

City of Clyde Hill

Cut-Through Traffic Management & Speeding Plan

City Council Traffic Sub-Committee Report

1-10-17





Goals of the Report

**Bring entire Council up to speed on work of the
Traffic Sub-Committee**

**Make entire Council comfortable enough to direct staff
on appropriate next steps**

Problems

- **Cut-Through Traffic (Traffic)**

- Weekdays – PM peak (4-7)
- Tough to get home...Frustrating Inconvenience
- Tough to get on to SR 520...Frustrating Inconvenience
 - Not always a problem

- **Speeding &/or Inattentive Driving (Safety)**

- Commuters – Trucks – “Others”
- – Real (data) vs Perceived (stories) Issues
 - Traffic Study Hot Spots



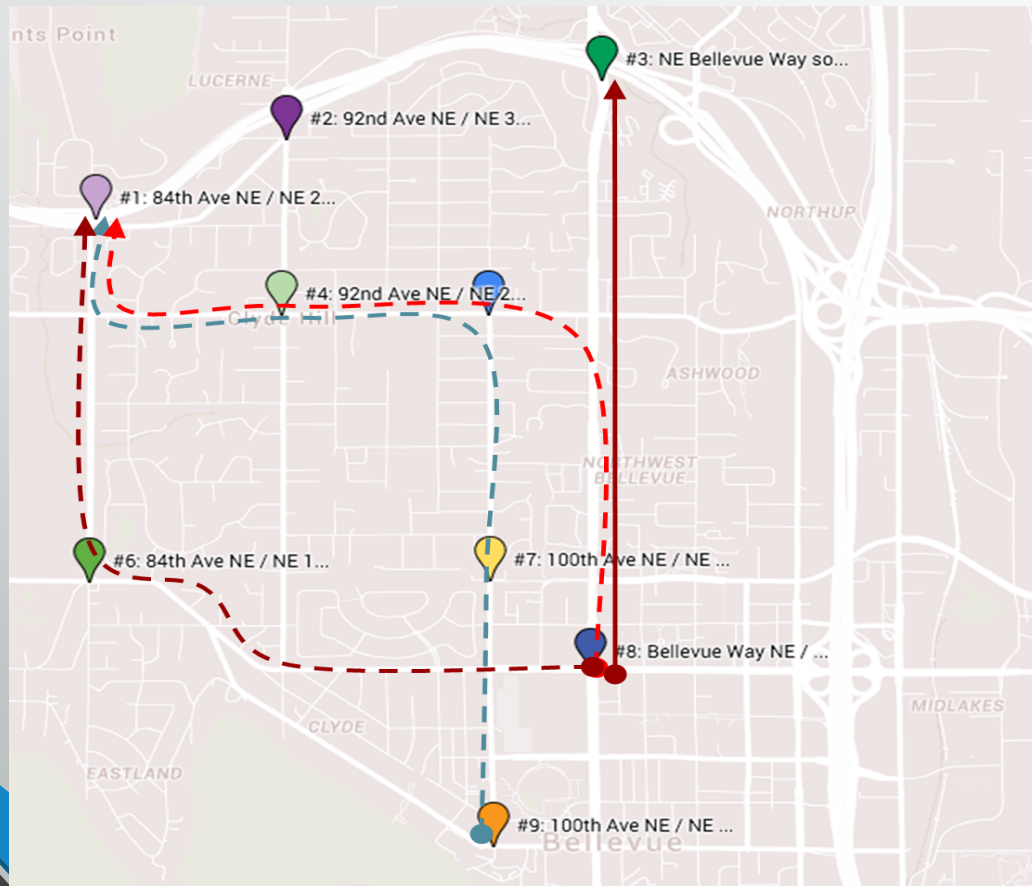
2016 Traffic Study

What the survey showed

What are the problems and where (O/D Study)

What the data showed

2016 Traffic Study



These were the typical routes chosen as alternatives during the PM peak hour.

