to/from the north and south, and Wagner St and Main St to/from the west. West Valley View provides connections to Hwy 99 at a signalized intersection on the east edge of the study area, and further to the east, to I-5 at Exit 21. Talent Ave provides connections to Colver Rd and Hwy 99 (via Colver) on the north, and to Rapp Rd and Hwy 99 (via Rapp) on the south. Wagner St and Main St provide connections to city neighborhoods and schools west of downtown.

The function and classification of study area streets (as specified by the City of Talent Transportation System Plan) are described below.

West Valley View Rd is a Minor Collector that extends east from Talent Ave to and beyond a signalized intersection at Hwy 99. West Valley View Rd provides the only Hwy 99 connection into downtown Talent, and is the only full connection to Hwy 99 between Colver Rd and Rapp Rd.

Talent Ave north of Wagner St is a Minor Arterial that extends north to Colver Rd immediately west of the signalized Colver/Hwy 99 intersection, where it provides a connection to the county and regional road system to the north. South of Wagner St Talent Ave is a Major Collector that parallels Hwy 99 and provides connections to the neighborhoods and communities south of downtown Talent.

Main St and Wagner St are Major Collectors that extend west from Talent Ave into the residential neighborhoods west of downtown.

Market St (formerly I St) is a Local Street that connects LaPree St, Main St, and Wagner St immediately west of Talent Ave, and serves primarily internal downtown access and circulation needs.

LaPree St is a Local Street that extends west from Talent Ave into the residential neighborhoods north of downtown. LaPree also provides access for the northwest section of the downtown area.

John St is a Local Street that connects Main St and Wagner St west of Market St, and serves primarily internal downtown access and circulation needs.

Front St is a Minor Collector that extends north from Wagner St on the west side of the railroad tracks, and serves primarily the residential neighborhoods west of the tracks.

New St is a Local Street that extends east from Talent Ave to a right-in/right-out only intersection at Hwy 99. It provides limited local access for the northeast section of the downtown area.

Sunny St is a Local Street that extends west from Talent Ave into the residential neighborhoods north of downtown.

Intersection traffic controls are shown in **Figure 4**, and marked crosswalks and on-street parking spaces are shown in **Figure 5**.

Existing Traffic Volumes

The traffic volume information needed for the Traffic Analysis was derived from a set of 24-hour directional hose counts (daily volume counts) and peak period intersection traffic counts that were made in the study area in May, 2007.

Daily Volumes

Daily volume counts were made at five locations in and around downtown Talent: Talent Ave north of Gangnes, Talent Ave south of Colver, West Valley View Road west of Hwy 99, Main St west of Front St, and Wagner St west of Front St. The daily volume counts total are compiled in **Figure 6**, and the time-of-day distribution of the daily traffic volumes are compiled in **Figure 7**.

As shown in **Figure 6**, daily traffic volumes in downtown Talent are modest. With daily volumes of 6,500 vehicles per day (vpd) on West Valley View, 3,000-4,000 on Talent Ave, 4,000 on Main St, and 2,000 on Wagner St, downtown street system capacity is more than adequate.

As shown in **Figure 7**, despite the fact that there is some peaking in the morning and evening commute periods and around school dismissal time, traffic volumes on the downtown Talent street network are fairly constant all day long. This indicates that use of the street network is primarily local, and that there is little external through traffic on Talent Ave or elsewhere.

Figure 4: Traffic Control Inventory

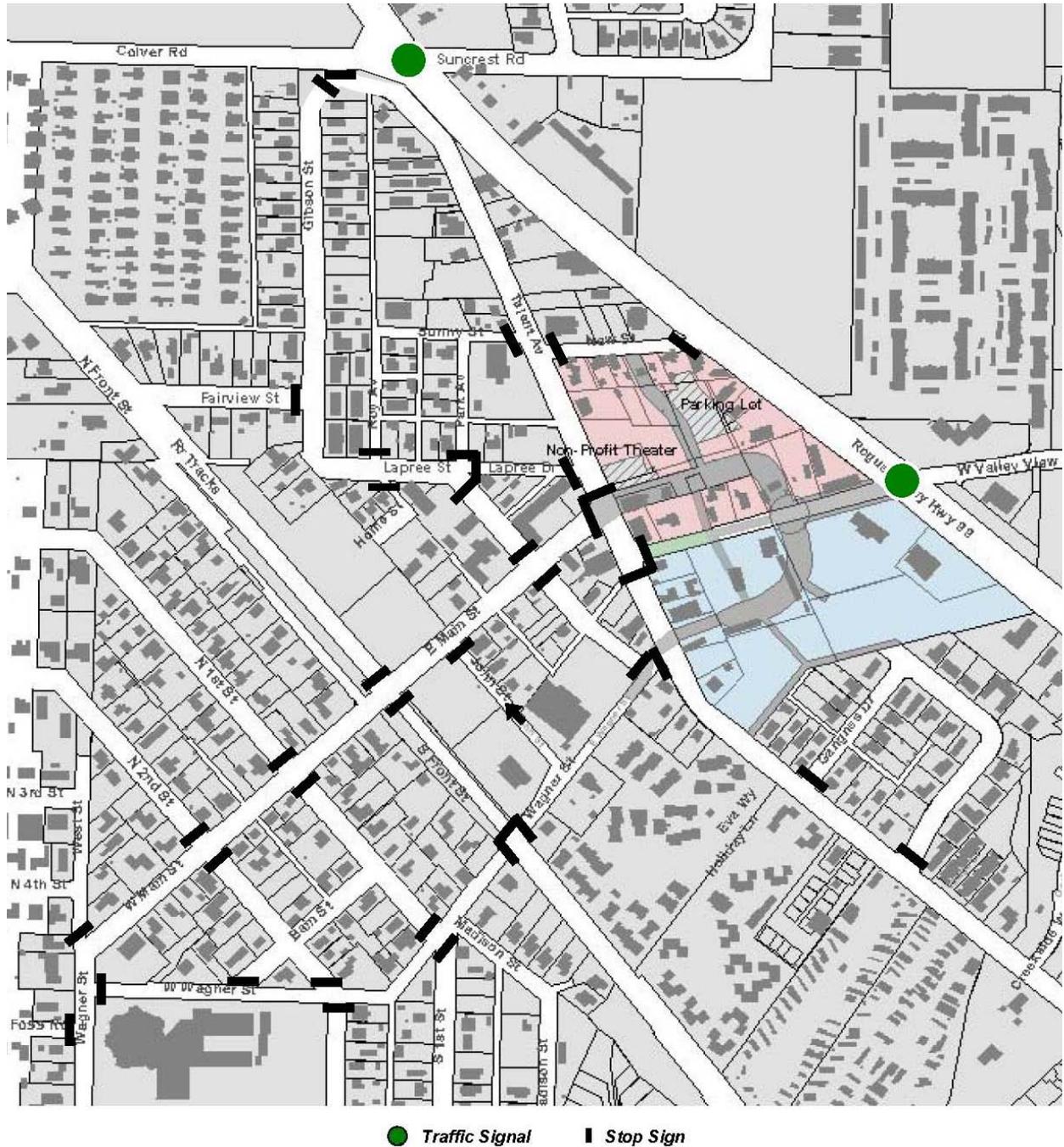
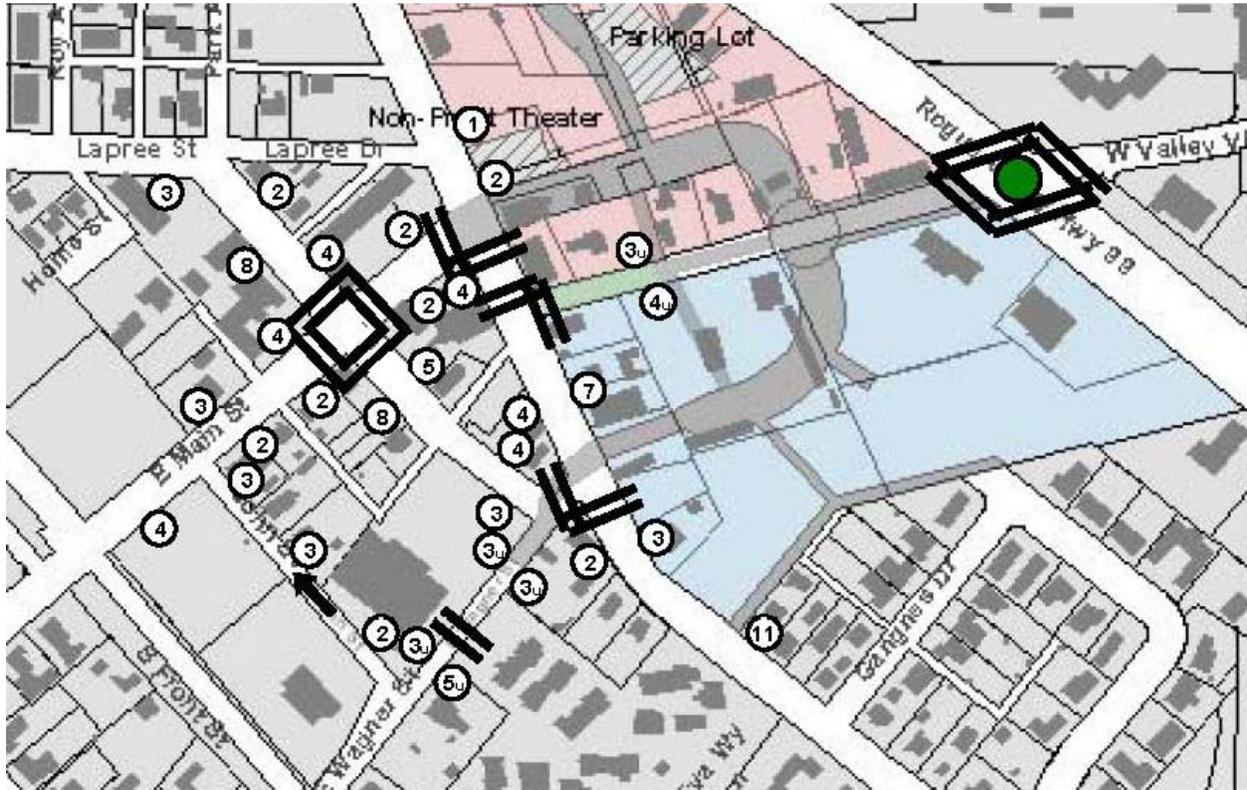


Figure 5: Cross-Walk and On-Street Parking Inventory



① On-Street Parking
(“u” = unmarked)

