To: **Mayor and City Council**

Through: **Pat DuVal, Interim City Manager**
Kenneth Asher, Community Development and Public Works Director

From: **Wendy Hemmen, Light Rail Design Coordinator**

Subject: **Johnson Creek Boulevard Mitigation at 42nd Avenue**

Date: **April 6 for the April 20, 2010 Work Session**

Action Requested

Affirm light rail project staff recommendation to signalize the intersection of 42nd Avenue and Johnson Creek Boulevard as mitigation for impacts resulting from the Portland to Milwaukie Light Rail Project.

History of Prior Actions and Discussions

No prior City Council action regarding light rail mitigation at the intersection of Johnson Creek Boulevard and 42nd Avenue.

Background

Existing Conditions

Almost every day, more than 10,000 cars travel Johnson Creek Boulevard (JCB). The route has been an important transportation link for this area of the region since the earliest settlement in the area during the 1800's. Traffic volumes on the street have not significantly changed in 30 years. In the 1970's the Average Daily Traffic (ADT) was 14,000 cars (at 42nd Avenue) and currently the ADT is 13,700. JCB is the only significant east-west collector in the area that links Highway 99E with Interstate 205. The nearest through streets are Bybee Boulevard (which is a mile to the north), and Harrison Street/King Road (which is a mile to the south). Bybee Boulevard, the next

northerly through-street, has approximately the same level of ADT as JCB. Additional historical detail is provided in Attachment 1.

The section of JCB between McLoughlin Blvd and 45th Avenue has traffic volume problems today, specifically with queuing, delay, and intersection operations[1] at its three stop-controlled intersections (32nd, 36th, and 42nd). Of these intersections, only 42nd is in the City of Milwaukie. 32nd and 36th are in the City of Portland.

Residents and employees in Milwaukie and the surrounding area use JCB as a collector road to reach their employment destinations and homes. Residents whose properties front on JCB have discussed at great length the inability to access their driveways when traffic backs up on the street (typically during "peak" hours between 4pm and 6pm). During these hours, the stop-controlled intersection at 32nd Avenue backs cars up over a half mile to the west past Highway 99E (McLoughlin Boulevard). During the morning peak travel time, the opposite effect occurs, with queues reaching over half a mile to the east from 32nd Avenue to 42nd Avenue, with another queue continuing near the Springwater Trail crossing near 45th.

In addition to congestion concerns, JCB has historically faced safety challenges due to its traffic volumes, intersections and curvilinear shape. Prior to the 1990's, these effects were compounded by a lack of bike and pedestrian improvements. In the 1990's, the City of Portland led a capital improvement project to reconstruct the road with wider travel lanes, bike lanes, and sidewalks. The improvements were completed in 2004. Reduced accidents and an overall increase in road safety have ensued.

Light Rail Effects

The Portland-Milwaukie Light Rail Project (PMLR) will place new traffic impacts on JCB, primarily because of the traffic generated by the Tacoma-Springwater Park and Ride structure on the former Goodwill site on the east side of McLoughlin south of the Tacoma overpass. Through the National Environmental Protection Act (NEPA) this project is required to offer mitigation for project impacts. The City of Milwaukie staff is specifically interested in ensuring JCB corridor[2] identified traffic impacts are mitigated locally.

The Final Environmental Impact Statement (FEIS), which discloses the known impacts under NEPA, will be published next month. The document will propose mitigation for

[1] Queuing refers to the stacking up of cars (i.e. congestion), usually at an intersection. Operation performance is measured in "delay," which refers to wait times for cars trying to get through intersections.
[2] "Corridor" refers not only to JCB itself, but also to streets that feed into it and nearby streets that help connect the same general areas served by JCB.

identified impacts. Staff has reviewed drafts of the FEIS, which identifies the following impacts to JCB due to the PMLR project (absent any mitigation):

- Traffic back-ups onto southbound Highway 99E
- Increased delays at 32nd Avenue beyond jurisdictional standards
- Increased delay at 42nd Avenue beyond jurisdictional standards
- Additional delay at 17th Avenue
- Additional delay at Park and Ride entrance signal
- Additional delay at 45th Avenue

The PMLR project proposes to mitigate the traffic impacts it generates, alleviating worsening traffic problems at 32nd Avenue and 42nd Avenue. Because queuing and delay issues arise from the all-way stop controls from 42nd to 32nd Avenues, converting these intersections to signal-controlled would be warranted (i.e. installing traffic lights).

Of these three intersections, 32nd is the most problematic, since queues at this intersection will lengthen with the opening of light rail, causing cars to back up all the way down the 99E southbound off-ramp at Tacoma and continue onto McLoughlin Boulevard. ODOT has determined that this queue poses a safety hazard and must be mitigated. The project team evaluated several mitigation options at this intersection. The practical alternative to mitigate this impact is to install a stop light and right-hand turn-lane at the 32nd Avenue and JCB intersection. This stop light is a minimum safety measure that will keep traffic from backing up onto McLoughlin Boulevard where rear-end crashes on the highway could occur absent the mitigation.

Traffic operations and signal warrants at the 42nd Avenue intersection both lead to the recommendation for signalization of the 42nd Avenue intersection. Per City of Milwaukie standards, a signal is required at 42nd Avenue and is shown as potential mitigation in the draft FEIS.

With the introduction of a signal at 32nd (assuming no other changes are made), congestion, exhaust, and blocked driveway access issues become far more pronounced at the 42nd Avenue and JCB intersection. The light rail project team reviewed the corridor to learn the effects at 42nd when a signal goes in at 32nd (keeping existing stop signs or switching to a signal). The two-hour AM peak traffic count data for the 42nd and JCB intersection is shown in Attachment 2a, and the two-hour PM peak data is included in Attachment 2b. The peak-hour conditions measured are from 5:00 PM until 6:00 PM. The traffic data was taken December 2 and 3, 2008. The future year projections (year 2030) are based on a modeled growth rate, applied to the 2008 count data by DKS, the project traffic consultant.

In 2030, the year which the project is required to study, evening traffic on JCB backs up from 42nd Avenue to the west for almost an entire mile if the current stop sign control is retained (see Attachment 3). The year 2030 peak-hour analysis is graphically represented as cars queuing in Attachment 3. With a signal installed at the 42nd Avenue intersection, however, the queues at 42nd Avenue are approximately what they are today; a few hundred feet long (see Attachment 4).[3] When signalized, the 42nd Avenue intersection will function much like it does today in terms of vehicular delay, but with safer street crossings, fewer driveway blockages, less exhaust pollution, and less cut-through traffic anticipated on Roswell, Filbert, Olsen, Harvey, 40th, Howe, and Logus Roads.

Several different options exist for the 42nd Avenue signal, given that a left-hand turn lane is not contemplated for the intersection (i.e. no dedicated left-hand turn lane on westbound JCB). A "doghouse" signal is imagined for the intersection ('doghouse' refers to the shape of the signal, with one light centered on top of a square of four lights). The top light is red, the middle two are yellow, and the bottom two are green. The left two are left-turn arrows. This style signal would allow for dedicated timing of left turns from JCB to 42nd with the westbound JCB flow. It will also allow for unprotected (flashing yellow) left turns. Standard signal detection devices may be used to minimize queuing behind left turning vehicles.[4] The specific signal operations will be developed during final design of the project.

With the installation of a signal at 42nd the JCB corridor will function for anticipated traffic volumes. As to safety concerns and neighborhood livability concerns, Milwaukie staff is working with City of Portland staff to develop and implement a traffic calming strategy. $50,000 is within the light rail project budget for traffic calming on JCB.[5] ODOT is currently studying possible safety improvements to the southbound McLoughlin Boulevard on/off ramp for possible inclusion with the light rail project as well. The project staff are also considering the efficacy of signal timing adjustments on the existing signals at 17th Avenue and 45th Avenue to help improve future traffic flow on the street.

Final design of the JCB mitigation improvements are anticipated to begin in October 2010. Details will begin to be looked at with final design. The functions and timing of the

[3] This assumes the stop sign is retained at 36th Avenue. The 36th Avenue intersection is in the City of Portland and its performance, in conjunction with 32nd and 42nd, is not covered in this staff report. The City of Portland has determined that it will retain the stop sign at the 36th Avenue intersection after light rail is built.

[4] Attachment 3, Attachment 4, and the DKS information were analyzed with a standard signal, not the doghouse signal. .

[5] The light rail project also has $500,000 budgeted to cover the anticipated cost of the two traffic signals (32nd and 42nd).

signals would be programmed to attempt to meet the needs of surrounding residents, the project, the City of Milwaukie, the City of Portland, and ODOT.

Light rail-related construction on JCB is flexible. Construction activity on JCB is not tied to the light rail track or garage construction. The JCB construction could occur at the beginning of project construction or wait until the final year of construction. Construction is anticipated to be complete by September 2015.

Neighborhood Comments

Some residents who live on JCB have been consistent in their opposition to completing signalization of the JCB corridor. Others in the area have told city staff they are supportive of the traffic signals on JCB. Some residents are concerned for their family's safety on JCB and are concerned about getting in and out of their driveways during portions of the day, especially after the Park and Ride is built. Staff has also heard concerns about future cut-through traffic on local roads in the Lewelling and Ardenwald neighborhoods and higher traffic volumes on Roswell and Logus. Some residents have expressed concern how their children will safely cross JCB.

Numerous public meetings have been held to discuss mitigation options on the upcoming traffic challenges and possible solutions to those challenges. The latest meeting discussing the Tacoma/ Johnson Creek Boulevard impacts and mitigations was held February 11, 2010. Between October 2009 and February 2010, the project team conducted additional studies requested by local jurisdictions. Questions and answers from public discussions are shown in Attachment 5.

Letters from the Ardenwald and Lewelling NDAs are Attachments 6 & 7. The Ardenwald NDA has taken a position against signals. The Lewelling NDA has refrained from taking a position on the issue.

Project Staff Recommendation

The City of Milwaukie staff support the TriMet Light Rail Project staff recommendation on mitigating Johnson Creek Boulevard[6] (see Attachment 8). The recommendation is to signalize the intersections at both 32nd and 42nd, and to provide traffic calming of a type and design to be determined at a later date. The project budget for these improvements total $550,000.

The city staff believes this recommendation better supports the goals of Milwaukie's Transportation System Plan (adopted 2007), which sets the city's transportation goals

[6] Light Rail Project staff includes staffs from TriMet, Metro, the City of Portland, City of Milwaukie, Clackamas County and ODOT.

and priorities. Seven of the community's nine TSP goals are believed to be better met by signalizing 42nd and JCB than by keeping it unsignalized. Attachment 9 lists these goals and describes how the TSP goals apply to Johnson Creek Boulevard.

In summary, the staff supports this recommendation because it is believed that signalizing the 42nd and JCB intersection will:

- Reduce cut-through traffic on nearby local roads, including streets adjacent to elementary schools
- Shorten queues on JCB and lessen delays at intersections
- Enable residents who live on JCB to access their driveways
- In combination with traffic calming and strategic signal timing, retain the existing low crash rate on the street and create signalized crossings for pedestrians
- Better meet the goals of the city's TSP
- Maintain the functionality of an important east-west street for Milwaukie neighborhoods and businesses

City staff arrived at this recommendation through the following process:

- Working with light rail designers and traffic engineers to understand the technical data
- Taking into account the needs and views of other project partners (including ODOT and the City of Portland)
- Reviewing TSP goals
- Listening to neighborhood concerns (in multiple settings)
- Internally debating the pros and cons of the positions

In the end, every City department working on the light rail project was unanimous in their support of the recommendation. [7]

Concurrence

TriMet concurs with the City of Milwaukie staff recommendation on mitigating Johnson Creek Boulevard (see Attachment 8).

Metro staff concurs with the technical analysis and recommendation to signalize 42nd Avenue set forth in the April 2, 2010 memo from Leah Robbins of TriMet, Attachment 8.

[7] These departments are Community Development [including Economic Development], Engineering, Planning, Public Works/Operations, and Community Services.