[Origin-Destination study]

2016 Traffic Study



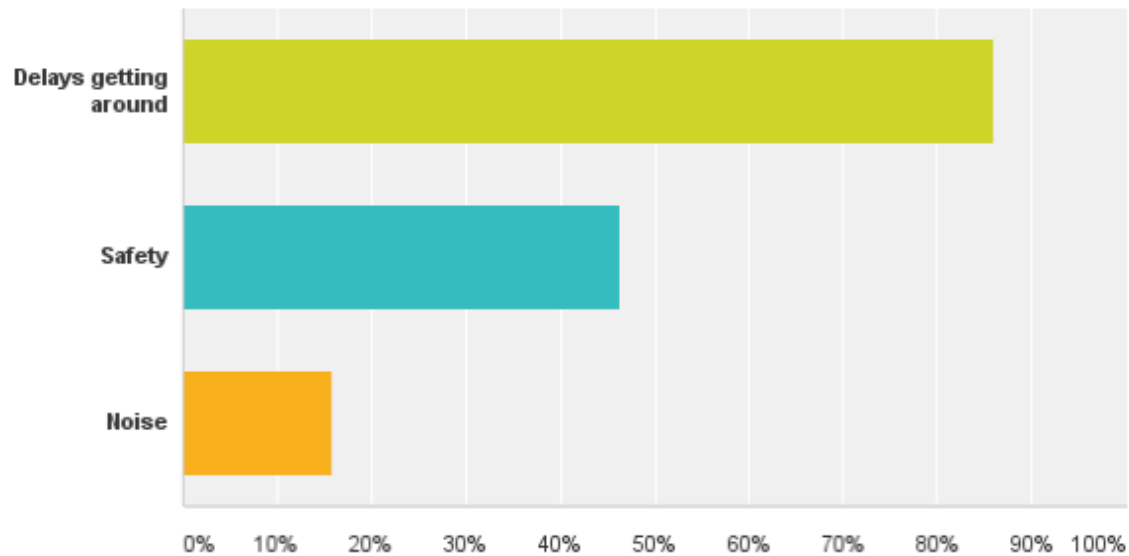
Destination flows for origin at
Bellevue Way and NE 8th Street

[Origin-Destination study]

2016 Traffic Study

Q2 What are your primary concerns about traffic congestion in town?

Answered: 530 Skipped: 28



Survey Results

Respondents:

35% Clyde Hill

46% Medina

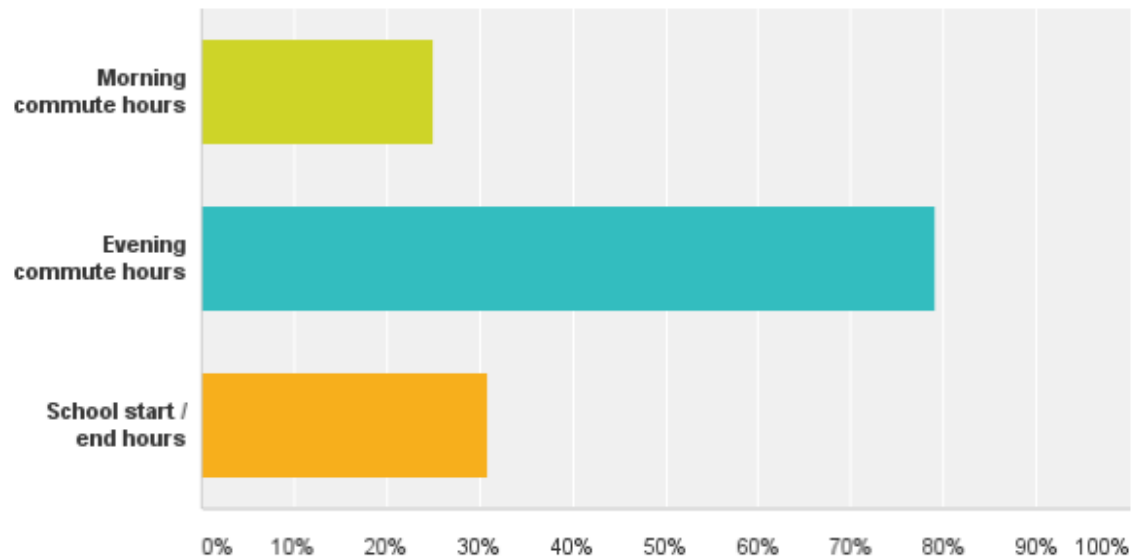
17% Hunts Point

2% Yarrow Point

2016 Traffic Study

Q3 What time of day is most important for you?