● Traffic Signal

== Marked Crosswalk

Figure 6: Existing (May, 2007) Daily Traffic Volumes

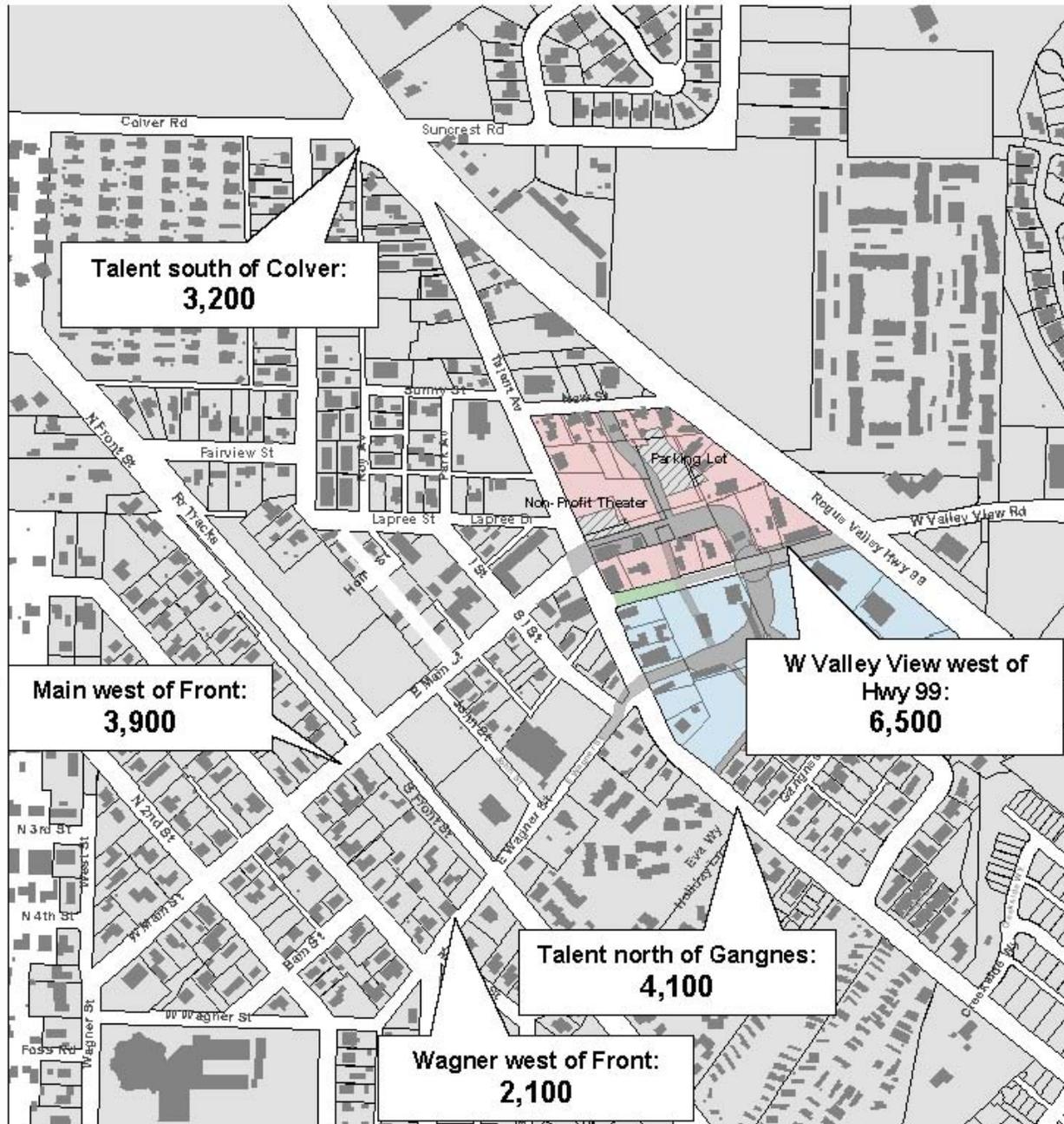
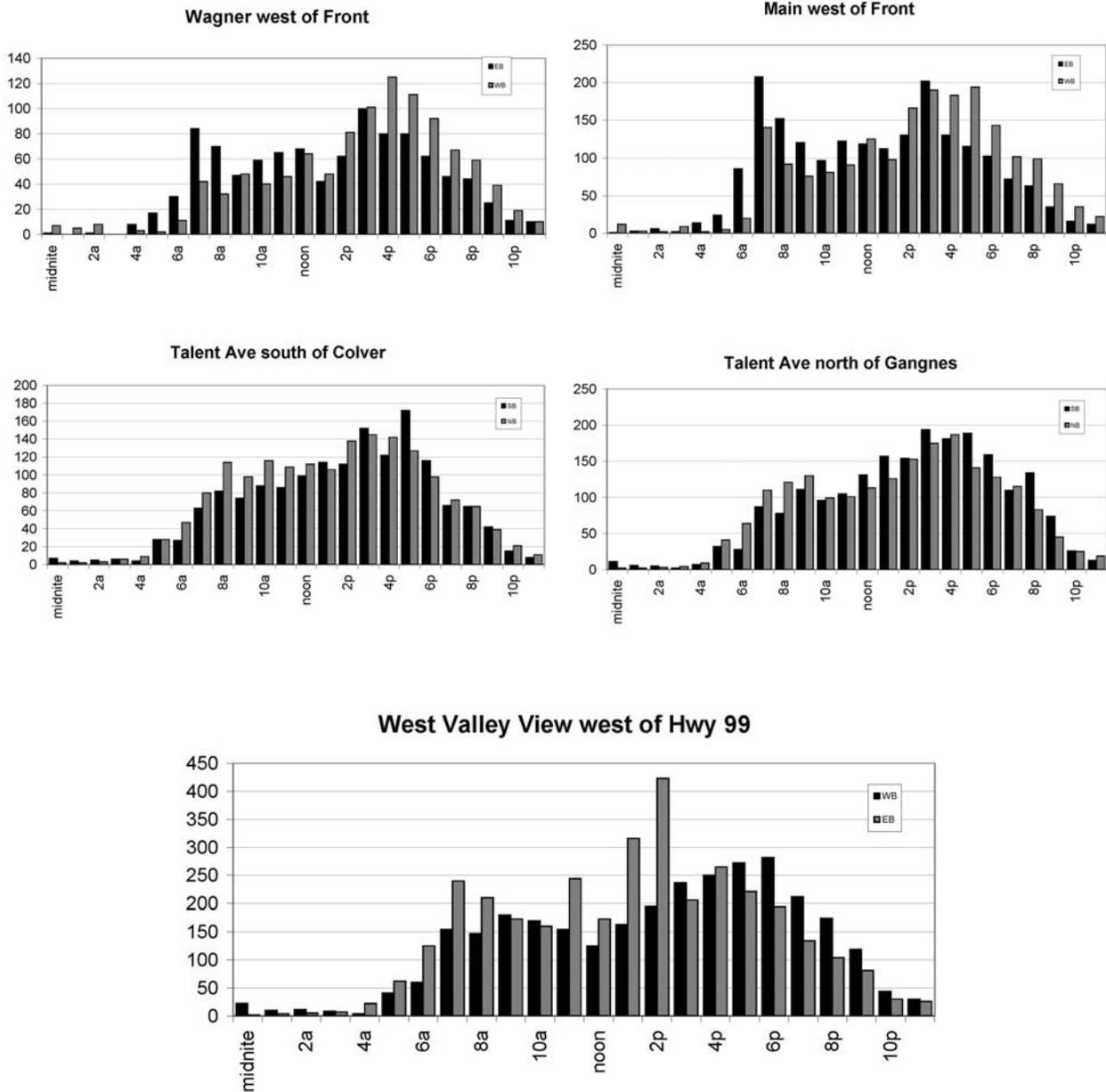


Figure 7: Existing (May, 2007) Time-of-Day Traffic Distribution



Peak Period Intersection Volumes

Weekday p.m. peak period intersection traffic counts were collected at 12 key intersections in the study area in May, 2007. Counts were made at Hwy 99/W Valley View Rd, Talent Ave/W Valley View Rd, Talent Ave/Wagner St, Market St/Wagner St, John St/Wagner St, Front St/Wagner St, Talent Ave/Main St, Market St/Main St, John St/Main St, Front St/Main St, Talent Ave/LaPree St, and Talent Ave/Sunny St–New St. The peak hour counts are compiled in **Appendix A, Figure A-1**, and the count reports are attached in **Appendix C**.

Existing Traffic Operations

The traffic operational analysis focused on the 12 key study area intersections. The operational analysis was performed for weekday p.m. peak hour conditions, when traffic volumes are greatest and operating conditions are the most difficult.

Methodology

The traffic operations analyses were based on the “Level of Service” (LOS) determined for each study intersection. The methodology is described in detail in **Appendix B**.

Results

Traffic operational analysis results are compiled in **Table 1**, which includes intersection level of service (LOS) and average delay for weekday p.m. peak hour conditions. As shown in **Table 1**, all study intersections have adequate capacity for current volumes and operate at LOS B or better conditions during weekday and weekend peak periods. Level of service analysis worksheets are compiled in **Appendix D**.

Existing Bus Service

In Talent and Jackson County, transit service is provided by the Rogue Valley Transit District (RVTD). RVTD operates one fixed-route bus line that serves Talent: RVTD’s Route 10 serves Medford, Phoenix, Talent, and Ashland (see **Figure 8**), providing service on 30-minute headways on weekdays.

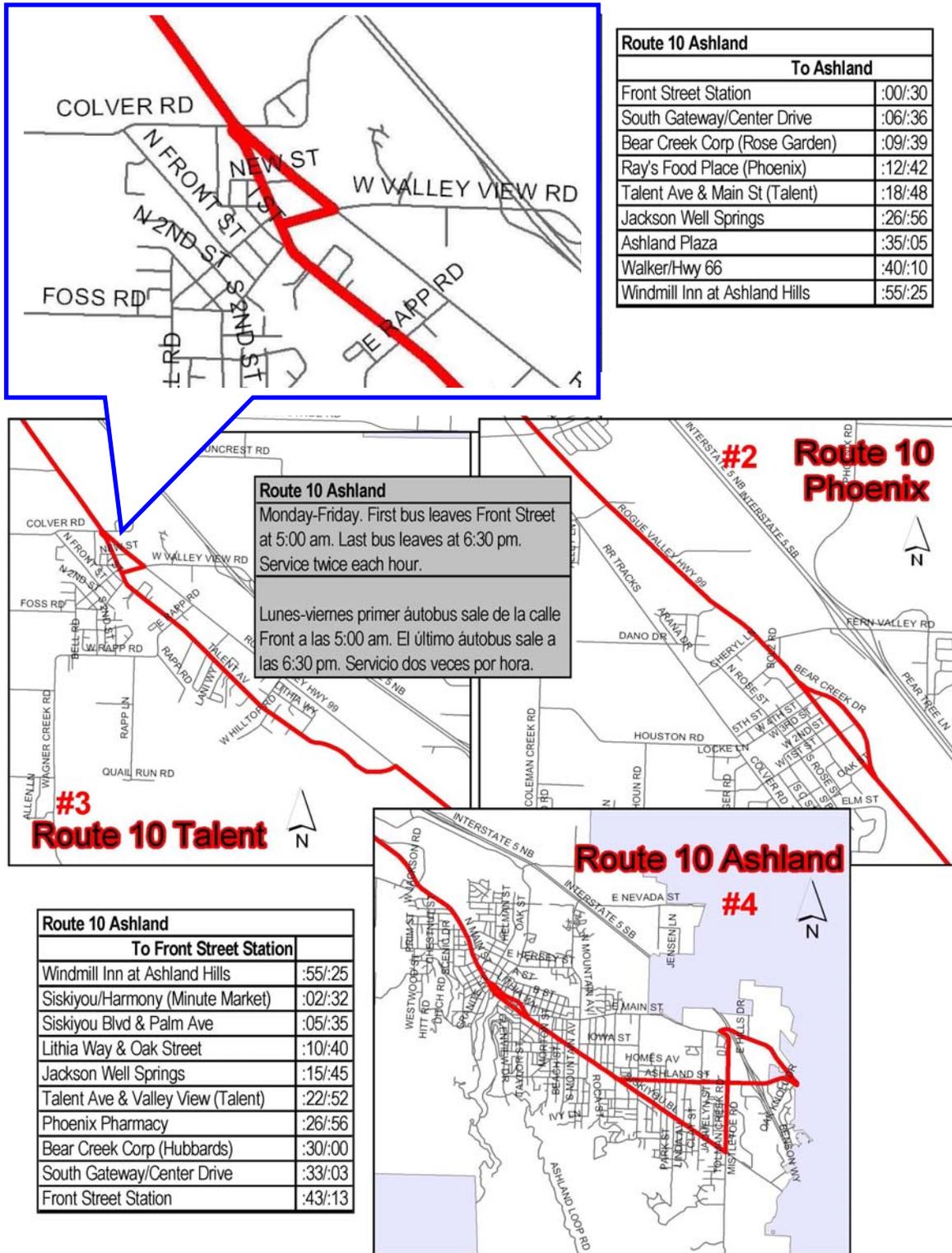
As shown in **Figure 8**, Route 10 operates on Hwy 99 north of downtown Talent and on Talent Ave south of downtown. Southbound service gets off Hwy 99 at Colver Rd and enters downtown Talent on Talent Ave, while northbound service follows West Valley View Rd from Talent Ave to Hwy 99.