The City of Portland recognizes that the intersection of 42nd Avenue and Johnson Creek Boulevard is within the City of Milwaukie's jurisdiction and has chosen not to comment on this matter, citing it as a City of Milwaukie issue.

Clackamas County Fire District supports signals on JCB. JCB is an emergency response route for CCFD#1 to reach the surrounding community and to provide back up services to the City of Portland. CCFD#1 desires the signals to be installed with Opticom systems to help the fire trucks maneuver through all types of traffic conditions present on JCB. JCB is also a route to the local hospital that provides emergency room services for the local area.

David Aschenbrenner, a Milwaukie member of the PMLRT Citizens Advisory Committee, provided comments in Attachment 10.

The Ardenwald NDA has requested no signals at any intersection. See the NDA letter (Attachment 6).

The Lewelling NDA provided a neutral letter describing all the issues as they understand with regard to signals at 32nd and 42nd, see the attached letter (Attachment 7) from the Lewelling NDA Chair.

Fiscal Impact

Affirmation of the recommendation will result in no fiscal impact to the City.

Rejection of the recommendation would not result in a fiscal impact to the City, unless the City later decided to install a signal at this intersection (without a private developer to foot the cost). The estimated cost of the signal in 2010 is $250,000. The City has no identified source for funding for traffic signals today, and is unlikely to have such a source of funding at this location in the future.

Work Load Impacts

None associated with the decision to affirm the staff recommendation.

Rejecting the staff recommendation will add workload to the light rail team, which can be accommodated. Staff would need to study in detail the results of Attachment 3 to our community. Staff would need to fully understand the repercussions of no mitigation on JCB and the off-site changes to other roadways with respect to cut through traffic. Rejection of this signal would divert the team from other light rail tasks and areas of community concern, though which tasks and areas cannot be known as yet. Staff has spent considerable time on this issue thus far, perhaps more than any other light rail

item except for the downtown Milwaukie station. The signalization of the intersection discussion would come back again after light rail is up and running. Staff would field complaints about this Milwaukie intersection until it is signalized in the future.

Alternatives

A. Affirm the staff recommendation to signalize Johnson Creek Boulevard and 42nd Avenue with the Portland to Milwaukie Light Rail project.

B. Affirm with conditions the staff recommendation to signalize Johnson Creek Boulevard and 42nd Avenue with the Portland to Milwaukie Light Rail project.
   - Traffic Calming to be built with the project
   - No left turn lanes, limiting right-of-way acquisition
   - Control signal timing in the off-peak periods
   - City Council to approve the final signal programming design

C. Reject the staff recommendation to signalize Johnson Creek Boulevard and 42nd Avenue with the Portland to Milwaukie Light Rail project.

Attachments

1. Johnson Creek Boulevard History Past Three Decades
2. DKS Traffic Count Technical Information
3. Graphic of queue in future by artist (Queue w/ signal at 32nd but w/o 42nd)
4. Graphic of queue in future by artist (Queue w/ signals 32nd and 42nd)
5. JCB Questions and Answers 3-9-2010
6. Letter from Ardenwald NDA
7. Letter from Lewelling NDA
8. TriMet Memo
9. Transportation System Plan Goals, Discussion, and Analysis of Johnson Creek Boulevard
10. Email from David Aschenbrenner, PMLRT CAC member
11. Letter from City of Milwaukie to Ardenwald NDA
12. Resolution

ATTACHMENT 1

March 3, 2010

Johnson Creek Boulevard History Past Three Decades

2010 – PMLRT project recommends reducing size of park and ride garage to 800 spaces. Budget established for PMLRT project that designates funding for 2 signals and traffic calming on JCB. Agreement by Portland and Milwaukie to use traffic calming on JCB. Conversations on going regarding traffic calming solutions for JCB.

2010 – Suggestion by Metro Councilor to use JCB as a toll road test case.

2010 – Ardenwald NDA submitted letter to public officials regarding JCB. Group of residents disagree with need for signals and request stop signs remain. Lewelling NDA supports signals on JCB.

2009 – Milwaukie Police Department patrolling of JCB and Ardenwald neighborhood. Performed radar survey of traffic in area. Chief's opinion is JCB is relatively safe road compared to problem areas in Milwaukie. Almost all speed offenders on JCB were neighborhood residents.

2009 – PMLRT preliminary design of traffic system to fix queue issues and resolve signal warrants at 32nd and 42nd as part of that project. Met with community to discuss preliminary traffic results for JCB corridor. ADT for JCB is 13,500.

2009 – Response letters from local agencies (Clackamas County, City of Milwaukie) and PMLRT project regarding some local citizen discord with changes to JCB corridor.

2007 – Transportation System Plan updated. JCB is downgraded to collector. Signal noted as warranted for JCB/32nd Ave. Commitment to improve safety for design speed of 25 MPH. Signalization project noted for JCB/42nd Avenue.

2004 – Resolution transferring jurisdiction of JCB from Clackamas County to City of Milwaukie.

2004 – Safety Improvement Project close out and final completions of lingering issues.

2004 – Email from Carlotta Collette addressed to The Oregonian. Email discusses mixed feelings of NDA regarding completed project. Noted traffic calming devices were requested and denied by Portland, requested drivers respect neighborhood.

2002 – Letter from Portland to Hatlelid regarding JCB improvement project.

2001 – IGA between Clackamas County and Milwaukie regarding improvements and jurisdictional transfer of JCB.

2000 – IGA on JCB regarding construction of the improvement project with either Portland or ODOT.

1999 – IGA on JCB regarding construction of the improvement project with either Portland or ODOT.

March 3, 2010

1999 – Staff presentation to City Council regarding JCB improvement project. The staff report outlines not increasing capacity, collector status, sidewalks and curb, bicycle and transit improvements, minimal right of way impacts, and a compromise to the design.

1998 – Intergovernmental Agreement (IGA) between cities of Portland and Milwaukie regarding funding for improvement project on JCB.

1997 – Transportation System Plan referrs to JCB as a Regionally Significant Route. JCB is listed as an Arterial in Milwaukie and a Neighborhood Collector in Portland. The ADT on JCB is 13,200 to the east and 11,000 west towards Sellwood.

1995 – IGA between cities of Portland and Milwaukie regarding local agent responsibilities.

1995 – Resolution by City Council endorsing the JCB safety improvement project.

1995 – Project open house with community to discuss JCB improvement plans. Public hearing at City Council.

1993 – Portland and Milwaukie began working cooperatively with residents on JCB improvement project.

1993 – JCB Improvement project revised. Citizen discussions with City Council.

1992 – JCB Improvement project outlined. Citizen discussions with City Council.

1991 – JCB Improvement project outlined. Citizen discussions with City Council.

1989 – Resolution by City Council supporting findings and recommendations of Metro's SE Corridor Study including JCB proposed safety improvement plan. Metro also adopted plan.

1987 – JCB Traffic counts defined for 1987 as 11,850 in JCB corridor study (exact location not identified).

1982 – McLoughlin Boulevard DEIS Corridor Study lists Tacoma Street with 13,900 ADT to 32nd Avenue.

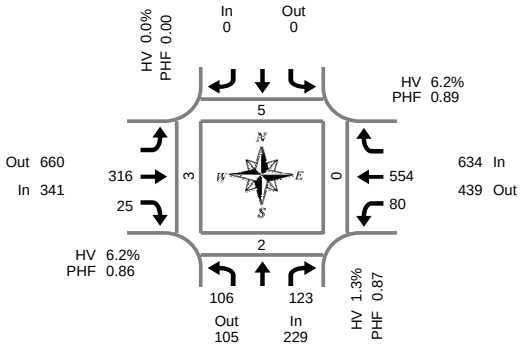
1980's-2010 – Complaints every few years to City Council regarding traffic on JCB.

1978 – Transportation Plan references 12,000 ADT on JCB. JCB is listed as a minor arterial with a proposed improvement at 42nd Avenue. ADT for the East leg of this intersection is 14,000 and 11,200 for the west leg. 42nd Ave has ADT of 4,800. The recommended project was to widen and install turn lanes on JCB for 42nd. JCB ADT quoted as 12,000 at 40th Ave. Road project to straighten and widen roadway proposed.

ATTACHMENT 2a

Total Vehicle Summary

Clay Carney
(503) 833-2740



SE 42nd Ave & SE Johnson Creek Blvd

Wednesday, December 03, 2008
7:00 AM to 9:00 AM

Peak Hour Summary
7:30 AM to 8:30 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	L		R	Bikes				Bikes		T	R	Bikes	L	T		Bikes		North	South	East	West
7:00 AM	7		11	0				0		10	1	0	5	34		0	68	0	0	0	0
7:05 AM	6		8	0				0		15	2	0	3	38		0	72	0	0	0	0
7:10 AM	10		6	0				0		13	3	0	2	41		0	75	0	0	0	0
7:15 AM	6		8	0				0		16	0	0	6	48		0	84	0	0	0	0
7:20 AM	11		8	0				0		19	1	0	6	43		0	88	0	0	0	0
7:25 AM	8		3	0				0		23	1	0	3	51		1	89	0	2	0	0
7:30 AM	6		7	0				0		22	1	0	7	37		0	80	0	0	0	0
7:35 AM	8		11	0				0		18	3	0	7	51		0	98	2	0	0	0
7:40 AM	11		10	0				0		28	3	0	10	40		0	102	0	0	0	0
7:45 AM	11		10	0				0		34	1	0	6	53		0	115	0	0	0	0
7:50 AM	8		13	0				0		31	2	0	6	54		0	114	2	0	0	1
7:55 AM	9		15	0				0		13	5	0	9	50		0	101	0	0	0	0
8:00 AM	11		10	0				0		30	2	0	9	47		0	109	0	0	0	0
8:05 AM	13		2	0				0		32	0	0	3	46		0	96	0	0	0	0
8:10 AM	7		18	0				0		21	2	0	3	48		0	99	0	0	0	0
8:15 AM	10		8	0				0		30	0	0	7	42		0	97	0	0	0	0
8:20 AM	7		8	0				0		28	2	0	6	42		0	93	0	1	0	1
8:25 AM	5		11	0				0		29	4	1	7	44		0	100	1	1	0	1
8:30 AM	10		9	0				0		12	4	0	3	38		0	76	0	1	0	0
8:35 AM	3		9	0				0		32	4	0	5	40		0	93	0	1	0	0
8:40 AM	5		5	0				0		28	3	0	9	40		0	90	0	0	0	0
8:45 AM	9		5	0				0		27	2	0	5	35		0	83	0	0	0	0
8:50 AM	3		7	0				0		27	1	0	6	39		0	83	0	0	0	0
8:55 AM	3		4	0				0		20	1	0	7	39		0	74	0	1	0	0
Total Survey	187		206	0				0		558	48	1	140	1,040		1	2,179	5	7	0	3

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	L		R	Bikes				Bikes		T	R	Bikes	L	T		Bikes		North	South	East	West
7:00 AM	23		25	0				0		38	6	0	10	113		0	215	0	0	0	0
7:15 AM	25		19	0				0		58	2	0	15	142		1	261	0	2	0	0
7:30 AM	25		28	0				0		68	7	0	24	128		0	280	2	0	0	0
7:45 AM	28		38	0				0		78	8	0	21	157		0	330	2	0	0	1
8:00 AM	31		30	0				0		83	4	0	15	141		0	304	0	0	0	0
8:15 AM	22		27	0				0		87	6	1	20	128		0	290	1	2	0	2
8:30 AM	18		23	0				0		72	11	0	17	118		0	259	0	2	0	0
8:45 AM	15		16	0				0		74	4	0	18	113		0	240	0	1	0	0
Total Survey	187		206	0				0		558	48	1	140	1,040		1	2,179	5	7	0	3

Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	229	105	334	0	0	0	0	0	341	660	1,001	1	634	439	1,073	0	1,204	5	2	0	3
%HV	1.3%				0.0%				6.2%				6.2%				5.2%				
PHF	0.87				0.00				0.86				0.89				0.91				