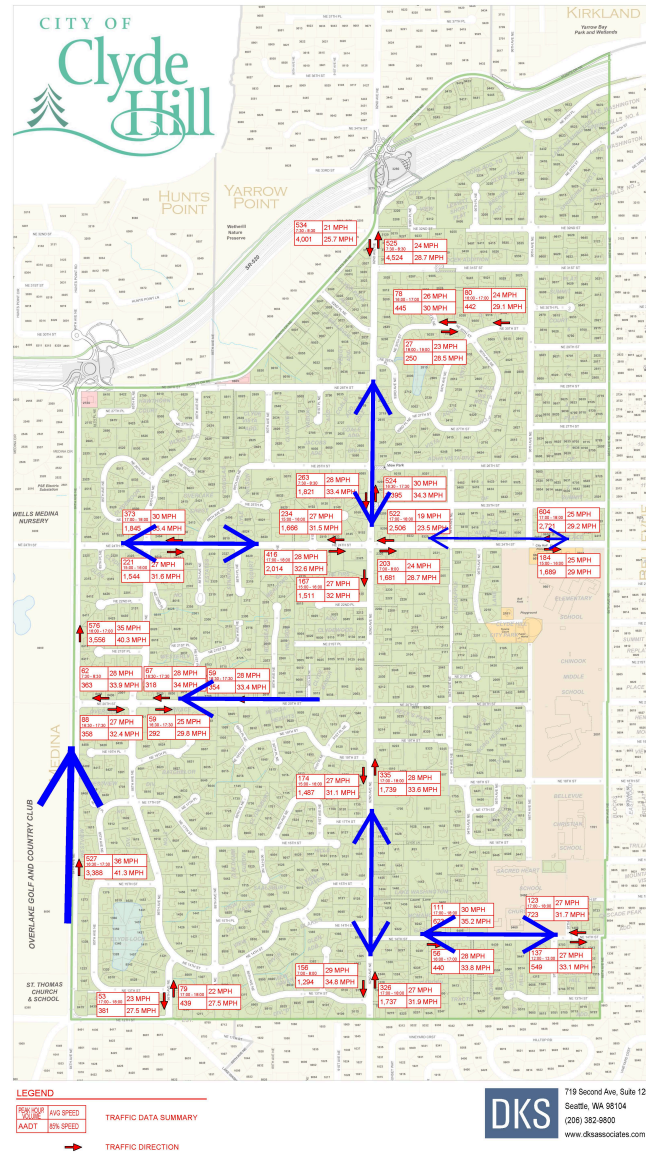
Answered: 546 Skipped: 12



Survey Results

What safety concerns are most important?:

- #1 Vehicle queues/blocking
- #2 Exiting and entering
- #3 Pedestrian crossing
- #4 Biking along major road



Traffic Volume & Speed Map

Size of blue arrows
signifies the
identification
/direction of speeding



Associated Challenges

Not a Problem all the Time

When 520 mainline flows all is well, when mainline is stopped (reasons outside of City control) traffic backs up and frustration builds

Greater Use/Reliance on Traffic Apps (WAZE, Google...)

Apps look for shortest route and don't care about neighborhood consequences

People use w/out thinking

Perceived vs Real Speeding Concerns

"Feeling" traffic is too fast – Speed Studies might show differently

Give Us A Sticker – Legal Constraints

Can't Legally Differentiate between "us and them" – Public Roads

Bellevue's Sound Transit Construction



Have Tried To Address Problems

Tried Various Cut-Through, Traffic Calming & Ped Safety Ideas

(bollard/intersection improvements, no left turn signs, enforcement...)