Table 1: Intersection Level of Service (LOS) for Existing Conditions

Intersection	Existing (2007)	
	LOS	v/c ^{a)}
W Valley View / Hwy 99 <i>signalized intersection</i>	B	0.56
W Valley View / Talent Ave <i>NB Talent, WB Valley View [stop sign]</i>	<i>non-standard control LOS n/a</i>	
Colver Rd / Talent Ave <i>NB Talent [stop sign]</i>	B	0.23
Sunny St–New St / Talent Ave <i>EB Sunny [stop sign] WB New [stop sign]</i>	A A	0.01 0.05
LaPree St / Talent Ave <i>EB LaPree [stop sign]</i>	B	0.02
Main St / Talent Ave <i>SB Talent, EB Main [stop sign]</i>	<i>non-standard cti; LOS n/a</i>	
Wagner St / Talent Ave <i>EB Wagner [stop sign]</i>	B	0.23
Main St / Market St <i>NB Market [stop sign] SB Market [stop sign]</i>	B B	0.08 0.03
Main St / John St <i>NB John [stop sign]</i>	B	0.06
Main St / Front St <i>NB Front [stop sign]</i>	A	0.01
Wagner St / Market St <i>SB Market [stop sign]</i>	B	0.08
Wagner St / Front St <i>all-way stop intersection</i>	A	0.17

a) "v/c" = volume: capacity ratio

Figure 8: Downtown Talent Bus Service



Future Baseline Traffic Volumes

For the purposes of this traffic analysis, completion and full occupancy of the development envisioned by the Master Plan was assumed to occur within 10 years. Accordingly, 2017 was used as the analysis year for this study. In order to analyze the impacts of the proposed development in 2017, an estimate of 2017 “baseline”, or “background” traffic volumes was needed. (“Baseline traffic” is the volume of traffic expected to be on the street system without the Master Plan development.) For the purposes of this analysis, it was estimated that over the course of the 10-year analysis horizon (2007 to 2017), existing 2007 traffic volumes would increase by a total of 16% (1.6% per year)¹. Using this growth rate, 2017 baseline volumes were projected from the 2007 volume counts, and were reassigned to the Master Plan street network; estimated 2017 baseline peak hour volumes are compiled in **Appendix A, Figures A-2 and A-3**.

¹ 10-year traffic growth rate developed for and used in *Transportation Impact Study for ClearviewPlanned Development* (submitted to City of Talent on behalf of Archerd & Dresner LLC by Alex Georgevitch Consulting, February, 2005)

IMPACTS OF MASTER PLAN DEVELOPMENT

Master Plan Development Scenario

The development/redevelopment and the street network envisioned by the West Valley View Master Plan were used as the basis for this traffic and parking analysis. A layout plan of the development and street network defined by the Master Plan is shown in **Figure 1**, and the Master Plan development and street network are described in the following subsections.

Development/Redevelopment

The West Valley View Master Plan envisions development and redevelopment equivalent to approximately 80% of what is permitted by the underlying zoning. The traffic and parking analysis was based on full buildout of that 80% during the 2007-2017 planning period, which comprises:

- Multi-family residential: 219 units
- General office space: 67,200 sq ft
- General retail space: 44,800 sq ft
- Off-street parking: 780 spaces

Street Network

The Master Plan proposes a reconfiguration of the downtown street network, comprising extensions of Main St and Wagner St from Talent Ave to West Valley View Rd at a point midway between Talent Ave and Hwy 99, and the closure of West Valley View Rd west of that point. The reconfigured four-leg Talent Ave/Main St and Talent Ave/Wagner St intersections were analyzed with all-way stop control. Because the Wagner St Extension may not be built for some time, the Master Plan traffic analyses were prepared for two street networks: one that includes the Main St Extension only (Phase I) and one that includes the Wagner St Extension as well (Phase II).

Master Plan Traffic Analysis

Traffic Generation/Distribution

The volume of traffic generated by buildout of the development envisioned by the Master Plan was estimated using the *Trip Generation Manual, 7th Edition*, published by the Institute of Transportation Engineers. Trip generation estimates are compiled in **Table 2**.

Table 2: Master Plan Traffic Generation^{a)} and Parking Demand^{b)}

 Land Use Type	ITE Land Use Code	size	daily trips, weekday	weekday p.m. peak hour trips (in / out)	peak parking demand (off-street spaces provided by Master Plan)
Sector 1 (Northwest)					
Specialty Retail	814	6,800 sf	301	8 / 10	30
General Office	710	10,200 sf	112	3 / 13	24
Residential Condominiums	230	33 units	193	11 / 6	48
Sector 1 Total			606	22 / 29	102 (119)
Sector 2 (Northeast)					
Specialty Retail	814	9,500 sf	421	11 / 14	42
General Office	710	14,200 sf	156	4 / 18	34
Residential Condominiums	230	46 units	270	16 / 8	67
Sector 2 Total			847	31 / 40	143 (165)
Sector 3 (Interior)					
Specialty Retail	814	10,200 sf	452	12 / 15	45
General Office	710	15,300 sf	168	4 / 19	37
Residential Condominiums	230	50 units	293	17 / 9	73
Sector 3 Total			913	33 / 43	155 (177)
Sector 4 (South)					
Specialty Retail	814	18,300 sf	811	22 / 28	81
General Office	710	27,500 sf	303	7 / 34	66
Residential Condominiums	230	90 units	527	31 / 15	131
Sector 4 Total			1,641	60 / 77	278 (319)
MASTER PLAN TOTAL			4,007	144 / 189	678 (780)

a) Source: *Trip Generation Manual, 7th Edition*, Institute of Transportation Engineers

b) Source: *Parking Generation Manual, 3rd Edition*, Institute of Transportation Engineers

As shown in **Table 2**, Master Plan buildout is estimated to generate approximately 4,000 daily trips and 330 trips during the weekday p.m. peak hour. For the purposes of the Master Plan traffic analysis, all these trips were assumed to be “new” trips; i.e., trips that would be added to the street network in addition to existing traffic and increased “non-Master-Plan-related” background traffic growth. This assumption yields conservatively high traffic volume forecasts, as it includes no displaced trips² or internal trips³, and includes these trips in the traffic totals used in the analysis.

In order to determine the volume of site-generated traffic using each of the various streets and intersections in the study area, an estimate of the geographical distribution⁴ of site-generated traffic was made. The trip distribution was derived from the May, 2007, traffic counts, and is inherent in the site-generated traffic volumes compiled in **Appendix A, Figures A-4 and A-5**.

Traffic Volumes

Weekday p.m. peak hour site-generated traffic volumes for Master Plan buildout are compiled in **Appendix A, Figure A-4**; site-generated traffic volumes on the street network without the Wagner St Extension are compiled in **Appendix A, Figure A-5**. Weekday p.m. peak hour total traffic volumes with Master Plan buildout, with and without the Wagner St Extension, are compiled in **Appendix A, Figures A-6 and A-7**.

Traffic Operations

Traffic operational analysis results are compiled in **Table 3**, which includes intersection level of service (LOS) and average delay for weekday p.m. peak hour conditions. (Level of service analysis worksheets are compiled in **Appendix D**.) As shown in **Table 4**, in 2017 the West Valley View Rd/Hwy 99 intersection will operate at LOS C, and all other study intersections will operate at LOS B or better conditions during weekday p.m. peak periods. Without the Wagner St Extension, the Talent/Main intersection will operate at LOS C, but all other study intersections would operate at LOS A-B or better.

² “Displaced Trips” are trips generated by the existing development on the site, but will be displaced when the site is redeveloped. These trips are included in the existing traffic counts, but because they will be displaced they should not be included in the future volume totals.

³ “Internal Trips” are trips made within a mixed use development that do not use the city street network, and therefore should not be included in the future volume totals.

⁴ “Geographical distribution” of site-generated traffic are the proportions of that traffic that take various paths/routes through the street network enroute to/from the site.

Table 3: Summary of Intersection Level of Service (LOS) Analysis Results

Intersection	Existing (2007)		Master Plan (2017)		Master Plan, Main Ext only (2017)	
	LOS	v/c ^{a)}	LOS	v/c ^{a)}	LOS	v/c ^{a)}
W Valley View / Hwy 99 <i>signalized intersection</i>	B	0.56	C	0.72	C	0.72
Colver Rd / Talent Ave <i>NB Talent [stop sign]</i>	B	0.23	B	0.37	B	0.37
Sunny St–New St / Talent Ave <i>EB Sunny [stop sign]</i> <i>WB New [stop sign]</i>	A A	0.01 0.05	B B	0.03 0.08	B B	0.03 0.08
LaPree St–Sector 1 access / Talent Ave <i>EB LaPree [stop sign]</i> <i>WB Sector 1 access [stop sign]</i>	B –	0.02 –	B B	0.04 0.05	B B	0.04 0.05
Main St / Talent Ave <i>all-way stop intersection</i>	–	–	B	0.51	C	0.65
Wagner St / Talent Ave <i>EB Wagner [stop sign]</i> <i>all-way stop intersection</i>	B –	0.23 –	– B	– 0.56	B –	0.28 –
Main St / Market St <i>NB Market [stop sign]</i> <i>SB Market [stop sign]</i>	B B	0.08 0.03	B B	0.11 0.05	B B	0.11 0.05
Main St / John St <i>NB John [stop sign]</i>	B	0.06	B	0.07	B	0.07
Main St / Front St <i>NB Front [stop sign]</i>	A	0.01	B	0.02	B	0.02
Wagner St / Market St <i>SB Market [stop sign]</i>	B	0.08	B	0.10	B	0.10
Wagner St / Front St <i>all-way stop intersection</i>	A	0.17	A	0.20	A	0.20
Wagner Ext–Main Ext / W Valley View <i>roundabout</i>	–	–	B	0.56	B	0.59

a) "v/c" = volume: capacity ratio

RECOMMENDATIONS

Key Findings

- Although there is some peaking in the morning and evening commute periods and around school dismissal time, traffic volumes on the downtown Talent street network are fairly constant all day long (see Time-of-Day Traffic Distribution figures). This indicates that use of the street network is primarily local, and there is little external through traffic on Talent Ave or elsewhere.
- Current traffic volumes on the downtown Talent street network are low, and existing capacity is more than adequate.
- The capacity available on the future downtown Talent street network is adequate to serve future traffic, even at the conservatively high volumes forecasted for this study.
- The traffic generated by Master Plan development can be easily accommodated on the downtown Talent street network (including the proposed West Valley View–Main Ext–Wagner Ext roundabout). Turn lanes are not needed at any of the downtown intersections, nor is signalization (in fact, volumes do not come close to meeting signal warrants; consequently, signals could not be installed even if they were desired).
- The traffic generated by Master Plan development also can be accommodated on the downtown Talent street network if only the Main Ext is open (i.e., if the Wagner Ext is delayed and has not been built).
- Peak parking demand of the Master Plan development can be accommodated by the new off-street parking facilities proposed as part of the Master Plan.

Recommendations

Street Configuration and Traffic Control

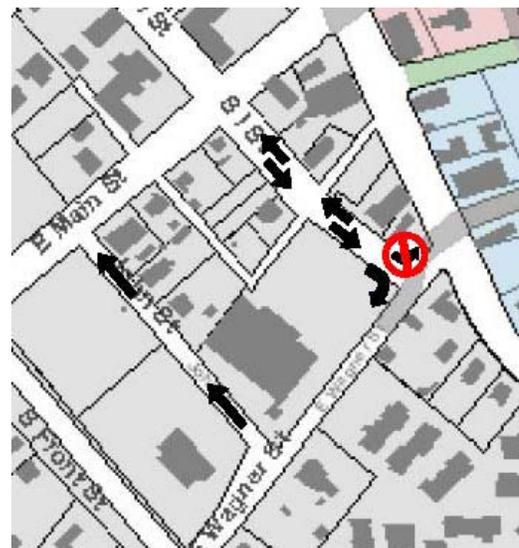
- Provide all-way stop (four-way stop) control at the Talent Ave/Main–Main Ext and Talent Ave/Wagner–Wagner Ext intersections.
- Retain single-lane approaches to all intersections.

- Realign LaPree to the north at Talent Ave (to increase spacing between the LaPree and Main intersections on Talent Ave), and align the driveway access to the Sector 1 parking lot directly across from it. (See **Figure R-1**)
- Consider prohibiting left turns from Market onto eastbound Wagner, as such maneuvers are problematic under most circumstances. (See **Figure R-2**) (The left turn from Wagner onto Market should be retained, because it is not so problematic, and the benefits of removing it do not justify the access/circulation limitations and inconveniences its removal would create).
- Locate West Valley View roundabout far enough west to meet ODOT roundabout-intersection spacing standards⁵ in order to ensure that queues on eastbound West Valley View Rd at Hwy 99 do not affect roundabout operation.
- Design the West Valley View roundabout to accommodate RVTB buses and emergency vehicles.

Figure R-1: Lapree Realignment



**Figure R-2:
Market-Wagner Left Turn Prohibition**



⁵ It should be noted that the ODOT standards do not really apply to the West Valley View roundabout, inasmuch as the ODOT standards are intended to ensure that roundabouts placed on the state highway system are not affected – i.e., clogged – by traffic queuing back from upstream signalized intersections. Because the West Valley View roundabout is not on the state highway system and because it will not impact traffic operations at the state’s Hwy 99/West Valley View Rd intersection, the spacing standards are not applicable.