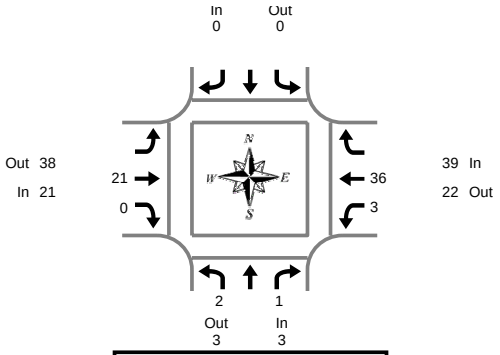
By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	L		R	Total				Total		T	R	Total	L	T		Total	
Volume	106		123	229				0		316	25	341	80	554		634	1,204
%HV	1.9%	NA	0.8%	1.3%	NA	NA	NA	0.0%	NA	6.6%	0.0%	6.2%	3.8%	6.5%	NA	6.2%	5.2%
PHF	0.80		0.81	0.87				0.00		0.85	0.69	0.86	0.83	0.88		0.89	0.91

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	L		R	Bikes				Bikes		T	R	Bikes	L	T		Bikes		North	South	East	West
7:00 AM	101		110	0				0		242	23	0	70	540		1	1,086	4	2	0	1
7:15 AM	109		115	0				0		287	21	0	75	568		1	1,175	4	2	0	1
7:30 AM	106		123	0				0		316	25	1	80	554		0	1,204	5	2	0	3
7:45 AM	99		118	0				0		320	29	1	73	544		0	1,183	3	4	0	3
8:00 AM	86		96	0				0		316	25	1	70	500		0	1,093	1	5	0	2

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SE 42nd Ave & SE Johnson Creek Blvd

Wednesday, December 03, 2008
7:00 AM to 9:00 AM

Peak Hour Summary
7:30 AM to 8:30 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	L		R	Total				Total		T	R	Total	L	T		Total	
7:00 AM	0		0	0				0		1	0	1	1	3		4	5
7:05 AM	0		0	0				0		2	0	2	0	2		2	4
7:10 AM	0		0	0				0		0	1	1	0	3		3	4
7:15 AM	0		0	0				0		1	0	1	1	3		4	5
7:20 AM	0		0	0				0		1	1	2	1	0		1	3
7:25 AM	0		0	0				0		1	0	1	0	3		3	4
7:30 AM	0		0	0				0		2	0	2	0	2		2	4
7:35 AM	0		0	0				0		3	0	3	2	2		4	7
7:40 AM	0		0	0				0		2	0	2	0	2		2	4
7:45 AM	0		0	0				0		1	0	1	0	3		3	4
7:50 AM	1		0	1				0		0	0	0	0	1		1	2
7:55 AM	0		0	0				0		0	0	0	1	4		5	5
8:00 AM	0		0	0				0		5	0	5	0	5		5	10
8:05 AM	0		0	0				0		0	0	0	0	4		4	4
8:10 AM	0		0	0				0		2	0	2	0	6		6	8
8:15 AM	1		0	1				0		2	0	2	0	6		6	9
8:20 AM	0		1	1				0		2	0	2	0	1		1	4
8:25 AM	0		0	0				0		2	0	2	0	0		0	2
8:30 AM	1		0	1				0		0	0	0	0	4		4	5
8:35 AM	0		0	0				0		3	0	3	0	4		4	7
8:40 AM	0		0	0				0		3	0	3	0	3		3	6
8:45 AM	0		0	0				0		0	0	0	0	4		4	4
8:50 AM	0		0	0				0		3	0	3	0	4		4	7
8:55 AM	0		0	0				0		3	0	3	0	5		5	8
Total Survey	3		1	4				0		39	2	41	6	74		80	125

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	L		R	Total				Total		T	R	Total	L	T		Total	
7:00 AM	0		0	0				0		3	1	4	1	8		9	13
7:15 AM	0		0	0				0		3	1	4	2	6		8	12
7:30 AM	0		0	0				0		7	0	7	2	6		8	15
7:45 AM	1		0	1				0		1	0	1	1	8		9	11
8:00 AM	0		0	0				0		7	0	7	0	15		15	22
8:15 AM	1		1	2				0		6	0	6	0	7		7	15
8:30 AM	1		0	1				0		6	0	6	0	11		11	18
8:45 AM	0		0	0				0		6	0	6	0	13		13	19
Total Survey	3		1	4				0		39	2	41	6	74		80	125

Heavy Vehicle Peak Hour Summary
7:30 AM to 8:30 AM

By Approach	Northbound SE 42nd Ave			Southbound SE 42nd Ave			Eastbound SE Johnson Creek Blvd			Westbound SE Johnson Creek Blvd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	3	3	6	0	0	0	21	38	59	39	22	61	63
PHF	0.38			0.00			0.75			0.61			0.72

By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	L		R	Total				Total		T	R	Total	L	T		Total	
Volume	2		1	3				0		21	0	21	3	36		39	63
PHF	0.50		0.25	0.38				0.00		0.75	0.00	0.75	0.38	0.56		0.61	0.72

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

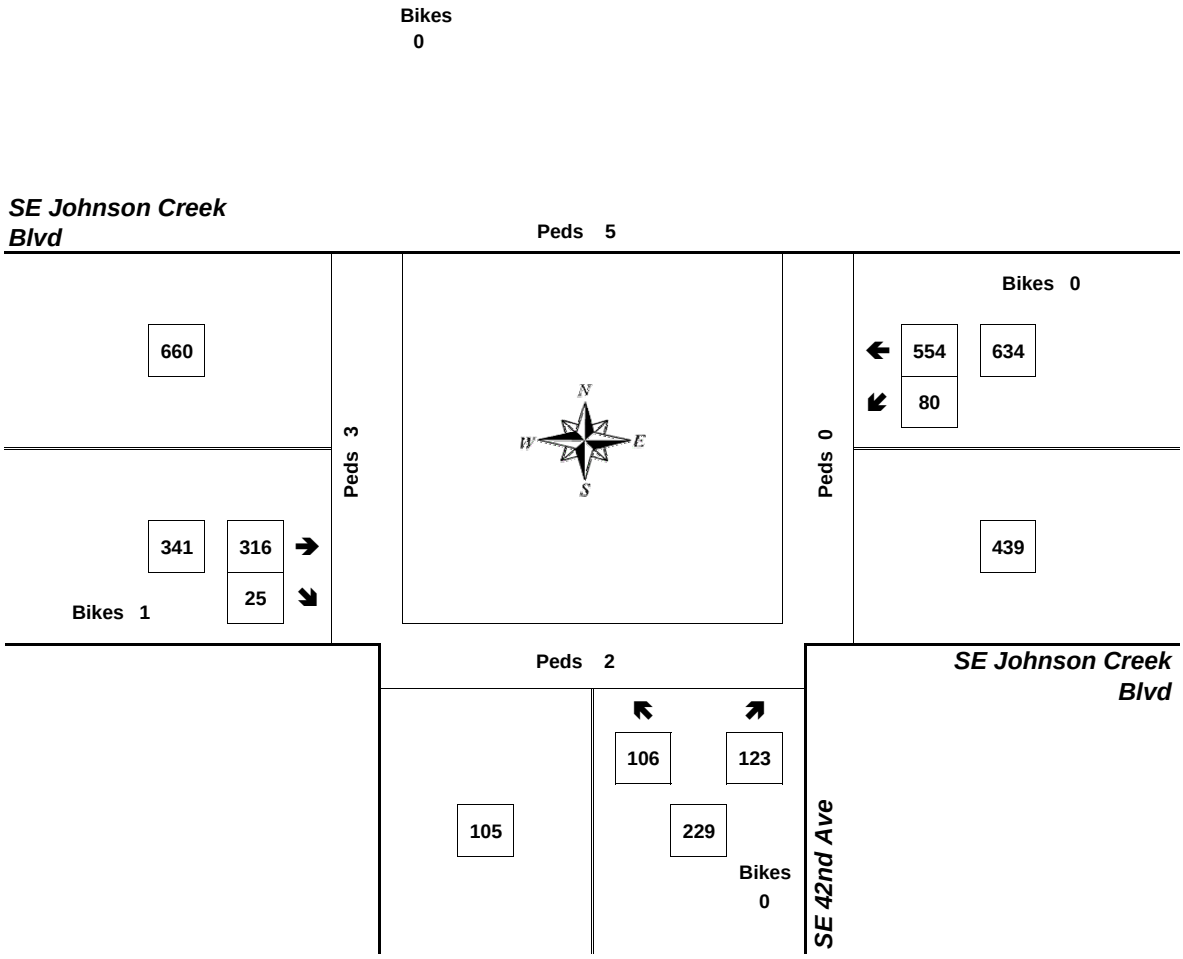
Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	L		R	Total				Total		T	R	Total	L	T		Total	
7:00 AM	1		0	1				0		14	2	16	6	28		34	51
7:15 AM	1		0	1				0		18	1	19	5	35		40	60
7:30 AM	2		1	3				0		21	0	21	3	36		39	63
7:45 AM	3		1	4				0		20	0	20	1	41		42	66
8:00 AM	2		1	3				0		25	0	25	0	46		46	74

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 42nd Ave & SE Johnson Creek Blvd

7:30 AM to 8:30 AM
Wednesday, December 03, 2008



Approach	PHF	HV%	Volume
EB	0.86	6.2%	341
WB	0.89	6.2%	634
NB	0.87	1.3%	229
SB	0.00	0.0%	0
Intersection	0.91	5.2%	1,204

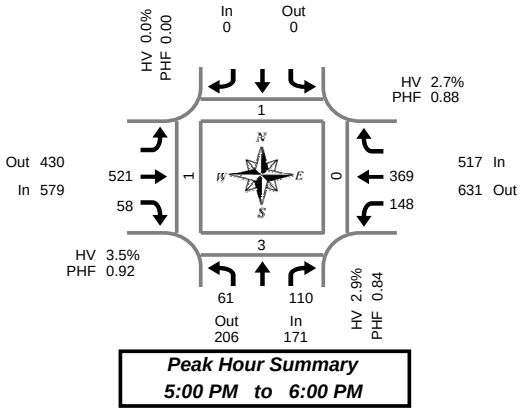
Count Period: 7:00 AM to 9:00 AM

ATTACHMENT 2b

Total Vehicle Summary

All Traffic Data Services Inc.