Encountered Problem of Balancing Effectiveness of Solutions with
their Impacts to Clyde Hill Residents

Solutions *Will* Impact Residents



Council Traffic Sub-Committee

To address concerns, Council authorized 2016 Traffic Study

Good information & community input

Following up, formed a Traffic Sub-Committee

Met multiple times

Good input during meetings

Examined and developed the following

Traffic Sub-Committee

Looked at specific problems & perceived problems in Clyde Hill

Looked at pros/cons of most traffic calming and traffic management ideas to manage/solve problems

Recognized influence of Bellevue's downtown growth as well as traffic apps as part of the problem...not alone there

Recognized everyone wants a solution that will restrict others but not them...found out City can't discriminate, but can be strategic

Know that everyone has a traffic story to emphasize their problem but wanted this Plan & City actions to be data based

Developed a set of goals & guiding principles for a plan



Traffic Sub-Committee Objectives

Reduce cut-through traffic

Address traffic volume and traffic safety issues
(primarily speed) on both arterial and non-arterial roads



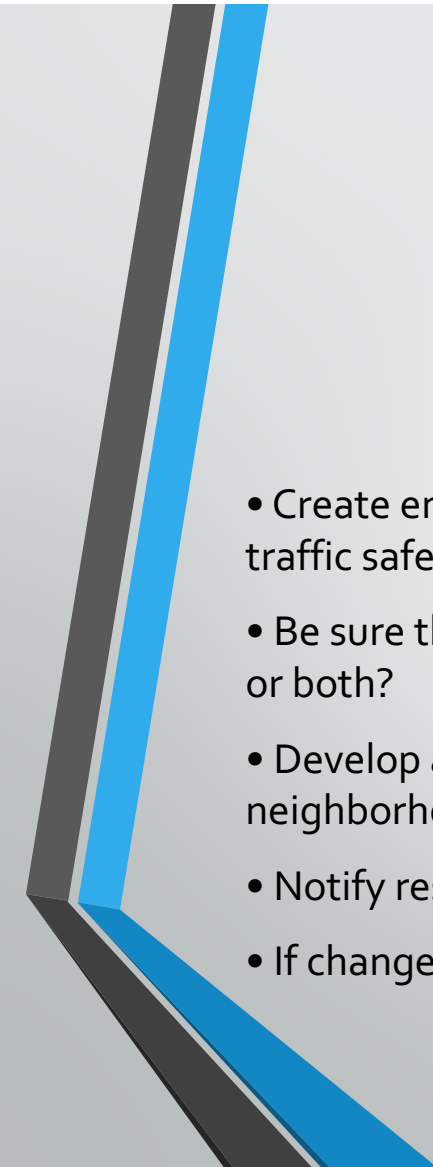
Traffic Sub-Committee Guiding Principles

Motivate non-residents not to cut through Clyde Hill during evening rush hour by:

- Encouraging them to use better alternatives (e.g., Bellevue Way to SR 520)
- Making it harder to cut through Clyde Hill while minimizing any adverse impacts on local residents including neighboring Points cities

Residual non-resident traffic to use only arterials while passing through the City

- (i.e., non-arterials are to be used only by residents for local travel)



Traffic Sub-Committee Guiding Principles

Communicate, Communicate, Communicate

- Create environment encouraging residents to share their concerns about traffic volumes and traffic safety with the City in an objective and constructive manner
- Be sure the problem is clearly defined. Is it a traffic volume or safety issue (e.g., speed - traffic) or both?
- Develop and review potential solutions with residents. Get support of key local residents for neighborhood projects
- Notify residents of changes proposed for implementation
- If changes implemented, evaluate effectiveness & what, if any, were the negative impacts



Traffic Sub-Committee Guiding Principles

- Search for solutions that are relatively simple and inexpensive to implement and can easily be removed or modified where appropriate
- Be sensitive to unintended consequences
- Get the message out:
 - (Clyde Hill is not a friendly place for unsafe driving or failure to respect traffic restrictions)
- Increase Police Visibility (especially in pm peak times)
- Increase Signage
 - (e.g., speed trailer, fixed signage such as "Your speed is")

Traffic Sub-Committee

- Hired Traffic Engineer to help staff develop ideas & management solutions
- Staff/Eric looked at situation from an overall city basis, using the principles
- Examined/refined overall City plan to make it more difficult for commuters (M-F – 4pm-7pm) to cut through community...make it quicker to use Bellevue Way
- Recognized that portions of the Plan would restrict Clyde Hill residents too, so developed a Communications Plan & sequenced ideas in stages to allow for periodic Council evaluation