- In order to improve traffic safety conditions at the Hwy 99/West Valley View Rd intersection⁶, modify the traffic signal to provide a protected left turn phase for eastbound West Valley View Rd traffic turning left onto northbound Hwy 99.
- The West Valley View roundabout can and should be constructed as part of the initial phase of Master Plan development (i.e., when the Main St Extension is built and West Valley View from Talent Ave to the Main St Extension is closed), as there are no operational advantages or significant cost savings to be gained by installing stop sign control on an interim basis.

Pedestrian Improvements (See **Figure R-3**)

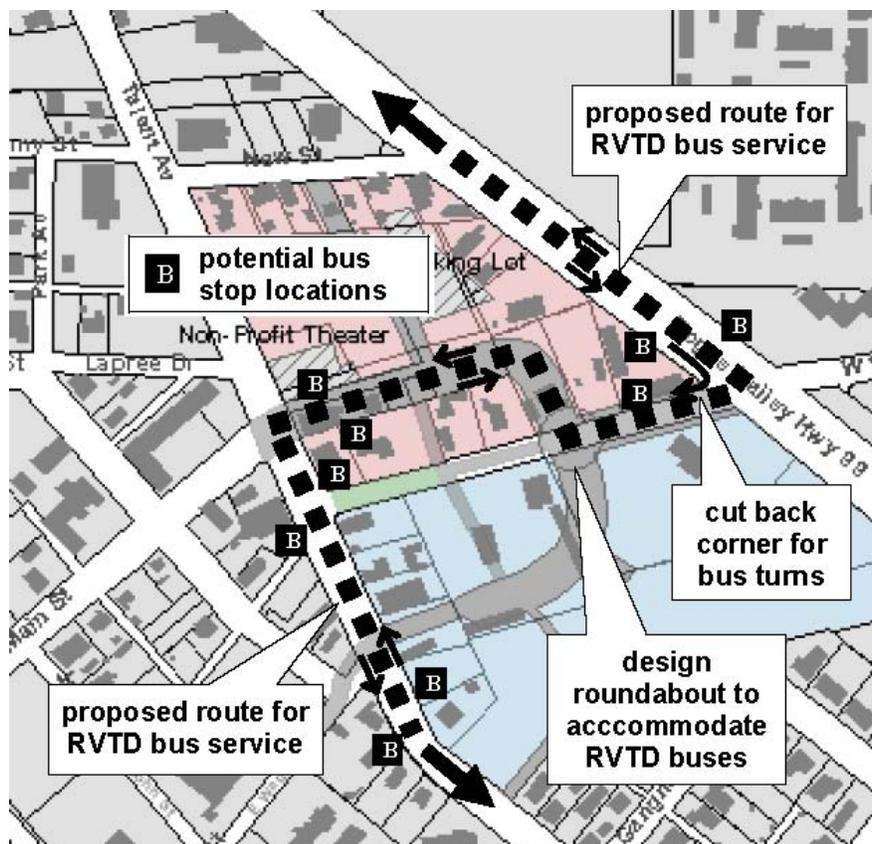
- Provide marked crosswalks⁷ on all four legs of the Main St/Talent Ave, Wagner St/Talent Ave, and LaPree St (realigned)/Talent Ave intersections.
- Provide marked crosswalks⁷ on the north[west] Market St leg and the [south]west Wagner St leg of the Market St/Wagner St intersection.
- Provide mid-block marked crosswalks⁷ on Talent Ave between Main St and Wagner St (e.g., at the location of the existing West Valley View Rd intersection) and on Main St Extension and Wagner St Extension east of Talent Ave.
- Crosswalks at the West Valley View roundabout must be located and designed carefully. The crosswalks should be no closer than 25 ft to the roundabout's circulating roadway, because this separation allows drivers entering the roundabout to focus on potential pedestrian conflicts and enter the circulating roadway in sequence rather than concurrently, and allows drivers exiting the roundabout to stop for pedestrians without blocking the circulating roadway. On the north (Main St Ext) and south (Wagner St Ext) legs of the roundabout, the 25-foot spacing will put the crosswalks fairly close to tight 90-degree curves in the roadway, creating a clear need to ensure the availability of clear visibility and good illumination.

⁶ Due to the skew angle of the east leg of the intersection, vehicles turning left from westbound West Valley View Rd onto southbound Hwy 99 block the view of on-coming westbound West Valley View Rd through traffic for motorists attempting to make the eastbound-to-northbound left turn.

⁷ In addition to appropriate signage and illumination, paint and/or pavement texture may be used.

- The physical design features needed to support the desired bus service should be incorporated in Master Plan area street improvement plans. Such features include adequate street width and sidewalk width at bus stop locations; adequate roadway structural strength at bus stops; adequate radius for buses at the West Valley View roundabout; and a corner cut-back on the northwest corner of the Hwy 99/West Valley View Rd intersection to increase the turn radius for southbound Route 10 buses turning right from southbound Hwy 99 onto westbound West Valley View Rd.
- If and when a shuttle/circulator service is instituted, it should be provided primarily as a connection between downtown Talent and residential and commercial areas. A shuttle/circulator service should not be considered as a 'replacement' transit connection for downtown Talent that would enable the primary fixed-route service (Route 10) to be relocated to Hwy 99.

Figure R-4: Transit Improvements



Parking

- The number of off-street parking spaces in the Master Plan area designated for public use, whether publicly-developed or privately-developed, should be maximized.
- Nearly all existing on-street parking spaces can be retained. It also may be possible to create additional on-street spaces on Talent Ave north of Main St and on Talent Ave at the existing West Valley View Rd intersection once that intersection is closed.
- With the adequate supply of off-street parking included in the Master Plan development, on-street parking is unnecessary on the Main St Extension, the Wagner St Extension, and the remaining segment of West Valley View Rd west of Hwy 99. Furthermore, given the importance of ensuring smooth traffic flow through the Main St Ext–Wagner St Ext–West Valley View roundabout and around the Main St Extension and Wagner St Extension curves, on-street parking would create undesirable friction and congestion.

City Code

- City of Talent site development standards should be revised as necessary to enable implementation of the traffic and parking recommendations, especially those that provide provisions for establishing vital off-street public parking.

Addressing Issues of Concern

The following is a summary of how the specific “Issues of Concern” have been addressed:

1. Lane configurations at all intersections (including feasibility or necessity for left turn lanes)

Response: Study concluded and recommended that turn lanes are not necessary and that single-lane approaches can and should be retained at all downtown Talent intersections.

2. A second alternative to the Wagner Street extension (south of pottery buildings)

Response: The Wagner St Extension provides a critical connection *across* Talent Ave, connecting the neighborhoods west of downtown with the Master Plan area and Hwy 99. Any alternative to the proposed alignment between the pottery buildings must include a direct connection to Wagner St west of Talent Ave, because an off-set connection will create problems similar to those that are experienced at the existing Talent Ave/West Valley View Rd intersection and its off-set connection between West Valley View and Main St. Alignment options just south of the pottery buildings were investigated, including a second smaller roundabout, re-routing Wagner St, and relocating the existing Talent Ave/Wagner St intersection to a point south of the pottery building. These other options were not considered to be viable because they would require additional land acquisition and the demolition or relocation of existing businesses and residences, all of which are historic properties.

3. Phasing of Master Plan improvements (including interim plans for the new “roundabout” intersection and the remaining portions of West Valley View)

Response: The Study concluded that if the Master Plan street improvements were to be built in phases, with the Main St Extension being built first, all of the traffic generated by Master Plan development can be accommodated with the first-phase improvements only. In addition, the Study concluded that the West Valley View roundabout can and should be constructed as part of the first phase of improvements, because there are no operational advantages or significant cost savings to be gained by installing stop sign control on an interim basis.

4. ODOT regulations regarding proximity of roundabouts to state highways

Response: The Study recommends that the West Valley View roundabout be located far enough west to meet ODOT roundabout-intersection spacing standards in order to ensure that queues on eastbound West Valley View Rd at Hwy 99 do not affect roundabout operation. The Study also notes that the ODOT standards do not really apply to the West Valley View roundabout, inasmuch as the ODOT standards are intended to ensure that roundabouts placed on the state highway system are not affected – i.e., clogged – by traffic queuing back from upstream signalized intersections. Because the West Valley View roundabout is not on the state highway system and because it will not impact traffic operations at the state’s Hwy 99/West Valley View Rd intersection, the spacing standards are not applicable.

5. Options for improvement at intersection of Market Street and Wagner

Response: The Study recommends that consideration be given to prohibiting left turns from Market onto eastbound Wagner, as such maneuvers are problematic under most circumstances. The Study also recommends that the left turn from Wagner onto Market should be retained, because it is not so problematic, and the benefits of removing it do not justify the access/circulation limitations and inconveniences its removal would create. These recommendations were developed after considering a complete range of options, as compiled in the Figures on the following pages.

6. Assessment of traffic signal warrant requirements at study area intersections

Response: The Study determined that the traffic generated by Master Plan development can be easily accommodated on the downtown Talent street network, and that neither turn lanes nor signalization are needed at any of the downtown intersections. (The Study found that downtown Talent traffic volumes do not come close to meeting signal warrants, and that consequently, signals could not be installed even if they were desired).

7. Perceived “narrowing” of Wagner extension between pottery buildings

Response: There is adequate width between the two pottery buildings. In addition, the Study found that a single-lane two-way approach to the Talent Ave intersection is adequate and that it is not necessary to provide on-street parking on the Wagner St Extension, allowing for a narrower street width at that location. For loading/unloading, off-street is safer and more convenient than on-street, and design of the off-street parking lot envisioned by the Master Plan should include provisions for pottery building loading area.

Market St/Wagner St Concepts Considered (Options 1-4)



1. SB John:

- (+) eliminates left turns from Market to Wagner
- (-) Market St access to Talent Ave via Main and John-Wagner
- (-) Tark's loading dock not usable



2. John-Market couplet:

- (+) eliminates all turns from Market to Wagner
- (-) Market St access to Talent Ave via Main and John-Wagner
- (-) Tark's loading dock not usable



3. John-Market link:

- (+) eliminates left turns from Market to Wagner
- (-) requires acquisition of property on John St northwest of Tark's
- (+) closes Market between Wagner and Alley, creating usable space and possibly eliminating all turns at Market/Wagner



4. Market to Talent via 1-way Alley:

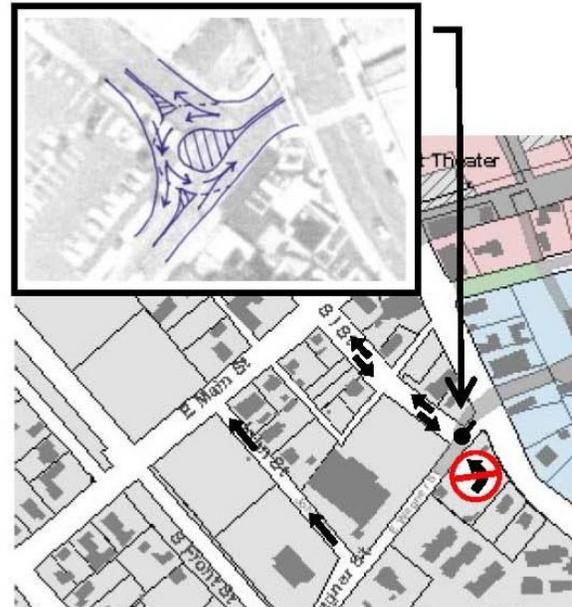
- (+) eliminates left turns from Market to Wagner
- (-) creates new intersection on Talent Ave between Main and Wagner

Market St/Wagner St Concepts Considered (Options 5-6)



5. Market-Talent connection via 2-way Alley:

- (+) eliminates left turns from Market to Wagner
- (-) creates new intersection on Talent Ave between Main and Wagner
- (+) closes Market between Wagner and Alley, creating usable space and possibly eliminating all turns at Market/Wagner



6. Market/Wagner roundabout:

- (+) retains access to Talent from SB Market
- (-) roundabout very close to Wagner/Talent intersection
- (-) requires r-o-w acquisition (east corner of Tark's)
- (-) eliminates left turns from Wagner to Market

8. Accommodation of all transportation modes (pedestrians, bicycles, RVTD bus service)

Response: The Study includes recommendations for crosswalks, and other pedestrian, bicycle, and transit access and circulation improvements in downtown Talent. Because the low volume and primarily local orientation of downtown Talent vehicular traffic minimizes conflict between traffic flow and pedestrian, bicycle, and transit activity, the improvements recommended by this Study can make downtown Talent a very walkable and transit-friendly place.

9. Compare parking analysis to existing parking ordinance and identify discrepancies or potential modifications to ordinance

Response: The Study found that a comparison was not needed, since the estimated peak parking demand of the Master Plan development can be easily accommodated by the new off-street parking facilities proposed as part of the Master Plan. The study recommends that City of Talent site development standards be revised as necessary to enable implementation of the recommendations related to public parking.