Clay Carney
(503) 833-2740



SE 42nd Ave & SE Johnson Creek Blvd

Tuesday, December 02, 2008
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	L		R	Bikes				Bikes	T	R	Bikes	L	T		Bikes		North	South	East	West
4:00 PM	1		5	0				0	54	5	0	13	28		0	106	0	0	0	0
4:05 PM	1		5	0				0	49	5	0	10	31		0	101	0	0	0	1
4:10 PM	2		11	0				0	50	5	0	12	34		0	114	0	0	0	0
4:15 PM	3		12	0				0	48	8	0	9	28		0	108	0	0	0	0
4:20 PM	4		10	0				0	46	4	0	9	24		0	97	0	1	0	0
4:25 PM	4		9	0				0	38	4	0	12	31		0	98	0	0	0	0
4:30 PM	2		9	0				0	41	6	0	11	35		1	104	0	0	0	0
4:35 PM	3		11	0				0	36	11	0	8	36		0	105	0	0	0	0
4:40 PM	3		7	0				0	40	5	0	12	24		0	91	0	0	0	0
4:45 PM	1		8	0				0	43	3	0	12	25		0	92	0	0	0	0
4:50 PM	4		11	0				0	33	7	0	10	25		0	90	0	0	0	0
4:55 PM	3		5	0				0	49	14	0	13	19		0	103	0	0	0	0
5:00 PM	3		6	0				0	53	5	0	6	32		0	105	0	0	0	0
5:05 PM	8		13	0				0	41	3	0	12	31		0	108	0	1	0	0
5:10 PM	6		10	0				0	48	7	0	12	40		0	123	0	1	0	0
5:15 PM	2		9	0				0	41	8	0	17	27		0	104	0	0	0	0
5:20 PM	3		8	0				0	46	4	0	9	32		1	102	0	0	0	0
5:25 PM	4		9	0				0	51	5	0	14	28		1	111	0	0	0	0
5:30 PM	7		15	0				0	47	5	1	11	26		0	111	1	0	0	0
5:35 PM	4		8	0				0	31	4	0	22	32		0	101	0	1	0	0
5:40 PM	9		8	0				0	38	5	0	14	36		0	110	0	0	0	0
5:45 PM	8		8	0				0	33	2	1	13	30		0	94	0	0	0	0
5:50 PM	5		8	0				0	44	4	0	8	22		0	91	0	0	0	0
5:55 PM	2		8	0				0	48	6	0	10	33		0	107	0	0	0	1
Total Survey	92		213	0				0	1,048	135	2	279	709		3	2,476	1	4	0	2

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	L		R	Bikes				Bikes	T	R	Bikes	L	T		Bikes		North	South	East	West
4:00 PM	4		21	0				0	153	15	0	35	93		0	321	0	0	0	1
4:15 PM	11		31	0				0	132	16	0	30	83		0	303	0	1	0	0
4:30 PM	8		27	0				0	117	22	0	31	95		1	300	0	0	0	0
4:45 PM	8		24	0				0	125	24	0	35	69		0	285	0	0	0	0
5:00 PM	17		29	0				0	142	15	0	30	103		0	336	0	2	0	0
5:15 PM	9		26	0				0	138	17	0	40	87		2	317	0	0	0	0
5:30 PM	20		31	0				0	116	14	1	47	94		0	322	1	1	0	0
5:45 PM	15		24	0				0	125	12	1	31	85		0	292	0	0	0	1
Total Survey	92		213	0				0	1,048	135	2	279	709		3	2,476	1	4	0	2

Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	171	206	377	0	0	0	0	0	579	430	1,009	2	517	631	1,148	2	1,267	1	3	0	1
%HV	2.9%				0.0%				3.5%				2.7%				3.1%				
PHF	0.84				0.00				0.92				0.88				0.94				

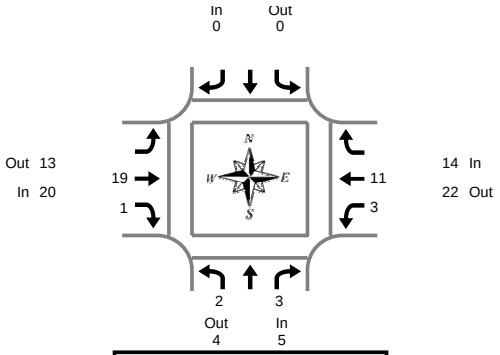
By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	L		R	Total				Total		T	R	Total	L	T		Total	
Volume	61		110	171				0		521	58	579	148	369		517	1,267
%HV	3.3%	NA	2.7%	2.9%	NA	NA	NA	0.0%	NA	3.6%	1.7%	3.5%	2.0%	3.0%	NA	2.7%	3.1%
PHF	0.69		0.86	0.84				0.00		0.90	0.76	0.92	0.76	0.90		0.88	0.94

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	L		R	Bikes				Bikes	T	R	Bikes	L	T		Bikes		North	South	East	West
4:00 PM	31		103	0				0	527	77	0	131	340		1	1,209	0	1	0	1
4:15 PM	44		111	0				0	516	77	0	126	350		1	1,224	0	3	0	0
4:30 PM	42		106	0				0	522	78	0	136	354		3	1,238	0	2	0	0
4:45 PM	54		110	0				0	521	70	1	152	353		2	1,260	1	3	0	0
5:00 PM	61		110	0				0	521	58	2	148	369		2	1,267	1	3	0	1

Heavy Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SE 42nd Ave & SE Johnson Creek Blvd

Tuesday, December 02, 2008
4:00 PM to 6:00 PM

Peak Hour Summary
5:00 PM to 6:00 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	L		R	Total				Total		T	R	Total	L	T		Total	
4:00 PM	0		0	0				0		3	0	3	1	2		3	6
4:05 PM	0		0	0				0		1	0	1	1	2		3	4
4:10 PM	0		0	0				0		1	0	1	0	0		0	1
4:15 PM	0		0	0				0		3	0	3	1	1		2	5
4:20 PM	0		0	0				0		1	0	1	0	1		1	2
4:25 PM	1		0	1				0		0	0	0	1	0		1	2
4:30 PM	0		0	0				0		3	0	3	0	0		0	3
4:35 PM	0		0	0				0		1	0	1	0	1		1	2
4:40 PM	0		0	0				0		1	0	1	0	1		1	2
4:45 PM	0		1	1				0		0	0	0	0	0		0	1
4:50 PM	0		0	0				0		2	1	3	0	1		1	4
4:55 PM	0		0	0				0		2	0	2	1	0		1	3
5:00 PM	0		0	0				0		2	1	3	0	3		3	6
5:05 PM	0		0	0				0		2	0	2	2	1		3	5
5:10 PM	1		0	1				0		2	0	2	0	0		0	3
5:15 PM	1		1	2				0		0	0	0	0	0		0	2
5:20 PM	0		0	0				0		2	0	2	0	1		1	3
5:25 PM	0		0	0				0		2	0	2	0	0		0	2
5:30 PM	0		1	1				0		1	0	1	0	3		3	5
5:35 PM	0		0	0				0		1	0	1	0	1		1	2
5:40 PM	0		0	0				0		2	0	2	0	0		0	2
5:45 PM	0		1	1				0		0	0	0	0	0		0	1
5:50 PM	0		0	0				0		2	0	2	0	0		0	2
5:55 PM	0		0	0				0		3	0	3	1	2		3	6
Total Survey	3		4	7				0		37	2	39	8	20		28	74

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	L		R	Total				Total		T	R	Total	L	T		Total	
4:00 PM	0		0	0				0		5	0	5	2	4		6	11
4:15 PM	1		0	1				0		4	0	4	2	2		4	9
4:30 PM	0		0	0				0		5	0	5	0	2		2	7
4:45 PM	0		1	1				0		4	1	5	1	1		2	8
5:00 PM	1		0	1				0		6	1	7	2	4		6	14
5:15 PM	1		1	2				0		4	0	4	0	1		1	7
5:30 PM	0		1	1				0		4	0	4	0	4		4	9
5:45 PM	0		1	1				0		5	0	5	1	2		3	9
Total Survey	3		4	7				0		37	2	39	8	20		28	74

Heavy Vehicle Peak Hour Summary
5:00 PM to 6:00 PM

By Approach	Northbound SE 42nd Ave			Southbound SE 42nd Ave			Eastbound SE Johnson Creek Blvd			Westbound SE Johnson Creek Blvd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	5	4	9	0	0	0	20	13	33	14	22	36	39
PHF	0.42			0.00			0.71			0.58			0.70

By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	L		R	Total				Total		T	R	Total	L	T		Total	
Volume	2		3	5				0		19	1	20	3	11		14	39
PHF	0.25		0.75	0.42				0.00		0.79	0.25	0.71	0.38	0.69		0.58	0.70

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

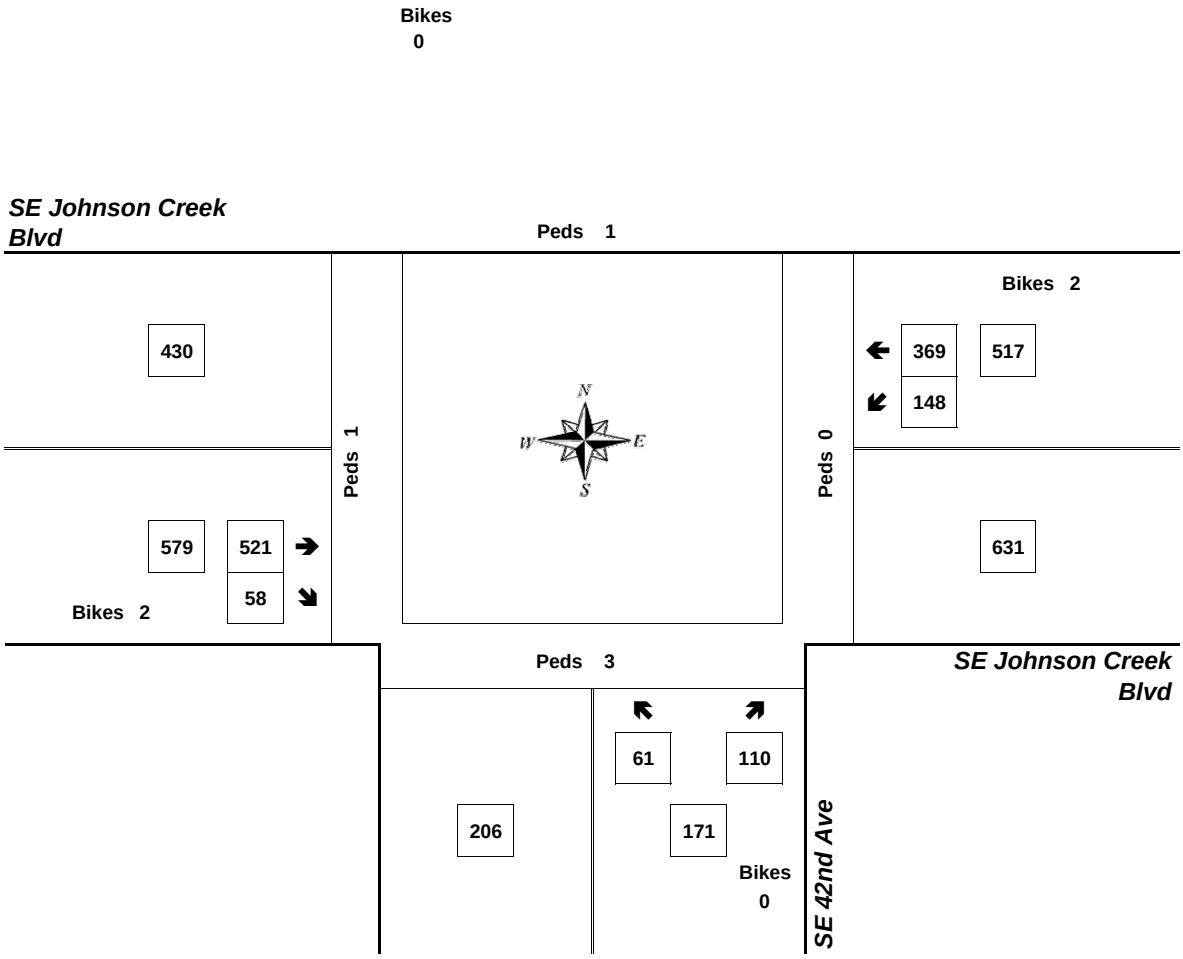
Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	L		R	Total				Total		T	R	Total	L	T		Total	
4:00 PM	1		1	2				0		18	1	19	5	9		14	35
4:15 PM	2		1	3				0		19	2	21	5	9		14	38
4:30 PM	2		2	4				0		19	2	21	3	8		11	36
4:45 PM	2		3	5				0		18	2	20	3	10		13	38
5:00 PM	2		3	5				0		19	1	20	3	11		14	39

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 42nd Ave & SE Johnson Creek Blvd