Cut-Through & Speeding Management Plan

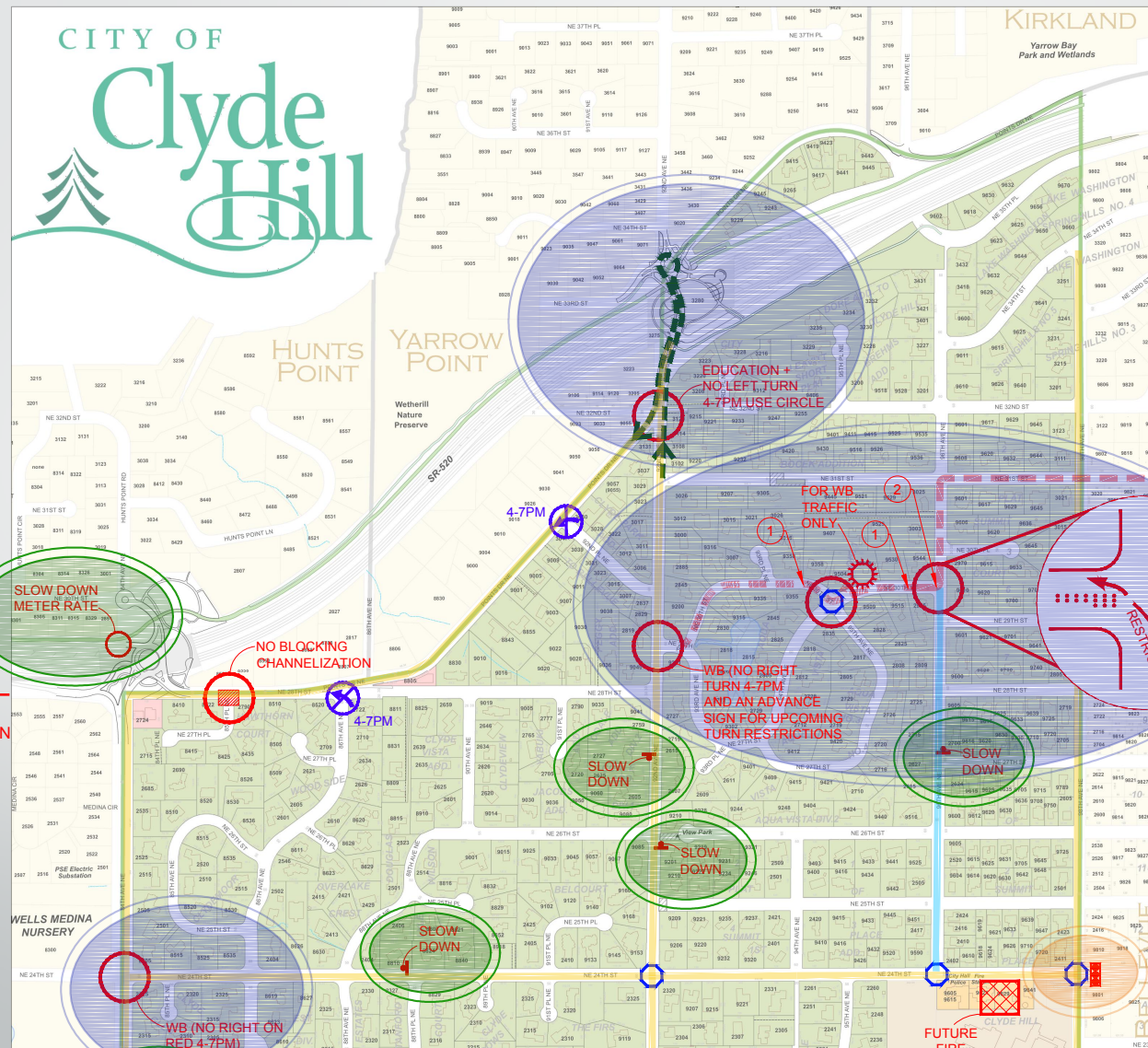
Manages problems on an Overall City Basis

Strategically Sequenced

- 1st step immediately helps speeding and will **collect speed/volume data** that will be used for further analysis/decisions
- Subsequent ideas implemented after carrying out a **Communications Plan**
- **Plan will take a lot of time to implement**
 - Will take 3-4+ weeks to gather effectiveness data on any idea...need to analyze
 - Will be chaos/frustration during those 3-4 weeks until behavior is modified
 - May decide to modify/eliminate Plan ideas along the way
 - Must have a clear/unified message to share w/those that are frustrated
- **Ability for Council to analyze & make go/no go decisions in between implementation of ideas**
- **Most of the Plan is budgeted**
 - Except for implementation of new traffic signal (24/98)...also waiting on Medina (24/84)