10. Discuss methods for keeping through-traffic off of Gangnes

Response: The Study found that because there will be adequate capacity and smooth traffic flow on the Wagner St Extension, there is no indication that through traffic would ever want to use a slower, more circuitous and inconvenient “short-cut” route via Gangnes St. However, if concern is great enough, the potential for through traffic use of Gangnes could be completely eliminated by limiting any connection into the Master Plan area (linking directly or indirectly to Wagner St Extension) to use by pedestrians, bicycles, and emergency vehicles only.

11. Deliveries/loading in alleys, marked zones, etc.

Response: No loading zones or areas are eliminated by the Master Plan improvements. However, the off-street parking areas envisioned by the Master Plan provide the opportunity relocate loading/unloading activities off-street where it is safer and there would be less conflict with traffic and pedestrian flow.

12. “Lining up” of alleys and minor streets

Response: The Study recommends that LaPree St be realigned at Talent Ave and “lined up” to connect directly with a future accessway to the Master Plan off-street parking/loading area directly east of Talent Ave. On the Main St Extension, it would be useful, but not necessary, to line up the future off-street parking/loading area accessway on the south side and the proposed Seiber St on the north.

13. Shared parking opportunities adjacent to downtown study area (examples: Talent Friends Church parking lot, medical complex parking lot, etc.)

Response: Because the Study found that an adequate supply of parking would be provided by the new off-street parking facilities proposed as part of the Master Plan, shared-parking opportunities at existing lots were not pursued. However, there is no reason why such opportunities could not or should not be pursued in the future if appropriate or necessary.

ATTACHMENT A: PEAK TRAFFIC VOLUMES

Figure A-1a: Existing (May, 2007) Weekday P.M. Peak Hour Traffic Volumes

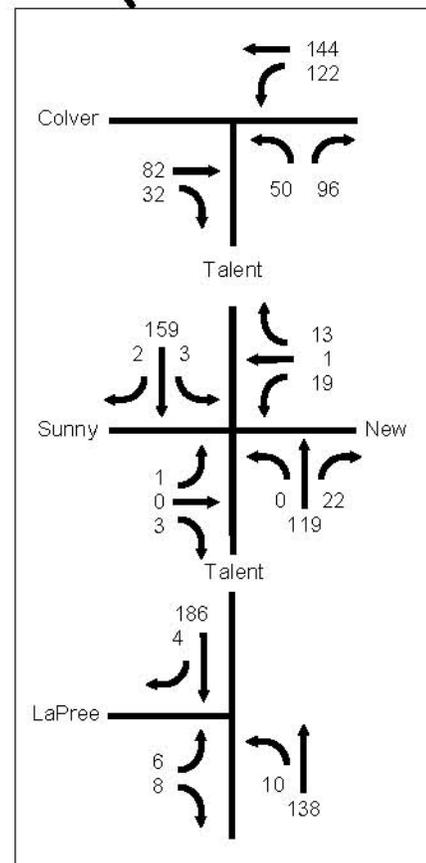
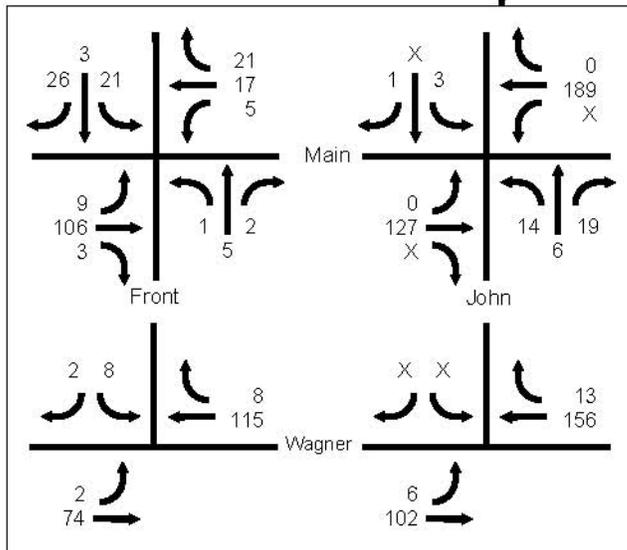
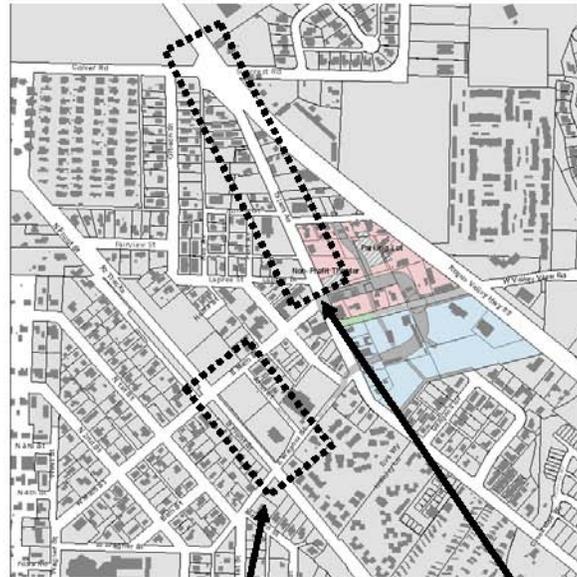
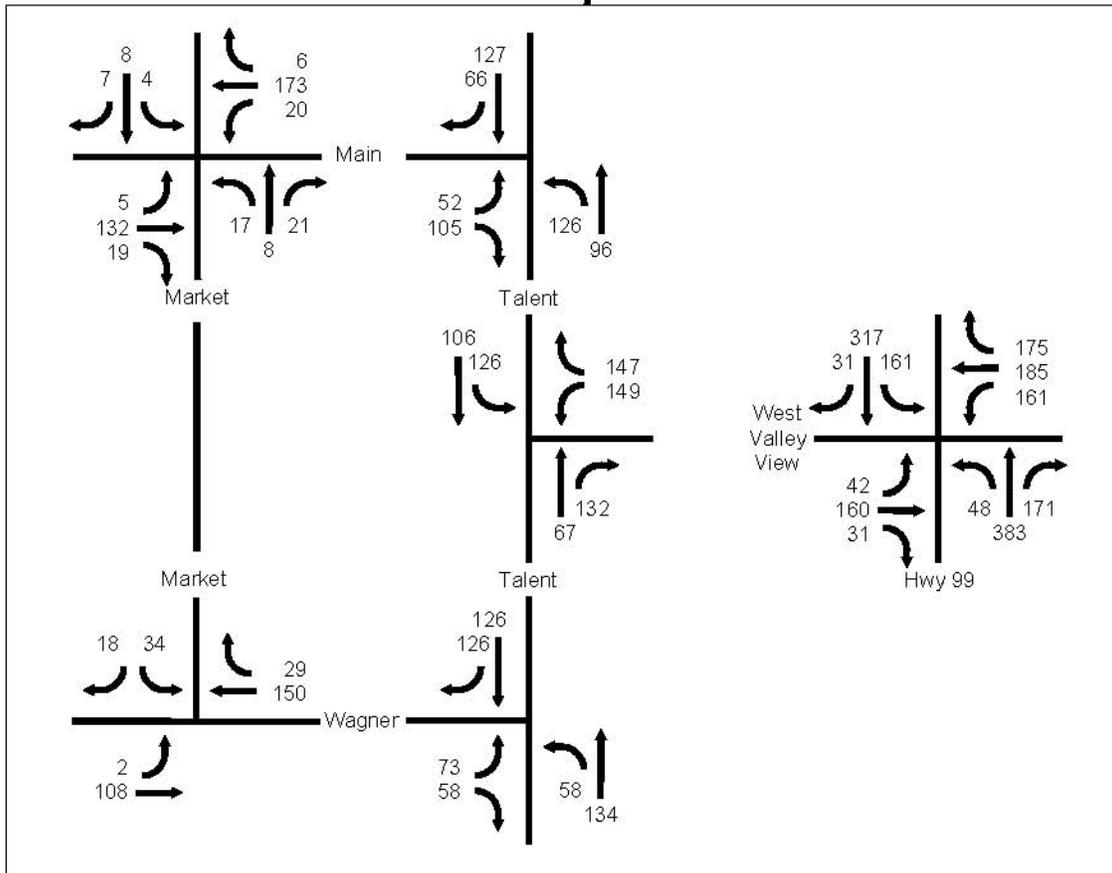
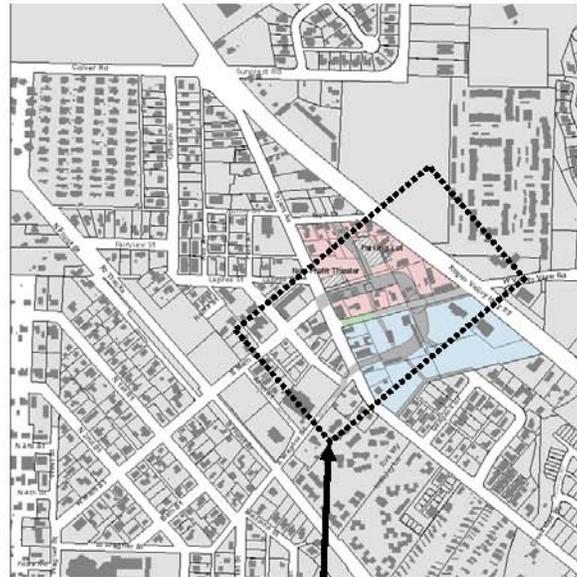
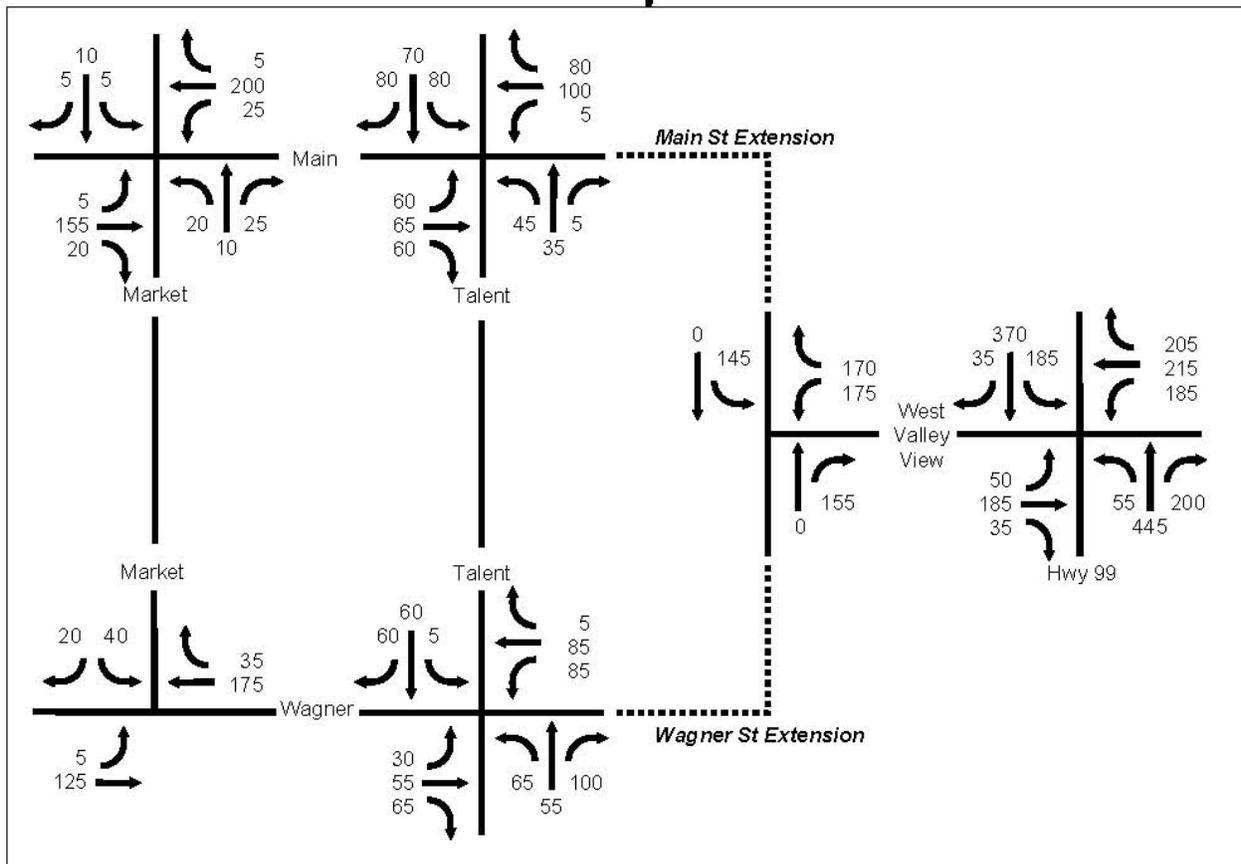