5:00 PM to 6:00 PM
Tuesday, December 02, 2008



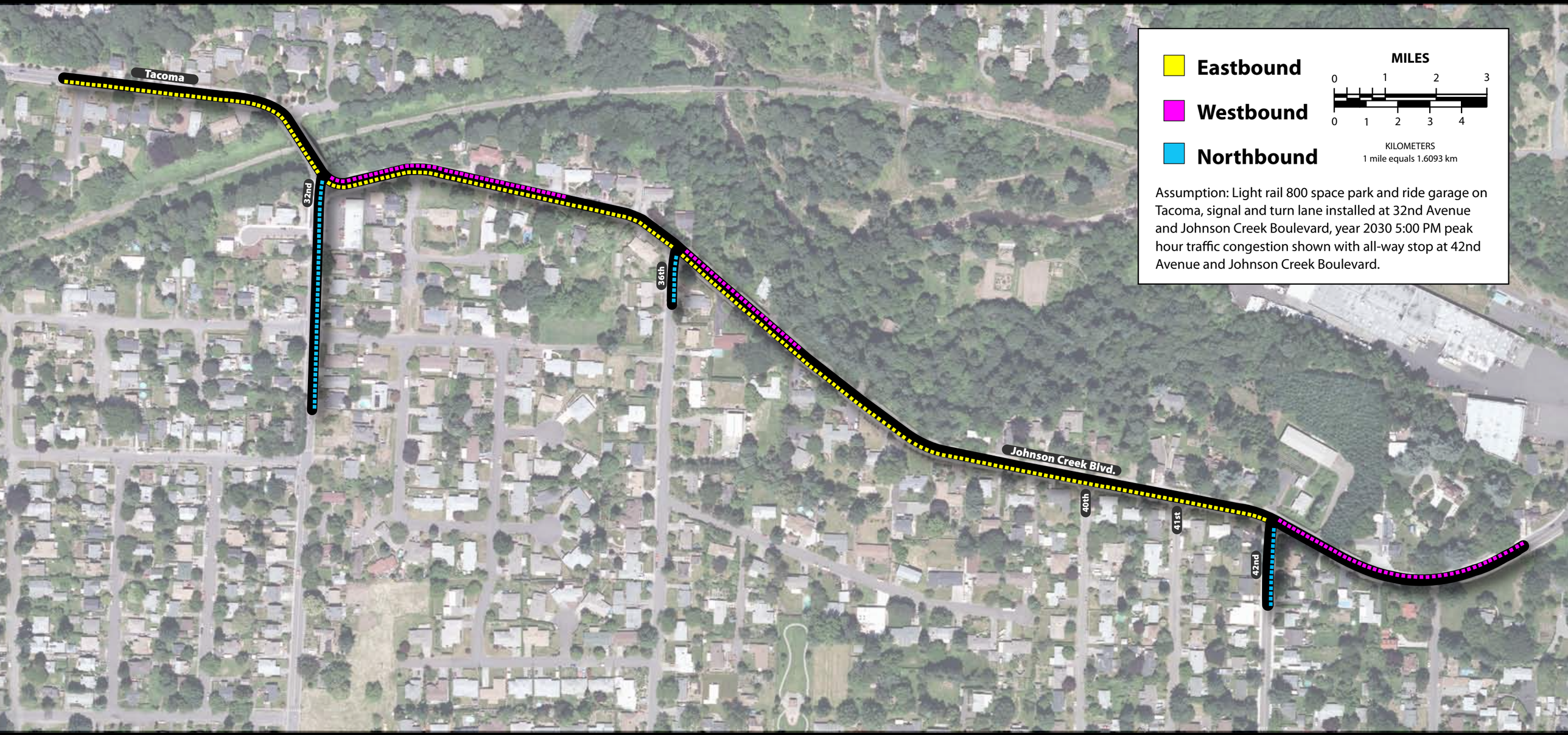
Approach	PHF	HV%	Volume
EB	0.92	3.5%	579
WB	0.88	2.7%	517
NB	0.84	2.9%	171
SB	0.00	0.0%	0
Intersection	0.94	3.1%	1,267

Count Period: 4:00 PM to 6:00 PM

ATTACHMENT 3

Year 2030

5:00 PM Peak Hour Traffic Congestion without Signal at 42nd Avenue



Eastbound

Westbound

Northbound

MILES
0 1 2 3
0 1 2 3 4

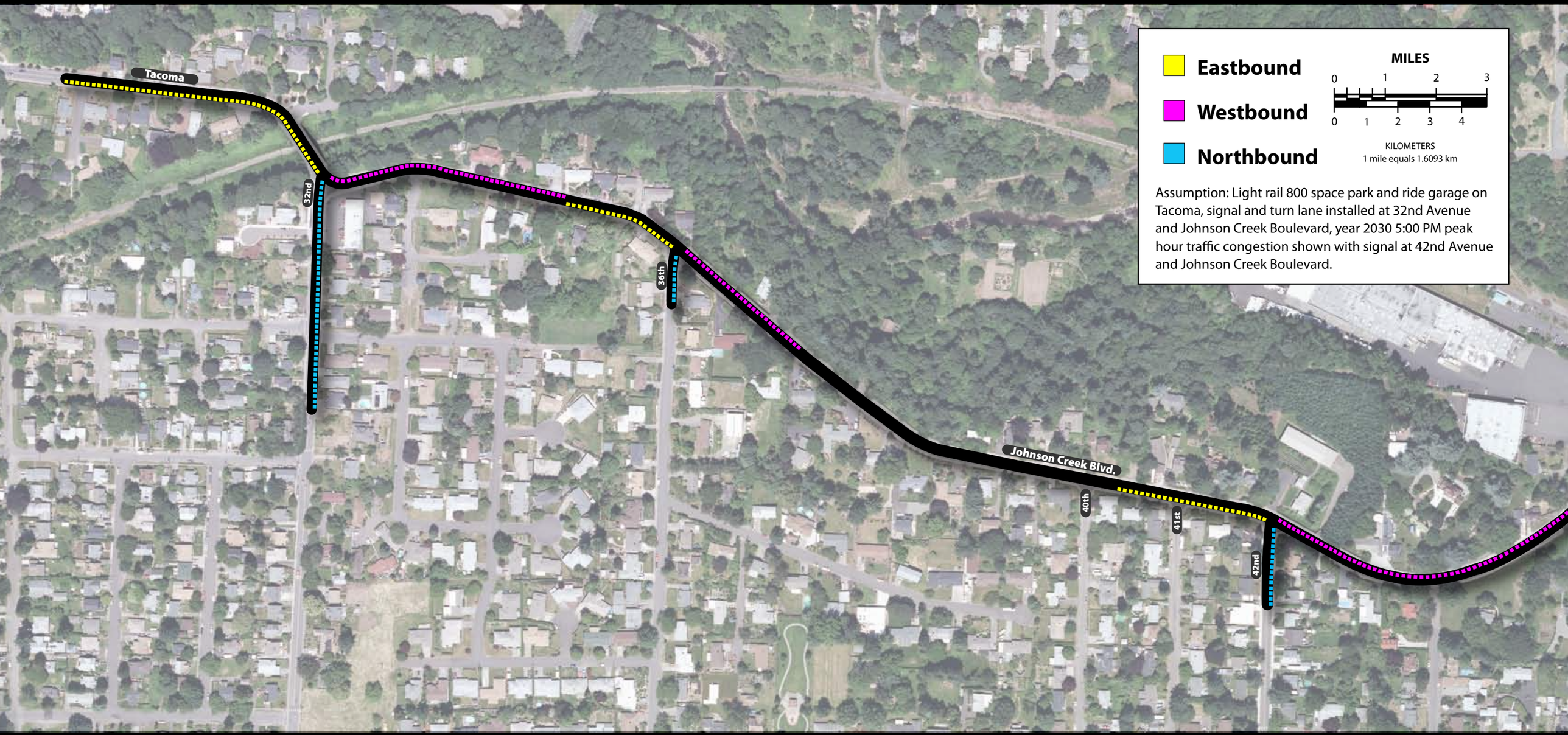
KILOMETERS
1 mile equals 1.6093 km

Assumption: Light rail 800 space park and ride garage on Tacoma, signal and turn lane installed at 32nd Avenue and Johnson Creek Boulevard, year 2030 5:00 PM peak hour traffic congestion shown with all-way stop at 42nd Avenue and Johnson Creek Boulevard.

ATTACHMENT 4

Year 2030

5:00 PM Peak Hour Traffic Congestion with Signal at 42nd Avenue



Eastbound

Westbound

Northbound

MILES
0 1 2 3
0 1 2 3 4

KILOMETERS
1 mile equals 1.6093 km

Assumption: Light rail 800 space park and ride garage on Tacoma, signal and turn lane installed at 32nd Avenue and Johnson Creek Boulevard, year 2030 5:00 PM peak hour traffic congestion shown with signal at 42nd Avenue and Johnson Creek Boulevard.

PORTLAND-MILWAUKIE
LIGHT RAIL PROJECT

Draft Responses Updated 3/9/10

Questions from 10/26/09
Tacoma Park & Ride Traffic Meeting

1. **Can Johnson Creek Blvd. status as "Collector" be changed to discourage regional traffic?**

   Any changes to the status of the road's classification would happen outside the scope of the Portland Milwaukie Light Rail (PMLR) project. Any change in road classification would be up to the responsible jurisdiction. The City of Portland and the City of Milwaukie share jurisdiction over Johnson Creek Blvd. Johnson Creek Blvd. is a collector because it is the only east-west route between Harrison Street and Bybee Blvd.

2. **Can Johnson Creek Blvd. status as "emergency response route" be changed to allow for traffic calming?**

   The road's classification is not within the scope of the PMLR project. Johnson Creek Blvd. is designated as an emergency response route for the City of Milwaukie and Clackamas County Fire District. The road classification change would be up to emergency providers and the City of Milwaukie. Currently, there is no plan to change the designation.

3. **Were the Sellwood Bridge replacement and Highway 43 interchange improvements included in the traffic forecast?**

   Yes. The Sellwood Bridge replacement project and Highway 43 interchange improvements were incorporated as a project listed on the current Metro Regional Transportation Plan (RTP project #1012) and in the Metro regional travel demand model for determining future traffic volume forecasting.

4. **Have the neighborhoods or City of Milwaukie submitted anything about traffic in writing to the Project?**

   Yes. The Ardenwald-Johnson Creek Neighborhood has submitted letters to the municipalities and agencies that are participating in the project. A letter outlining the different concerns has also been submitted to the project by a member of the Portland to Milwaukie Light Rail Citizen Advisory Committee. The City of Milwaukie

is a project partner and closely coordinates with TriMet and the City of Portland on issues related to JCB.

5. **Would the City of Portland allow a flashing red (all way stop) during non-peak hours at 32nd?**

   The City of Portland Traffic Engineer has reviewed this option and has stated that due to the inconsistency of intersection control this option would not meet City of Portland safety standards. In addition when signals fail, and there is power, they go to a red flash mode for all approaches. Many drivers have seen this and understand it. So when a signal goes to red flash they report a broken signal.

6. **Would the City of Portland allow speed bumps or cushions?**

   The cities of Portland and Milwaukie are actively exploring traffic calming options. Options include “speed feedback” signs, additional signage, speed bumps and cushions.

7. **What traffic calming tools could the City of Portland allow that do not require additional right-of-way?**

   Options include: “speed feedback” signs, enhanced enforcement and additional signage.

8. **How would vehicles turn left (southbound) from Johnson Creek Blvd. onto 32nd Ave. at 32nd**

   The design and phasing of the signal would be determined by the City of Portland; however for the purposes of analysis, the project has assumed that there would be a phase of the signal operation that would be dedicated to the southbound approach movement. Therefore when the southbound approach movement would occur, the northbound approach movement would be stopped as well as the westbound left turning movement. This would eliminate any conflict with the southbound approach volumes.

9. **What safety and security features will be included at the station?**

   Features include site design (including landscaping) that minimizes "hiding" places, (Crime Prevention Through Environmental Design, CPTED) appropriate lighting and CCTV cameras.

10. Why is a 1,000 space P&R needed at Tacoma?

The garage size has been reduced from 1,000 to 800 spaces (with a foundation that allows for future expansion). As a result of this reduction, the structure is now four stories instead of five. This parking capacity is based on projected demand.

Questions from attendees 2/11/10
Tacoma Park & Ride Johnson Creek Blvd. Meeting

1. Does the queuing eastbound on Tacoma during the afternoon peak hour back up to affect the mainline of McLoughlin Blvd. even without the project?

Yes, the project has tested a scenario for 2030 that is a "no-build/do nothing" scenario that does in fact indicate that even without the project the queuing in the eastbound direction along SE Tacoma Street would back up from SE 32nd Ave/SE Johnson Creek Blvd. over SE McLoughlin Blvd. and chain react with the surrounding interchange intersections to create a queue spillback of about 500 feet onto the southbound lane of McLoughlin. This condition creates a life-threatening hazard. It is therefore imperative that the project address the intersection of SE 32nd Ave/SE Johnson Creek Blvd.

2. What about free westbound right turn pocket/lane at SE 32nd Avenue/SE Johnson Creek Blvd.?

Allowing a free-flow (non traffic controlled) movement for a westbound right turn pocket, would create an unsafe environment at the intersection because the northbound through movement would be stop controlled and there is no indication for the northbound through traffic to know that the westbound right turn would be free moving. In addition the southbound approach would be stop controlled, so a northbound driver unfamiliar with the intersection may see the southbound approach stopped (and the westbound left, not right, movement stopped) and assume that the entire westbound approach would stop. Proceeding forward, the northbound through movement could collide with the free westbound right turn then. Ultimately this would be reviewed and approved or denied by the City of Portland traffic engineer. This free movement does not alleviate the traffic condition for the eastbound movement.

3. What about a new northbound right turn pocket at SE 45th Place/SE Johnson Creek Boulevard?

The amount of space available without reconstructing the bridge/overcrossing of Johnson Creek would allow for approximately 25 feet of storage space (one car length). This one car length storage space has minimal affect on reducing the queuing at this

intersection for that movement. A lower cost solution that allows for meeting jurisdictional operational standard AND reduces potential queuing can be seen by adjusting the signal timing. Additionally, if a new turn pocket were to be constructed that rebuilds the Johnson Creek crossing, it would allow for two northbound approach lanes (one through lane and one right turn pocket/lane), but would have two northbound lanes crossing over the at-grade Springwater Trail. This can be an unsafe condition because a vehicle stopped in the outer (east) northbound lane could potentially block a pedestrian crossing SE Johnson Creek Boulevard from the east, and that pedestrian could then emerge from the stopped vehicle to then be in conflict and potentially collide with a northbound vehicle travelling in the inner (west) lane not aware or able to see the pedestrian until it is too late. The same is true, and even more problematic because of faster traveling speeds, for a bicycle from the east on the Springwater Trail. This turn pocket does not alleviate the traffic condition for the east or westbound movement at 42nd.

4. What about a southbound through pocket at SE 32nd Avenue/SE Johnson Creek Boulevard?

The amount of space available without reconstructing the bridge/overcrossing of the Springwater Trail would allow for approximately 25 feet of storage space (one car length). This one car length has minimal affect on reducing the projected 2030 PM peak hour queue for the southbound approach, and even if implemented the queue would still spillback to the Hwy 99E/SE Tacoma Street interchange and ultimately back onto the southbound Hwy 99E mainline (with or without the project). In addition, the small pocket would encroach into the existing bicycle lane at the intersection. Recent sidewalk improvements at the northwest intersection corner would also need to be modified. To implement a longer turn or through pocket in the southbound approach would require the reconstruction and widening of the existing Springwater Trail overpass structure. Currently that structure is weight restricted, and a new structure would be built to code and eliminate that weight restriction allowing heavier vehicles/trucks access to the area. The signal was selected as an appropriate potential mitigation that was low cost and addressed the queuing (and safety) issues of vehicles backing up onto the southbound mainline of Hwy 99E.

Questions from Richard Cayo Letter dated 2/11/10
Tacoma Park & Ride Traffic Meeting

1. **Why was SE 39th Ave between Glenwood and Woodstock repaved when SE Clay and Water streets near OMSI are in such poor condition?**

The repaving of 39th Ave. between Glenwood and Woodstock is part of the City of Portland's preventive maintenance program. Repaving roads before they completely deteriorate saves money, so more roads can be repaired. If you would like more information please call Brian Oberding, City of Portland Pavement Services Manager, at 503-823-7560.

2. **Why is so much money being spent on the City of Portland's sewer system?**

   The sewer system needs upgrades to minimize sewage flow into rivers.

3. **Why doesn't construction on the Portland Streetcar project on SE Grand and MLK take place only at night, when fewer motorists would be inconvenienced?**

   The City of Portland is managing construction of the Portland Streetcar project. While construction is more efficient during daylight hours the project does include some night time activities to minimize impacts to motorists.

4. **Why does the region invest in light rail when buses are cheaper and can help move people out of the city during a natural disaster?**

   Light rail is part of a balanced transportation system that also includes roads, freeways, bikes routes, sidewalks, and other modes of transit including buses, streetcar, and, in the future, bus rapid transit (BRT). In the Portland region, each light rail vehicle does the work of at least four buses. Carrying more than 200 passengers, each light rail car has more than three times the capacity of a bus. It also moves about 25 percent faster through traffic due to faster loading and traffic priority. Light rail travels in its own right of way and doesn't get stuck in traffic. Riders also like its permanence and predictability, relatively quiet operation and zero emissions. Riders also enjoy wide doors and spacious interiors, smooth ride quality. About 100,000 trips are taken on MAX on an average weekday; and it carries one-third of all weekday transit trips.

5. **Why is the Portland Milwaukie Light Rail project spending money on traffic signals on Johnson Creek Blvd. when the residents of Johnson Creek Blvd. don't want them?**

   The project has tested a "no-build/do nothing" scenario that indicates, even without the project, the queuing in the eastbound direction along SE Tacoma Street would back up from SE 32nd Ave/SE Johnson Creek Blvd. over SE McLoughlin Blvd. and chain react with the surrounding interchange intersections to create a queue spillback of about 500 feet onto the southbound lane of McLoughlin. This condition creates a life-threatening hazard. . It is therefore imperative that the project address the intersection of SE 32nd Ave/SE Johnson Creek Blvd.

Questions from Linda Hatelid after 2/11/10 Tacoma Park & Ride Traffic Meeting (verbal)

1. **Specific location of speed cushions that we can go look at?**

   Lake Oswego (Lakeview Blvd. between Pilkington and Bryant, Quarry Rd. just east of Carman Dr. from Galewood St. to Country Woods. Ct.; Galewood St. from Quarry Rd. to the east).
   Beaverton (155th from Beverly Beach to Davis, 6th Street from Erickson to Menlo, and on Sorrento Dr).
   Tigard (114th, 106th, North Dakota Street, Canterbury Street)

2. **Specific location of "smart" signals?**

   Almost any signal can be described as a "smart" signal. Signals may be tied together to create, or disrupt through traffic movement. With vehicle detection, signals can provide priority for specified turning or through movements. Several specific signal locations are close by; one in particular, is 43rd and King Road. Ms. Hatlelid is looking for an exact duplicate of the 42nd and JCB intersection signalized. This does not exist close to this location. At 45th and Johnson Creek Blvd there is a similar signal, but is currently in need of repair to operate efficiently.

Questions from City of Milwaukie's 2/22/10 Monthly Meeting

1. **What is the exit routing from the Tacoma structure onto Tacoma Street?**

   Traffic would exit the Tacoma Park and Ride lot on a new access road from just east of the station northbound to SE Tacoma Street. Approximately 30% of the traffic would turn right with 70% turning left.

2. **Concern about autos backing up over light rail tracks. What do the queues look like for autos entering and exiting the Tacoma Park and Ride structure during morning and afternoon peak times? How much queuing storage is available for cars entering and exiting the garage during these times?**

   On the new access road from the station to SE Tacoma Street, there is 500 feet between the light rail crossing and the intersection at SE Tacoma Street. With the reduction of the Tacoma Park and Ride lot size to 800 spaces, during the one hour afternoon peak the northbound vehicle queues don't back up over the tracks. For 95% of the time the vehicle queue is 375 feet or less. This represents a shortening

of the queue from about 450 feet or less (95th percentile) under the 1,000 space park and ride lot. The 375 foot queue represents about 15 to 17 cars.

On SE Tacoma Street the project is recommending restriping to lengthen the westbound left turn lane to the park and ride access road to about 200 feet. With the reduction of the Tacoma Park and Ride lot size to 800 spaces, during the one hour morning peak the westbound vehicle queue, in the left turn lane, is 150 feet or less for 95 % of the hour. The 150 foot queue represents about six to seven cars. Within the site the potential queue stopped by a light rail vehicle is expected to be 300 feet representing eleven to twelve cars. There is 500 feet of queuing available and will result in no spill back to Tacoma.

3. When can signal timing be adjusted at the 45th and Johnson Creek Blvd. intersection?

The City of Portland's signal engineer made a site visit to the intersection last week, and found the east approach detection device had failed due to pavement damage. This is causing the westbound green to extend to its maximum time. The maximum time for this movement was reduced, which is all that can be done until the detection device has been repaired.

4. What affect will downsizing of the Park Ave Park and Ride structure from 1,000 to 600 spaces have on commuters traveling from the south? Will there be enough room to accommodate those who want to park?

Metro's High Capacity Regional System Plan identified a future high capacity transit corridor to Oregon City, regardless of corridor chosen; a 1,000-space structure at Park Avenue may never reach full utilization. The design of the 600-space structure will include provisions for a possible future expansion. This expansion, while not anticipated, would be developed "once triggered" by conditions defined through a process by jurisdictional partners. This process would identify when expansion could occur, what permitting and review process would be required, and how would an expansion project design and construction be managed.

Further analysis and triggers for expansion include:

- Control measures to assure no intrusive parking in neighborhoods adjacent to the park and ride.
- Utilization of "lot full "signage that informs park and ride users of remaining capacity in the garage.
- Use of supporting parking facilities along the McLoughlin/99E corridor to relieve any long term pressure on parking.

5. What do models show regarding the percentage of commuters traveling south of Park Ave.?

About 55-60% of the trips coming to the Park Avenue Park and Ride lot come from the south on SE McLoughlin Blvd.

6. **Can we have vissim models of the signalized 32nd and 42nd intersections with Johnson Creek Blvd? Ms. Hatelid has asked if Alan Snook can present this at the next Ardenwald Neighborhood Association meeting.**

   This request as been referred to project staff for consideration.

ATTACHMENT 6

January 7, 2010

Dear Public Official:

In response to the ongoing discussions concerning expected traffic changes due to the proposed Tacoma Street Park and Ride, Ardenwald/Johnson Creek Neighborhood Association is writing to express our unified support in keeping existing traffic controls on the section of SE Johnson Creek Boulevard within our neighborhood boundary. Thank you for taking the time to thoroughly read this letter while considering the residents who are directly affected by any decisions you make regarding this issue. Our concerns focus on safety and livability for the neighborhood residents.

Issue: In response to the expected traffic changes due to the proposed Tacoma Street Park and Ride, potential traffic mitigation has been identified* on SE Johnson Creek Boulevard (SE JCB) and all intersections along the boulevard between SE 17th Avenue and SE 45th place which includes replacing stop signs at SE 32nd and SE 42nd with traffic signals and removing the stop sign at SE 36th. The two proposed traffic lights/ signals would be timed to allow for maximum traffic volume on the stretch of SE JCB that runs through our neighborhood. This proposed traffic mitigation is currently being reviewed by Tri-Met, the cities of Portland and Milwaukie, Clackamas and Multnomah Counties, Oregon Department of Transportation and Metro.

Neighborhood Response:
Reduce traffic speeds to legal limit (25 mph) in order to support safe traffic speeds and volume limits along the impacted area of SE JCB and nearby streets. We are not interested in increasing the volume of traffic through the neighborhood at the expense of safety and livability issues. Slower traffic will be an incentive for drivers to use other routes as well as making SE JCB safer for drivers/pedestrians/people exiting their houses along SE JCB as well as being a preventative measure against the current damage to fences, mailboxes and other property along SE JCB.

Recommendations:

1. Leave existing traffic signage AS IS.

2. Review Milwaukie's Transit plan and to make sure that the goals are keeping with the overall goal of the plan and not picking and choosing the pieces that are beneficial for one area but harmful to another.

3. Prioritize new southbound traffic flow off of SE JCB/Tacoma near the Kasch's Garden Center location. This would be a major safety and traffic improvement for more than half the expected traffic to the Tacoma Park and Ride and encourage the movement onto major roadways and instead of the neighborhood.