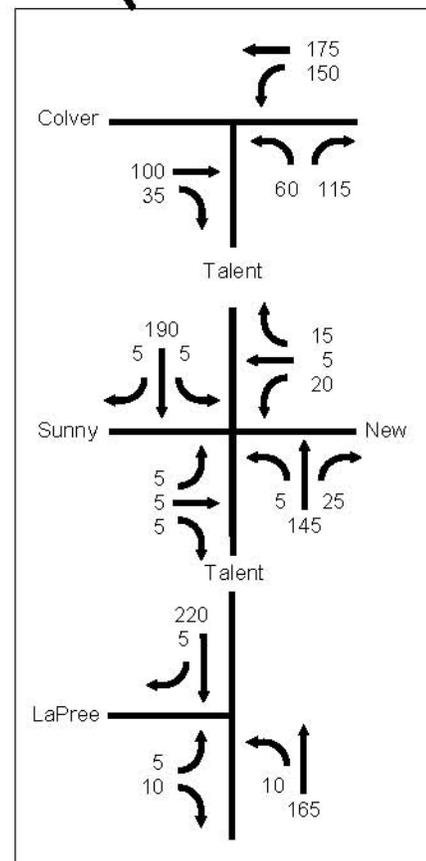
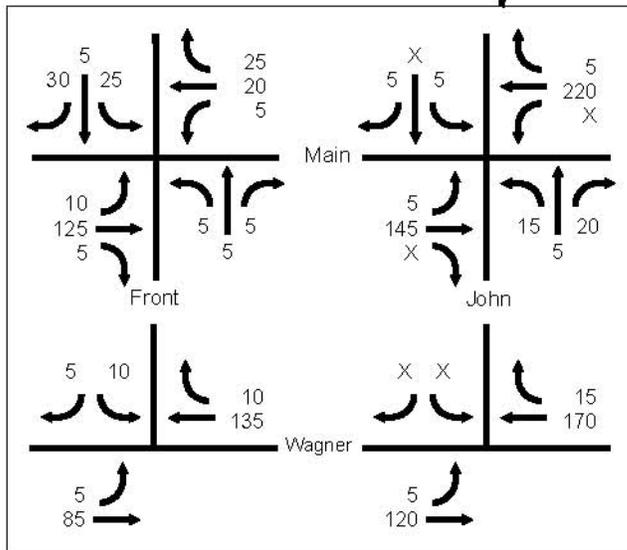
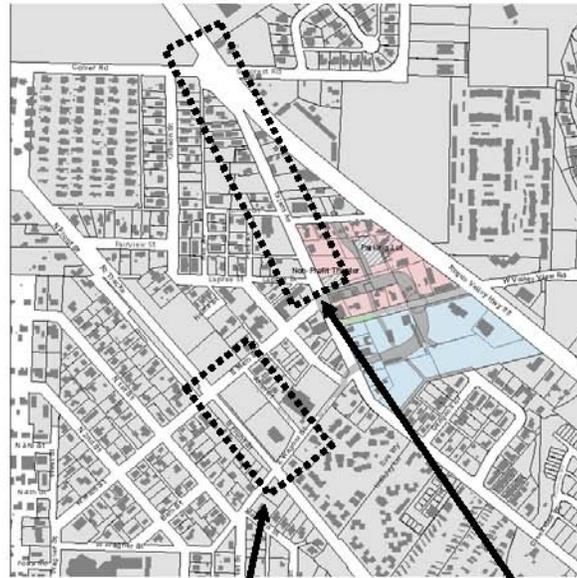
Figure A-1b: Existing (May, 2007) Weekday P.M. Peak Hour Traffic Volumes



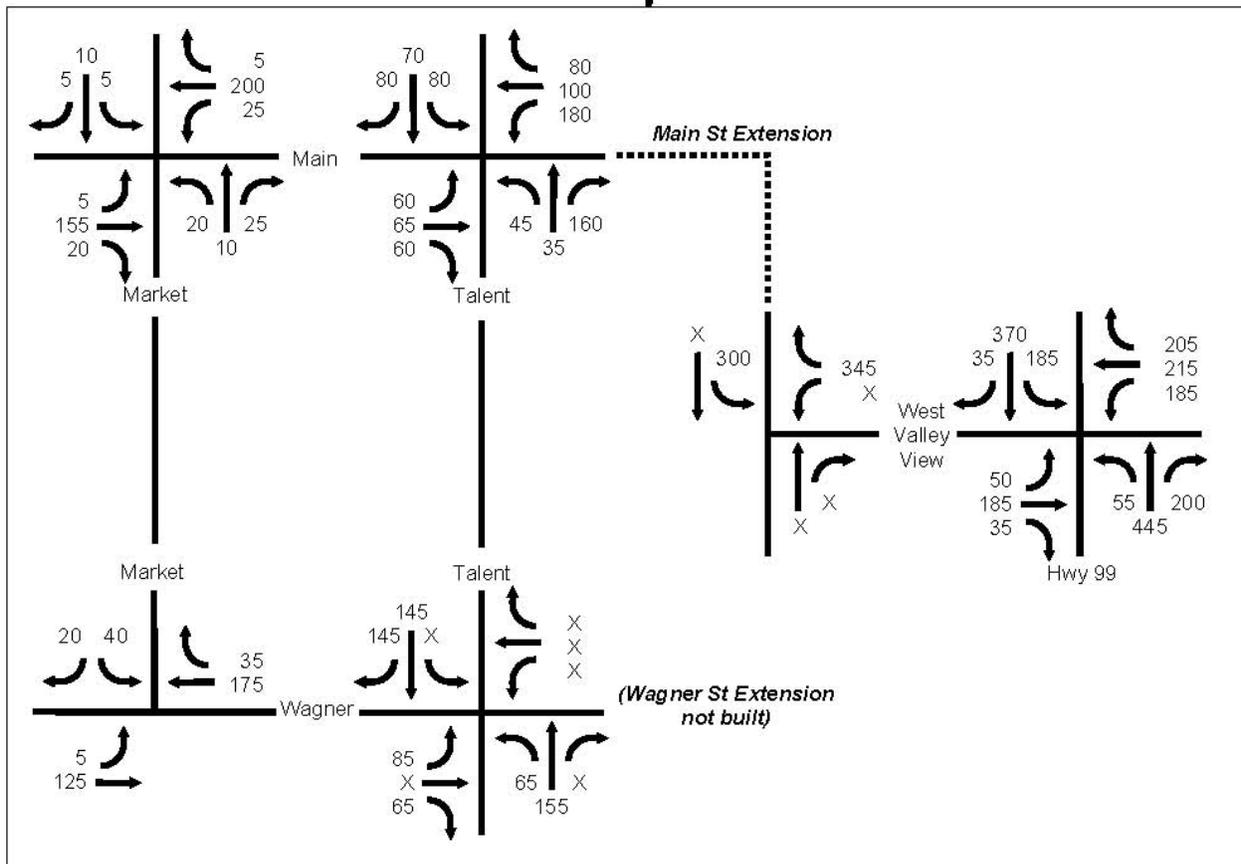
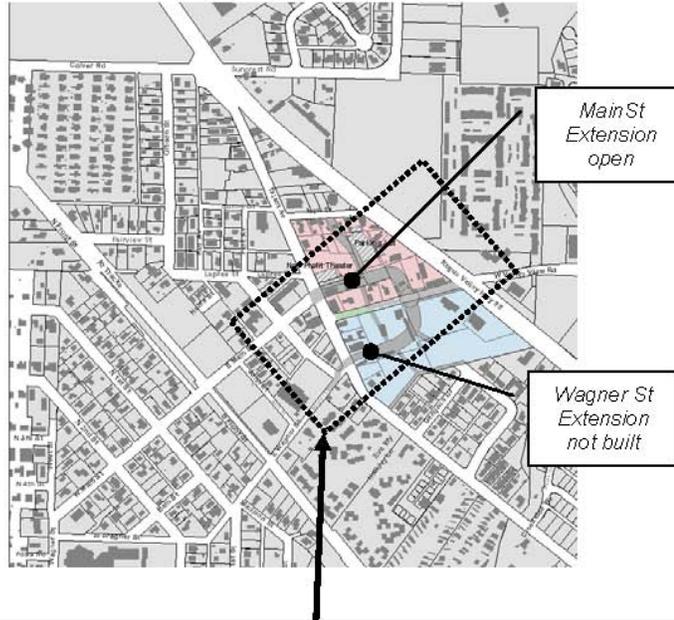
**Figure A-2a: Background Traffic Volumes
 (2017 Weekday P.M. Peak Hour)**



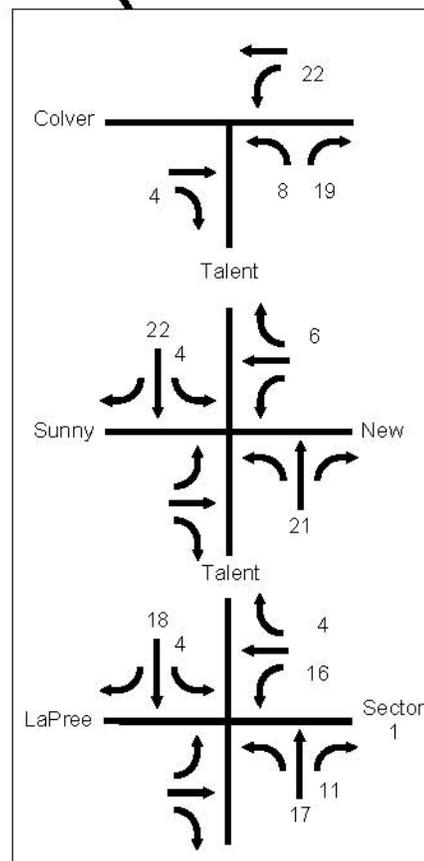
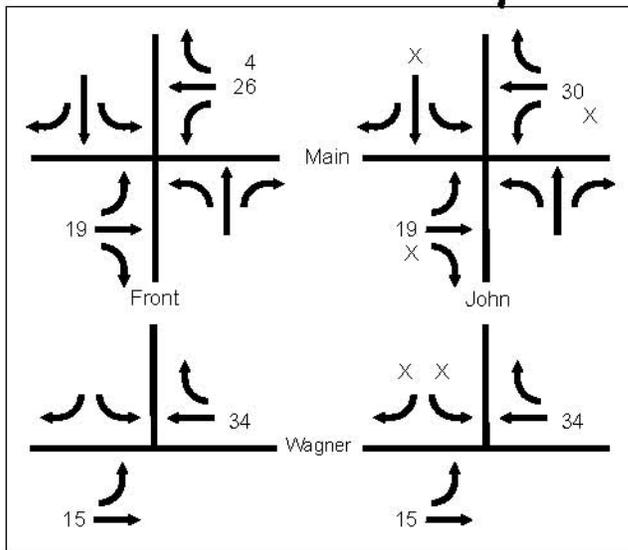
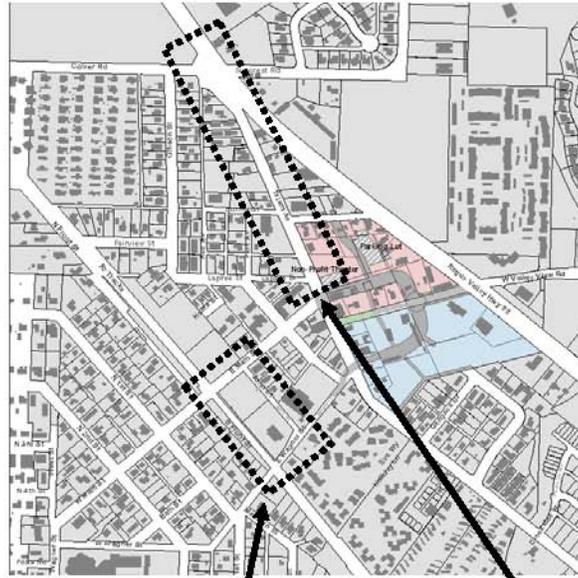
**Figure A-2b: Background Traffic Volumes
 (2017 Weekday P.M. Peak Hour)**