4. Change SE JCB's current emergency vehicle routing designation from fire trucks and other emergency vehicles to routing primarily for police cars. This would allow some traffic calming measures (bumps, islands etc) and slow down traffic.

5. Implement traffic calming devises that provide visual and aural cues to alert drivers of speed zones. Devices to be studied may include changes in pavement color and texture used in interesting and visually attractive ways, rumble strips, turnarounds, signs indicating traffic speed or kept up bike lane and pedestrian

striping.

6. Implement the proposed right turn lane on SE JCB westbound at the intersection of 32nd and SE JCB.

7. Maintain additional mitigation at 99E Southbound off-ramp.

8. Improve safety of Springwater Corridor crossing on SE JCB near SE 45th place by putting up a crosswalk signal or ped/bike overpass. This would also encourage alternative transportation to the park and ride.

9. Improve pedestrian experience and bike access to the Park and Ride by improving lighting and access routes - namely the Springwater Corridor and SE JCB between SE 17th and SE 32nd.

Background:
The reason traffic issues are so important to Ardenwald/Johnson Creek Neighborhood residents is that there is an anticipation of increased traffic from the use of the proposed Tacoma Park & Ride - a park and ride equal in size to the largest park and ride structures within the entire Tri-met system and the largest park and ride within the Portland city limits. Even if this large structure were not built, Metro models indicate that traffic through our neighborhood will increase as the metro area grows.

According to the DKS study*, most of the traffic using the park and ride is expected from the south but a significant percent is expected from the east and west using SE JCB/Tacoma. The obvious goal of the area traffic planners, as well as many city, county and state staff working on this project, is to implement the proposed traffic mitigation measures thus encouraging the increased volume of traffic through the neighborhood.

Speeding is already a problem on JCB - ***Why improve traffic flow on a neighborhood street with an existing speeding issue, when the potential changes are only needed for a few hours of the day and in the end do little to slow speeding traffic?***

According to study used by Tri-Met to calculate the park and ride traffic impact, as well as other studies, SE JCB already has a speeding problem with the speed of the 85th percentile being 34 mph. The current posted speed limit is 25 mph. According to the study, the traffic mitigations currently being reviewed will reduce the 85th percentile speed by 2 mph. This means that even with the traffic mitigation, traffic safety on SE JCB will remain a major issue.

With increased traffic on a street that will continue to have speeding issues, the neighborhood will end up dealing with additional accidents, property damage, difficulty in getting out of driveways, noise and air pollution and increased road wear.

The main reason for the proposed traffic mitigation involves the "failure" of intersections at SE 32nd and SE 42nd primarily during morning and afternoon rush hour traffic. Outside these few hours per day, there is no "failure" at the noted intersections.

Previous Traffic Issues/History:
Adding to the current tension is a long history of Ardenwald/Johnson Creek Neighborhood residents feeling that promised traffic calming measures on SE JCB weren't delivered despite having "failing" intersections; acknowledged speeding; inappropriate emergency route designation; and overall unsafe conditions for SE JCB's classification. Whether the promises and results were misinterpreted or unfulfilled, this

underlying skepticism is strong, especially since many of the vocal residents have lived on SE JCB through several projects.

Emergency Routes:
Currently Emergency Route designation stands in the way of the possibility of most traffic calming approaches on SE JCB. However, the curvy nature of the section of SE JCB that runs through our neighborhood, the current congestion at several times of the day puts into question the functionality of SE JCB as an emergency vehicle route. And if there is such concern regarding traffic calming on emergency routes, why does SE 32nd, which leads to a hospital, police station and fire station, have speed bumps?

Pass Through Traffic:
It would be ideal if the pass through traffic (currently and in the future with the Park & Ride) went someplace else. The obvious alternative is Highway 224 which is expected to carry most of the traffic from the south. As a result, all deliberate traffic engineering efforts must be made to keep that traffic on that highway. Other possibilities to look at are SE King and SE Railroad Avenue. However, they have their own neighborhood concerns and physical obstacles.

From the perspective of Ardenwald/Johnson Creek Neighborhood, why should we degrade our neighborhood by improving traffic flow for area residents who have chosen a lifestyle that requires more time in the car and longer commute times. If our community were a destination or business center, it would make sense to invite this traffic, but we are primarily a neighborhood. And, if the goal of light rail to get people out of their car, why are steps being taken to encourage people to use their cars?

The Ardenwald/Johnson Creek Neighborhood Association

The proposed mitigation referred to in this letter, is outlined in the document prepared by Alan Snook of DKS Associates and dated Oct. 12, 2009, and presented at several stakeholder meetings involving neighborhood residents and government representatives. Additional information including the library with notes from the Tacoma Station Planning meetings and CAC meetings, may be found on the Tri-Met website under the Portland-Milwaukie Light Rail subsections.

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ATTACHMENT 7

Lewelling NDA

March 14, 2010

City of Milwaukie
Planning Department
Attn: Wendy Hemman

Wendy,

Thank you for presenting information to the Lewelling NDA regarding the possibility of signaling intersections on Johnson Creek Blvd. Our neighborhood has generally supported the overall idea of light rail to Milwaukie. Most all our members have attended meeting and kept themselves informed of the issues relating to light rail. For the most part we are just waiting for it to come rather than debate any particular issue.

Regarding signalizing the various intersections on JCB our NDA has no set opinion either way. We see benefits to leaving the intersection without a signal and the benefits a signal would bring during peak hours.

Speaking to residents who live on JCB there in an opinion that speeds have increased since the road improvements took place a number of years ago. People who use JCB as a pedestrian or via bicycle feel that JCB is much safer than before the improvements. People living on JCB feel that adding a street light is just another infringement on the neighborhood environment they are trying to protect now and before the past improvements. Those who live off JCB have expressed the delay in the three way stops creates cut through traffic placing vehicles on Roswell and putting traffic on a school street which is never a good thing.

There are many pros/cons to each side of the idea. It would seem protecting livability and promoting safety would be an easy path. From my experience in transportation issues at time those two ideas could not be further from each other, as it seems in this case. I believe that signals would help during peak hours but they are an eyesore and would take away for the feel the street is trying to keep. Somewhere a compromise can be found.

JCB is a busy road. At one end you have a shopping center drawing plenty of access off 205 and 82nd. On the other end you have the Sellwood bridge (as JCB becomes Tacoma) allowing access to the west side of the river. In between you have substantial commercial concerns to the east and shopping and residential to the west. Once Sellwood Bridge is rebuilt I can only see traffic increasing over the whole section more than what will come from the light rail stop at McLoughlin.

Again we support Milwaukie Light Rail and have confidence the issues of safety and livability will be decided. I doubt as a group we would ever overwhelmingly support one way or another regarding traffic signals on JCB.

Thank you.

Jeff Klein
Lewelling NDA Chair

ATTACHMENT 8

TRIMET **Memo**

Date: April 2, 2010

To: Wendy Hemmen, PE

From: Leah Robbins, PE

Subject: Summary of Project Staff Recommendation Regarding Johnson Creek Boulevard

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The purpose of this memorandum is to summarize the technical presentation material, produced by DKS and Associates, utilized in numerous public discussions regarding the traffic analysis completed for the Final Environmental Impact Statement for the Portland-Milwaukie Light Rail Project. No new technical data is introduced.

Project staff, including representatives from City of Milwaukie, City of Portland, Oregon Department of Transportation, TriMet, and Metro, presented findings from the traffic analysis at a February 11, 2010 public meeting that identified two final options for traffic changes on Johnson Creek Boulevard to be included in the FEIS and therefore Preliminary Engineering project estimate:

- **Signalization of 32nd Avenue, 42nd Avenue and placeholder for traffic calming**
- **Signalization of 32nd Avenue only, and placeholder for traffic calming**

These two options were among many analyzed by project staff over the duration of Preliminary Engineering, some of which were identified by community members for consideration.

Signalization of 32nd Avenue, 42nd Avenue and placeholder for traffic calming

Operations

A signal at 32nd Avenue moves traffic through the intersection in phases, while still providing gaps in traffic flow on SE Johnson Creek Blvd. The signal at 42nd Avenue is assumed to be designed so as to not provide a westbound left turn pocket, retaining the current cross-section of the road. To do this, the signal would utilize phasing controls that would provide sufficient time to allow left turns to proceed, with protected and/or permissive portions of the signal phase. Traffic calming measures would be further refined during Final Design to identify what would be implemented for construction.

Queuing

With a signal at 32nd, PM traffic queues in 2030 will not impact safe operations of McLoughlin Blvd ramps.

Impacts

New signalized intersections would require construction at SE 32nd and 42nd to install controllers, poles, and equipment as necessary for operation.

Signalization of 32nd Avenue only, and placeholder for traffic calming

Operations

32nd Avenue signal operates similarly as described above. A four-way stop is retained at SE 42nd Avenue. Minimal traffic calming would be expected in this scenario. Traffic calming measures as applied would likely be nearest the 32nd Avenue intersection reaching east to 36th and west potentially to 27th Avenue.

Queuing

With no signal at 42nd Avenue, a continuous queue is expected during PM peaks, stretching from 42nd Avenue back to 32nd Avenue.

Impacts

The PM queuing will continue to block driveways. Additionally, traffic avoiding this stretch will divert to adjacent east-west streets between 32nd and 42nd .

Technical Recommendation

Project staff recommends, and the current project budget includes, a signal at both 32nd and 42nd Avenues with traffic calming measures for these primary reasons:

- Provides a balance of meeting adequate operations while meeting community needs;
  - Will not promote faster speeds
  - Will not promote cut through neighborhood traffic
- Maintains existing and provides additional controlled safe pedestrian crossings of JCB;
- Reduces eastbound/PM queuing on Johnson Creek Boulevard
- Benefits westbound/AM queues for those accessing northbound McLoughlin Blvd

CC: Kenny Asher, Teresa Boyle, Ralph Drewfs, Bridget Wieghart

ATTACHMENT 9

Transportation System Plan Goals
Discussion and Analysis of Johnson Creek Boulevard

JCB Queues of concern to Highway 99E operations

JCB Queues of concern after signalization of 32nd Avenue

TSP Goal Discussion:

The City of Milwaukie went through an extensive outreach program in developing the TSP. Public outreach, discussions, and hearings were conducted to formalize the plan. The TSP now guides the decisions Milwaukie makes for its transportation system. Milwaukie's goals in the 2007 Milwaukie Transportation System Plan are: livability, safety, travel choices, quality design, reliability and mobility, sustainability, efficient and innovative funding, compatibility, and economic vitality. These goals are not ranked in order of importance or priority. Some of these goals fully support signals; some of these goals may support both stop signs and signals. Overwhelmingly the goals support installation of the traffic signal at 42nd and JCB. The goals are further studied below.

GOAL 1 LIVABILITY

Design and construct transportation facilities in a manner that enhances the livability of Milwaukie's community.

a. *Provide convenient walking and bicycling facilities to promote the health and physical well being of Milwaukie citizens.*

The traffic signals proposed will have pedestrian crossing signals to assist in crossing the road at this intersection, and have been noted in studies as safer for pedestrians than stop sign controlled intersections.

b. *Protect residential neighborhoods from excessive through traffic and travel speeds while providing reasonable access to and from residential areas.*

This traffic signal will protect and minimize impacts to both the Ardenwald and Lewelling neighborhoods from existing and proposed cut through traffic on local roads. The signals will enhance residential access by allowing better access out of driveways during brief periods of vehicular gaps created with signals. With stop signs today (no signals), residents have complained that they cannot get out of their driveways. Travel speeds are an existing challenge on the road. The project will be reviewing traffic calming applications and alternatives for this corridor to be used in combination with traffic signals. Portland and Milwaukie will continue to work together for a mutually beneficial solution to travel speeds using traffic calming. This project will also help Milwaukie residents that commute either to Gresham/Clackamas County or Portland and the west side. Many Milwaukie residents travel the JCB corridor and spend long periods of time consistently stuck in traffic. Residents could gain back approximately 65 hours a year in future reduced travel times thereby increasing the livability for Milwaukie residents.

c. *Protect residential neighborhoods from excessive noise and pollutants associated with higher functional class streets, industrial uses, and rail activities.*

The existing conditions have vehicles lining up in long stop and go queues. Noise and pollutants currently exist. With the addition of signals the long queues will be minimized. Cars will not be in stop and go conditions that increase pollutants including noise. Cars will minimize stopping and starting times. JCB is a higher functional class street, a collector, limiting the use of local roads and neighborhood routes as cut thru routes for traffic in the center of the neighborhoods is beneficial.

e. *Provide a seamless and coordinated transportation system that is barrier-free, provides affordable and equitable access to travel choices, and serves the needs of all people and businesses, including citizens of low income, people with disabilities, children, and seniors.*

The signal makes the road system and pedestrian network more accessible to citizens with disabilities as they are more easily able to cross the road for transit stops and access to the Springwater Trail.