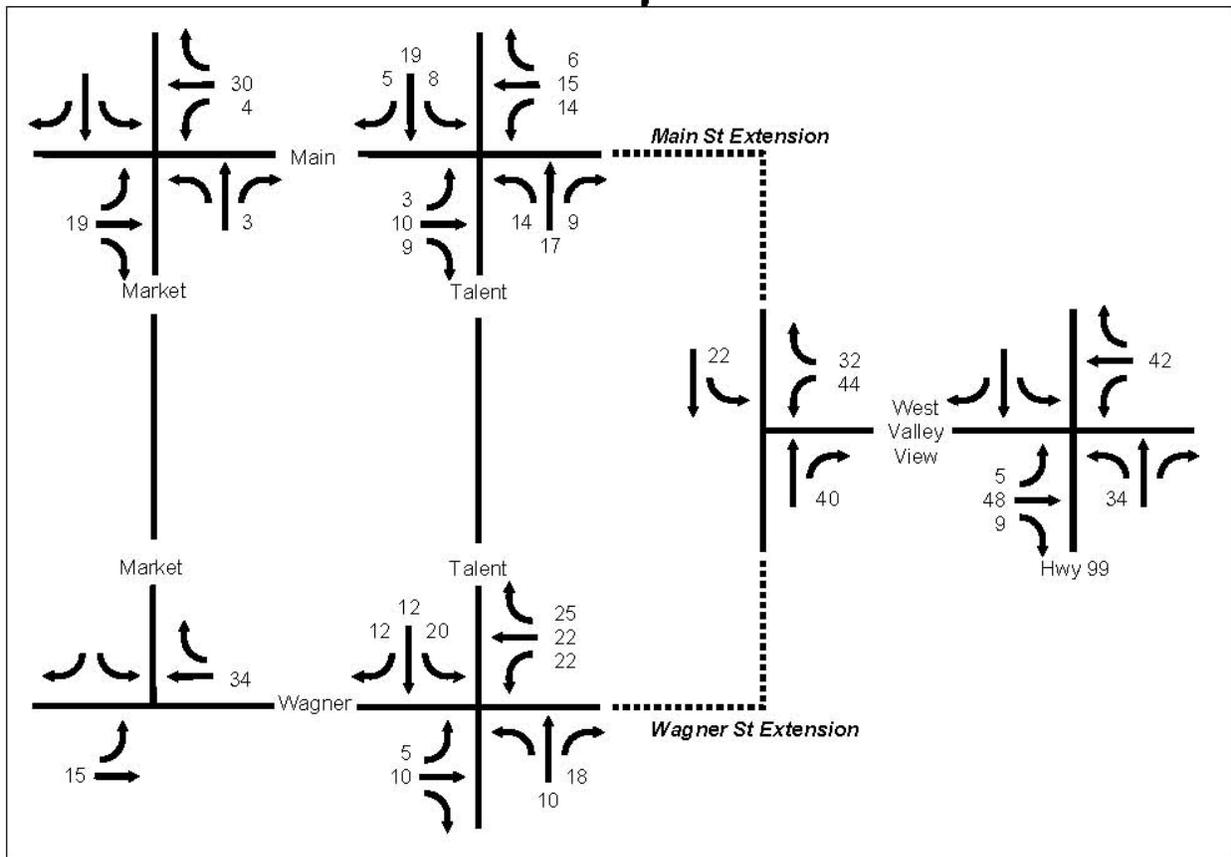
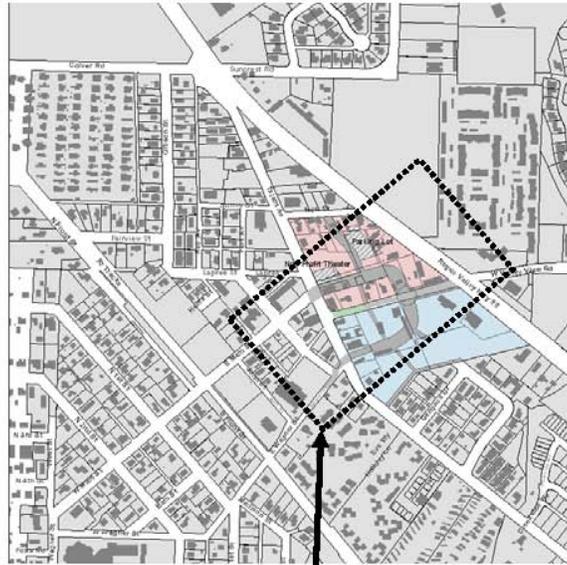
**Figure A-3: Background Traffic Volumes with Main St Extension Only
 (2017 Weekday P.M. Peak Hour)**



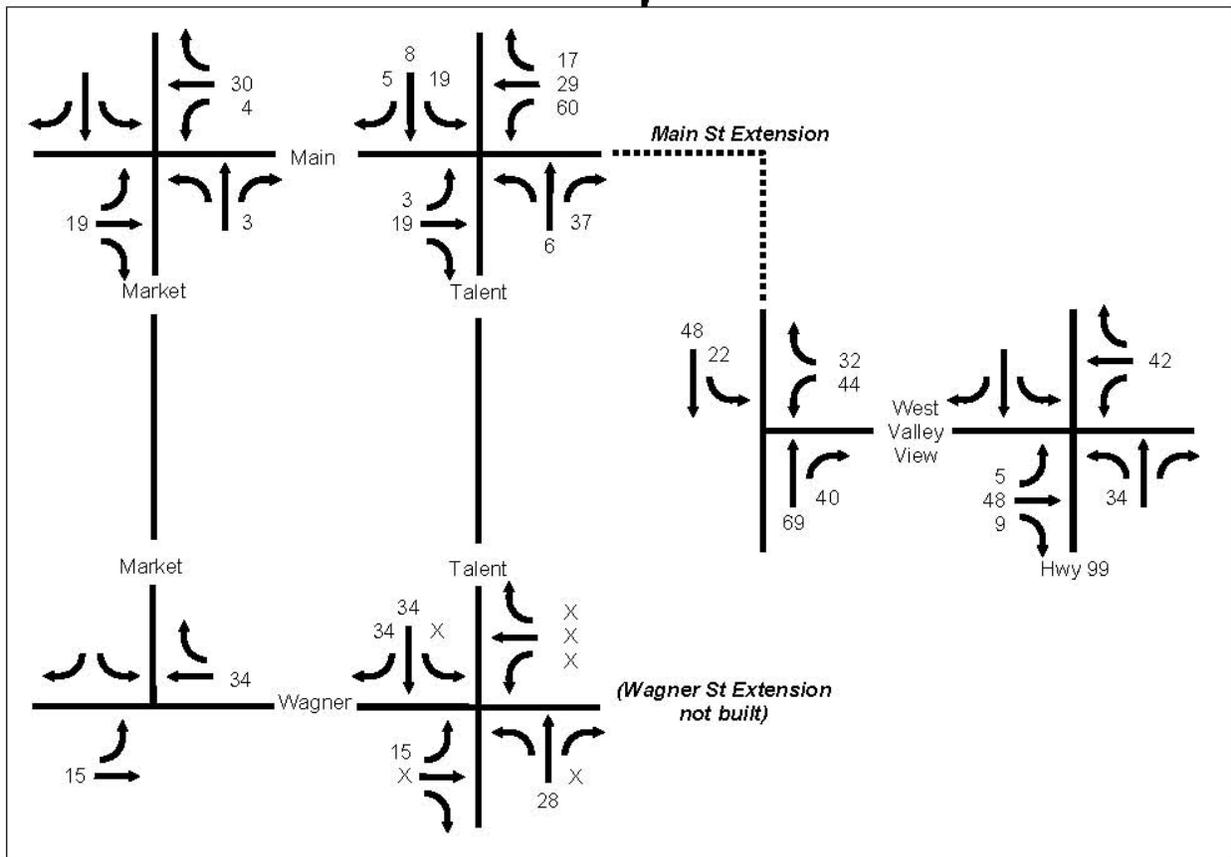
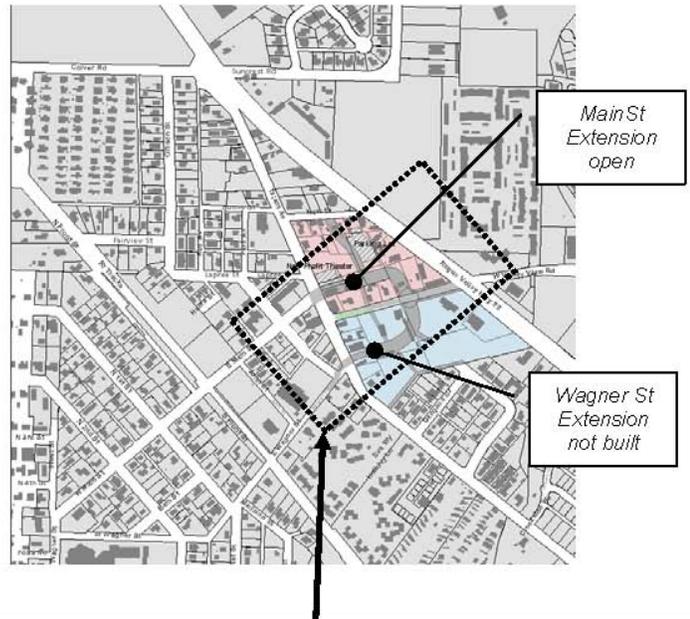
**Figure A-4a: Master Plan-Generated Traffic Volumes
 (2017 Weekday P.M. Peak Hour)**



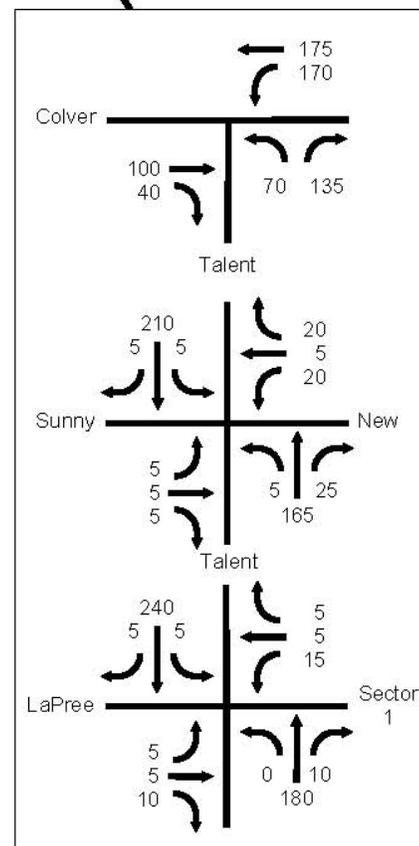
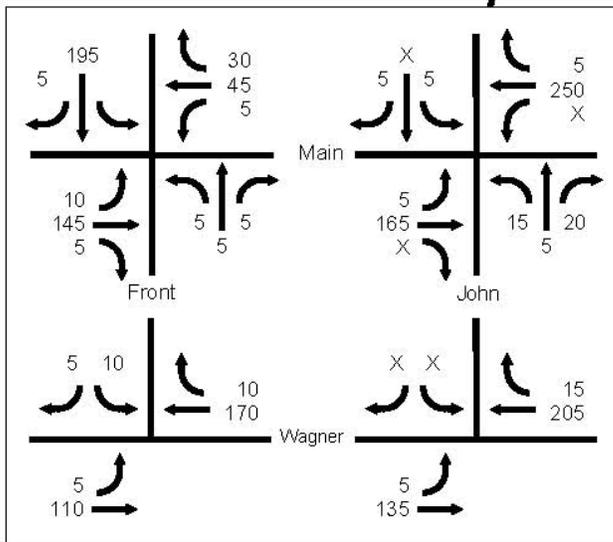
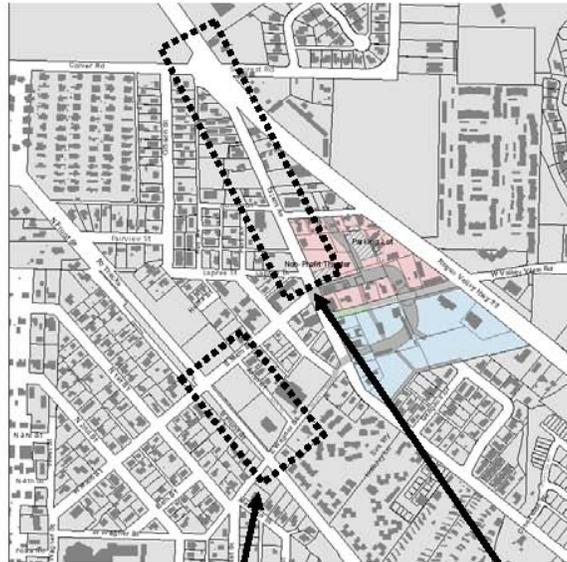
**Figure A-4b: Master Plan-Generated Traffic Volumes
 (2017 Weekday P.M. Peak Hour)**



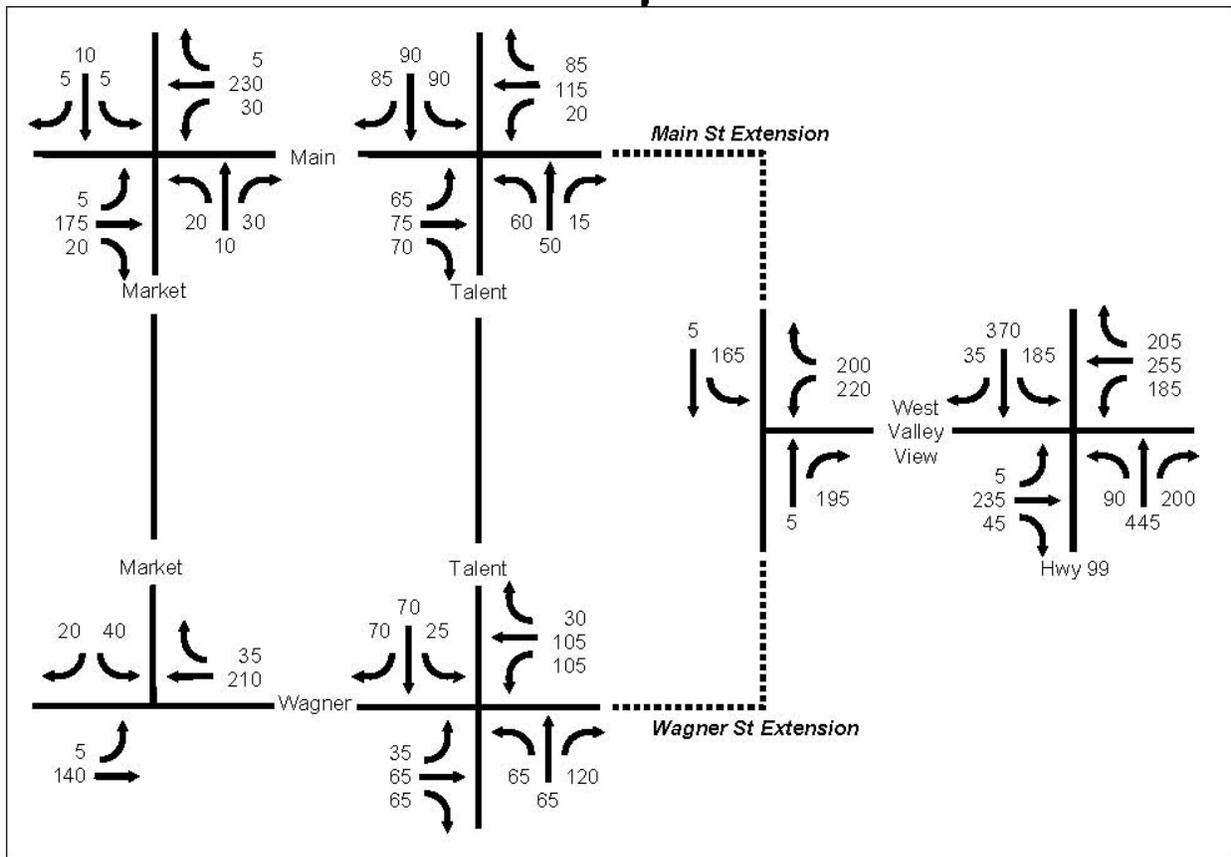
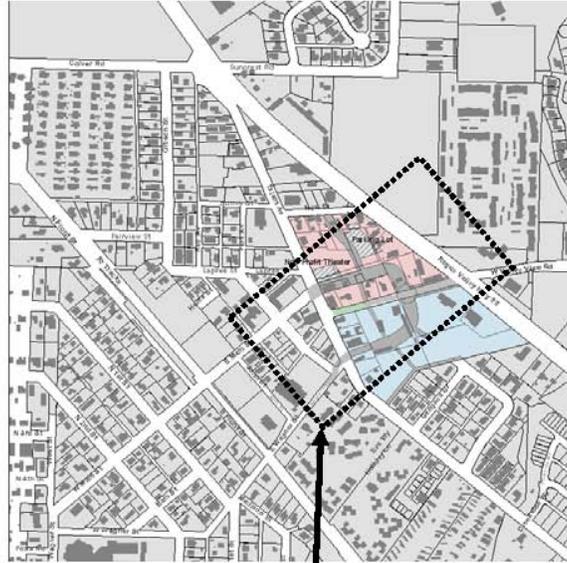
**Figure A-5: Master Plan-Generated Traffic Volumes with Main St Extension Only
 (2017 Weekday P.M. Peak Hour)**



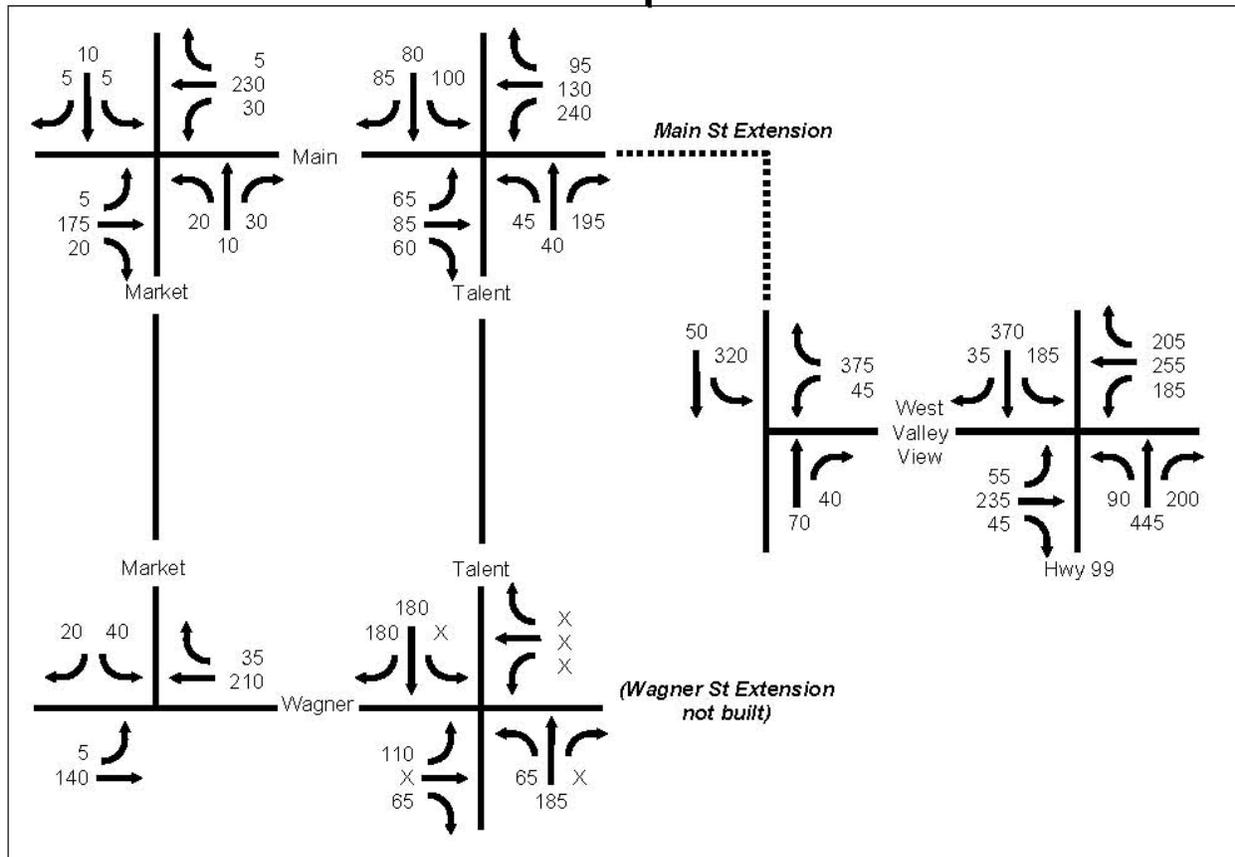
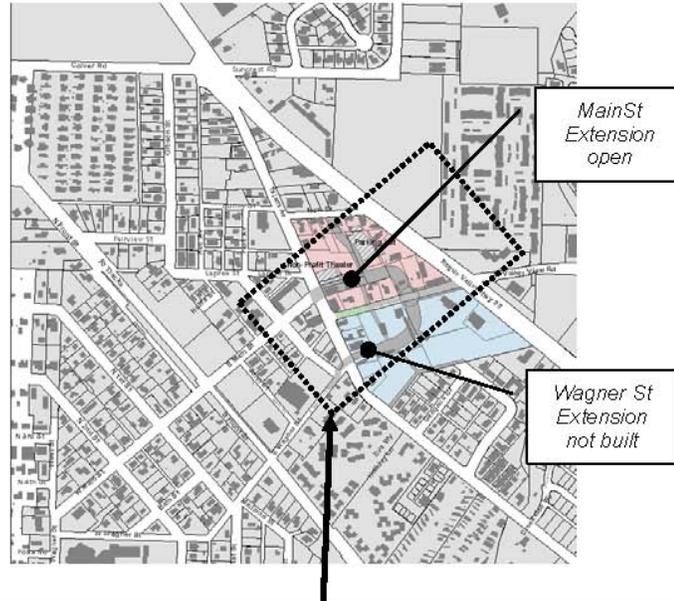
**Figure A-6a: Total Traffic Volumes
 (2017 Weekday P.M. Peak Hour)**



**Figure A-6b: Total Traffic Volumes
 (2017 Weekday P.M. Peak Hour)**



**Figure A-7: Total Traffic Volumes with Main St Extension Only
 (2017 Weekday P.M. Peak Hour)**



ATTACHMENT B: TRAFFIC OPERATIONAL ANALYSIS METHODOLOGY

The traffic operations analyses were based on the “Level of Service” (LOS) determined for each study intersection. The Highway Capacity Manual, published by the Transportation Research Board and used nationwide, defines LOS as follows:

“Level of Service” (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with A representing the best operating conditions and F the worst. Each level of service represents a range of operating conditions and the driver’s perception of those conditions. Safety is not included in the measures that establish LOS.”⁸

LOS is used by planners, engineers, and the lay public alike to assess traffic conditions, to identify problems, and to develop improvements and “solutions.” In addition, local governments and other public agencies responsible for transportation use LOS to set standards for traffic conditions.

LOS is determined for the peak 15 minutes of a 1-hour period. The traffic volumes on which LOS analyses are based can be traffic forecasts or actual traffic counts. In addition to traffic volumes, LOS is based on roadway characteristics (numbers and configuration of lanes, lane width, roadway grade, etc.) and the types of traffic controls. As implied in the definition above and outlined below, LOS is determined differently for different types of intersections:

⁸ *Highway Capacity Manual* (HCM2000), Transportation Research Board, National Research Council, 2000, p. 2-2

Signalized intersections: LOS is determined for the intersection as a whole, and is based on average delay for vehicles entering the intersection. LOS D conditions exist when average control delay – i.e., delay attributable to the traffic signal – is less than 55 seconds per vehicle. LOS criteria are as follows:

LOS	control delay
A	≤ 10 sec/veh
B	10-20 sec/veh
C	20-35 sec/veh
D	35-55 sec/veh
E	55-80 sec/veh
F	> 80 sec/veh

Source: HCM2000, Exh 16-2

All-Way Stop Control (AWSC) intersections: LOS is determined for the intersection as a whole, and is based on average delay for vehicles entering the intersection. LOS criteria are as follows:

LOS	control delay
A	≤ 10 sec/veh
B	10-15 sec/veh
C	15-25 sec/veh
D	25-35 sec/veh
E	35-50 sec/veh
F	> 50 sec/veh

Source: HCM2000, Exh 17-22

Two-Way Stop Control (TWSC) intersections: LOS is determined for the individual “minor” movements (i.e., those movements that must stop or yield), and is based on average delay for vehicles entering the intersection. LOS criteria are as follows:

LOS	control delay
A	≤ 10 sec/veh
B	10-15 sec/veh
C	15-25 sec/veh
D	25-35 sec/veh
E	35-50 sec/veh
F	> 50 sec/veh

Source: HCM2000, Exh 17-2