GOAL 2 SAFETY

Develop and maintain a safe and secure transportation system.

a. *Design and maintain safe and secure walkways and bikeways between parks, schools, and other activity centers in Milwaukie.*

The traffic signals proposed will have pedestrian crossing signals to assist in crossing the road at this intersection, making the intersection safer for pedestrians. This intersection is also a route to the Springwater Trail for bikers and walkers.

c. *Adopt and implement access control and spacing standards for all streets under the City's jurisdiction to improve safety and promote efficient through-street movement. Access control measures should be generally consistent with Clackamas County access guidelines to ensure consistency on city and county roads.*

The traffic signals proposed meet the goal and intent of this section. JCB is a through street and for most residents in Milwaukie and the region this is beneficial.

GOAL 4 QUALITY DESIGN
Establish and maintain a set of transportation design and development regulations that are sensitive to local conditions.
d. Promote context-sensitive transportation facility design, which fits the physical context, responds to environmental resources and maintains safety and mobility.

Installation of a traffic signal is a change to the existing environment and the local residential condition. The signal infrastructure will add to visual clutter. The perception by some may change from a quiet residential area to an urban transportation facility.

GOAL 5 RELIABILITY AND MOBILITY
Develop and maintain a well-connected transportation system that reduces travel distance, improves reliability, and manages congestion.
b. Maintain traffic flow and mobility on arterial and collector roadways.

Johnson Creek Boulevard is a collector facility. The signal will manage congestion, improve reliability of the corridor and reduce travel times for local residents. The signal will also allow residents that live on JCB to exit their driveways more efficiently and safely.

GOAL 6 SUSTAINABILITY
Provide a sustainable transportation system that meets the needs of present and future generations.
a. Encourage an energy efficient transportation system.

The stop signs are not energy efficient. They currently waste fossil fuels by the operation practice of vehicles queuing through half mile to mile long queues from 17th Avenue to 45th Avenue. Traffic signals will minimize the effect.

d. Practice stewardship of air, water, land, wildlife, and botanical resources. Take into account the natural environments in the planning, design, construction, and maintenance of the transportation system.

Traffic signals help with the stewardship of the air and water. The air pollution will be less as will the water pollution from the rain that falls on the roadways and washes pollutants from stopped and very slow moving vehicles into the storm drainage system that drains to creeks. Many vehicles from Milwaukie enter this portion of the road system when their vehicles are still cold, the height of vehicular pollution.

GOAL 7 EFFICIENT AND INNOVATIVE FUNDING
Efficiently allocate available funding for recommended transportation improvements, and pursue additional transportation funding that includes innovative funding methods and sources.
b. Identify and develop diverse and stable funding sources to implement recommended projects in a timely fashion.

This project is funded by the FTA, ODOT, Metro, TriMet, Clackamas County, Portland, and Milwaukie. The funding source has been identified for the needed improvement and is budgeted in the project. Local tax payers have been paying taxes and this funding is coming back to them. Each intersection signalization is approximately $250,000 that the City of Milwaukie does not have in the City budget for 42nd Avenue.

GOAL 8 COMPATIBILITY

Develop a transportation system that is consistent with the City's Comprehensive Plan and coordinates with County, State, and regional plans.

a. Coordinate and cooperate with adjacent jurisdictions and other transportation agencies to develop transportation projects that benefit the city of Milwaukie and the region as a whole.

The signalization will benefit the city as a whole. Lewelling has no set opinion, due to valid reasoning to both support and deny signals. Some of Ardenwald's residents support signals, but have not spoken publicly. Numerous vocal Ardenwald residents are against any signal. Signals work well with the surrounding regional land use.

b. Work collaboratively with other jurisdictions and agencies so the transportation system can function as one.

This process is a multi-jurisdictional effort to bring an alternative transportation element to Milwaukie and the SE Portland McLoughlin corridor. This intersection is part of that and provides access to the light rail station for Milwaukie residents. Most Milwaukie residents will use the Tacoma Park and ride to access light rail. Those nearest can walk, others can ride bicycles on JCB to access the station, while for many drivers the Tacoma Park and Ride is the only location to park their vehicles. JCB is a multi-jurisdictional road and needs to function as best it can. Currently the road does not meet this goal. This road is the link to McLoughlin Blvd and to Sellwood for this area of Milwaukie and SE Portland.

GOAL 9 ECONOMIC VITALITY

Promote the development of Milwaukie's, the region's, and the state's economies through the efficient movement of people, goods, and services, and the distribution of information.

e. Ensure that all new development contributes a fair share toward on-site and off-site transportation system improvements.

Leaving the intersection as is creates a large impact to the City of Milwaukie and an even bigger impact to local area residents. This intersection currently operates in a marginal condition. With 32nd and JCB signalizing this intersection will see long delays that are not acceptable to the City of Milwaukie's street network. The light rail project through building a traffic signal will be providing its fair share of improvements to this area.

ATTACHMENT 10

Hemmen, Wendy

From: David Aschenbrenner [dlasch@comcast.net]
Sent: Monday, April 05, 2010 6:26 PM
To: Hemmen, Wendy
Subject: Johnson Creek Blvd. Traffic Light

Wendy,
As a member of the Light Rail CAC, I have been following the concerns of the community in regards to the proposed traffic light at 42nd and Johnson Creek Blvd. The community has concerns on how this intersection will function. I also have the same concerns, I know how ever there will be a need for the traffic light and also some form of traffic calming on this street. My recommendation is to go forward with the installation of the light but leave it off until the traffic conditions and more education of the community is done. I would encourage the traffic calming measures to be discussed and installed as soon as possible. I feel the traffic concerns that the community has about speeding is real.

Please contact me if you have any further questions

David Aschenbrenner
11505 SE Home Ave.
Milwaukie, OR 97222
503-804-3837

ATTACHMENT 11

February 10, 2010

Dear Members of the Ardenwald NDA,

Thank you very much for your January 7 letter regarding the future of Johnson Creek Boulevard. The Milwaukie City Council has been following the various discussions that are underway about possible changes to the street due to the Portland-to-Milwaukie light rail project. Johnson Creek Boulevard is an important route, as it serves at least three Milwaukie neighborhoods and neighboring jurisdictions and businesses.

The City of Milwaukie is carefully weighing the trade-offs that are necessitated by this difficult situation. We have clearly heard from your NDA that traffic signals, speeding, blocked driveways and increased traffic volumes are unacceptable and incompatible with neighborhood livability.

From those working on the light rail project, we understand that Johnson Creek Boulevard's future will resemble a parking lot along part of its length during certain hours, and that if nothing is done to ameliorate this condition, cut-through traffic on 32nd, Roswell, Filbert, Olsen and Logus will worsen. We also understand that the light rail project will be required to install a traffic light at 32nd to ensure that cars do not back up on to 99E during the late afternoon.

The City is engaged with the other governments that have jurisdiction over the street. As we participate in these discussions, we will keep your recommendations close at hand. Although trade-offs are inevitable and all the Ardenwald recommendations may not be workable, we will make every effort to balance the competing demands that continue to characterize Johnson Creek Boulevard.

Perhaps most importantly, we agree with you that the City should not allow increased traffic volumes or speeding at the expense of neighborhood livability and safety. The City has its highest degree of control at the intersection of 42nd and JCB. The best solution for this intersection will be informed by the choices that are being made by the other jurisdictions on the corridor, as well as the input of neighborhoods like Ardenwald.

Thank you again for your letter and for sharing your ideas on possible improvements to Johnson Creek Boulevard.

Respectfully,

Jeremy Ferguson
Mayor

MILWAUKIE CITY HALL
10722 SE Main Street
Milwaukie, Oregon 97222
P) 503 786 7555 / F) 503 652 4433
www.cityofmilwaukie.org

ATTACHMENT 12

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MILWAUKIE, OREGON, TO AFFIRM A LIGHT RAIL PROJECT STAFF RECOMMENDATION TO SIGNALIZE THE INTERSECTION OF 42ND AVENUE AND JOHNSON CREEK BOULEVARD AS MITIGATION FOR IMPACTS RESULTING FROM THE PORTLAND TO MILWAUKIE LIGHT RAIL PROJECT.

WHEREAS, the Portland to Milwaukie Light Rail Project will worsen existing traffic conditions on Johnson Creek Boulevard with the traffic generated by the Tacoma-Springwater Park and Ride structure; and

WHEREAS, the 42nd Avenue and Johnson Creek Boulevard intersection is the only controlled intersection in this area within the jurisdiction of the City of Milwaukie; and

WHEREAS, the City of Milwaukie has established transportation goals in Milwaukie's Transportation System Plan (adopted 2007) to increase pedestrian safety, protect neighborhoods from excessive through traffic, improve reliability of Milwaukie roadways, and manage congestion; and

WHEREAS, the signalization of the 42nd Avenue and Johnson Creek Boulevard intersection better supports the City's TSP goals and is the minimal infrastructure improvement needed to maintain the minimum level of service identified in the Milwaukie TSP; and

WHEREAS, the City of Milwaukie has the authority to request mitigation for impacts within the city from the light rail project; and

WHEREAS, Johnson Creek Boulevard is an emergency response route for Clackamas County Fire District No. 1 and a route to the only local hospital; and

WHEREAS, Johnson Creek Boulevard is a vital transportation link for the City of Milwaukie; and

WHEREAS, Johnson Creek Boulevard also acts as a neighborhood street; and

WHEREAS, the 32nd Avenue and Johnson Creek Boulevard intersection will be signalized with the Portland to Milwaukie Light Rail Project to minimize the chance of cars stacking up on the 99E southbound off-ramp at Tacoma continuing onto McLoughlin Boulevard; and

WHEREAS, the 42nd Avenue and Johnson Creek Boulevard intersection will see an increase of approximately two minutes in future delay to the evening eastbound travel through this intersection without a stop light; and

WHEREAS, residents on Johnson Creek Boulevard experience difficulty in accessing the street from their driveways when traffic backs up on the street, typically during “peak” hours; and

WHEREAS, traffic calming is proposed on Johnson Creek Boulevard with this signal installation; and

WHEREAS, residents and users of Johnson Creek Boulevard will experience additional air pollutants without a signal; and

WHEREAS, nearby local roads, including streets adjacent to elementary schools are anticipated to see an increase in cut-through traffic without a signal; and

WHEREAS, it is fiscally prudent for the City of Milwaukie to support the proposed signal, which will be paid for without any required contribution from the City of Milwaukie;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Milwaukie affirms the staff recommendation to signalize the intersection of 42nd Avenue and Johnson Creek Boulevard as mitigation for the Portland to Milwaukie Light Rail Project; and

BE IT FURTHER RESOLVED that the right of way acquisition for a left turn lane is not desired nor supported by this recommendation; and

BE IT FURTHER RESOLVED that the City Council be consulted by TriMet prior to the acquisition, installation, and programming of the new signal:

Introduced and adopted by the City Council on April 20, 2010.

This resolution is effective on April 20, 2010.

_____
Jeremy Ferguson, Mayor

ATTEST:

APPROVED AS TO FORM:
Jordan Schrader Ramis PC

_____
Pat DuVal, City Recorder

_____
City Attorney