PHASE 1
PHASE 2
PHASE 3



NOTE

1. EVALUATE TEMPORARY SPEED BUMP INSTALLATION & SPEED TRAILER TO COLLECT DATA
2. EVALUATE STOP SIGN WARRANTS AT THIS INTERSECTION

FUTURE MODIFICATIONS

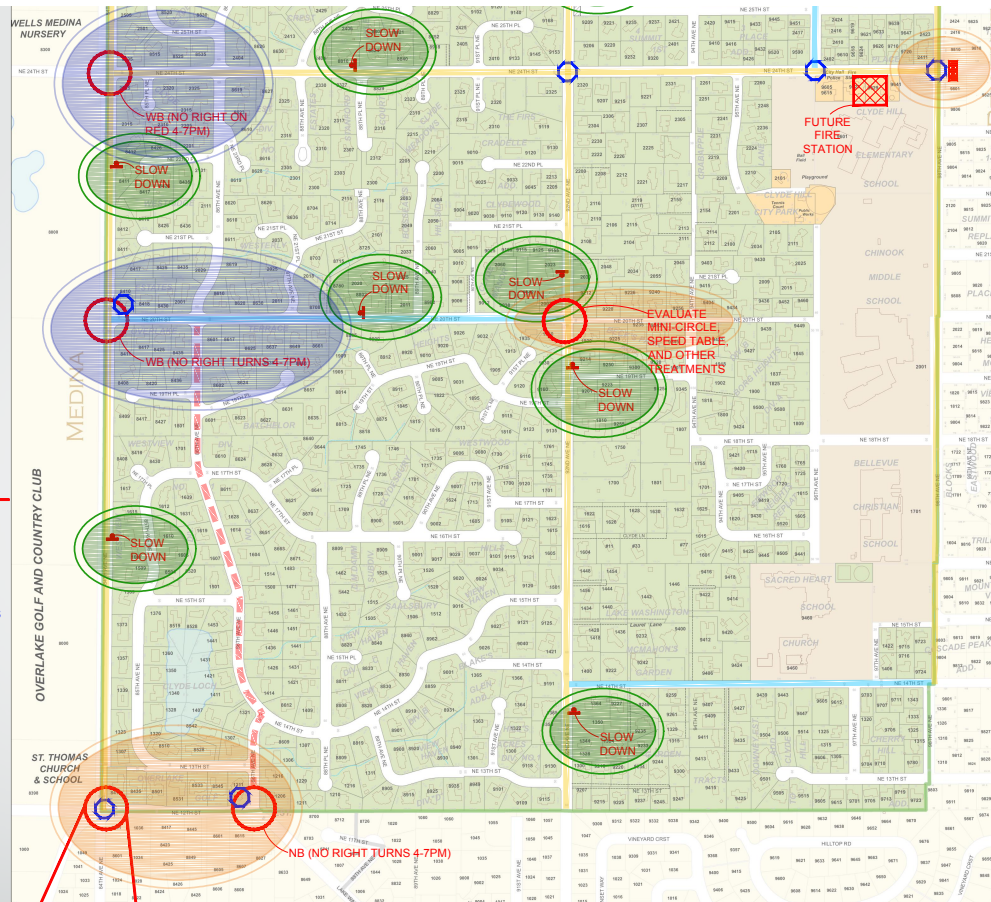
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A.) WSDOT - REDUCED RAMP METER RATE @ 84TH WB

FUTURE MODIFICATIONS

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 - A.) WSDOT - REDUCED RAMP METER RATE @ 84TH WB
 - B.) W/ BELLEVUE OTHER LOCAL JURISDICTIONS
 - C.) MOBILE RADIO UPDATES.
 - D.) COMMUNICATING TO WAZE AND GOOGLE
 - E.) COMMUNICATION TO LOCAL RESIDENTS SO THEY ARE AWARE OF THE CHANGES FIRST
2. ENFORCEMENT
3. PDCA - PLAN, DO, CHECK, ACT

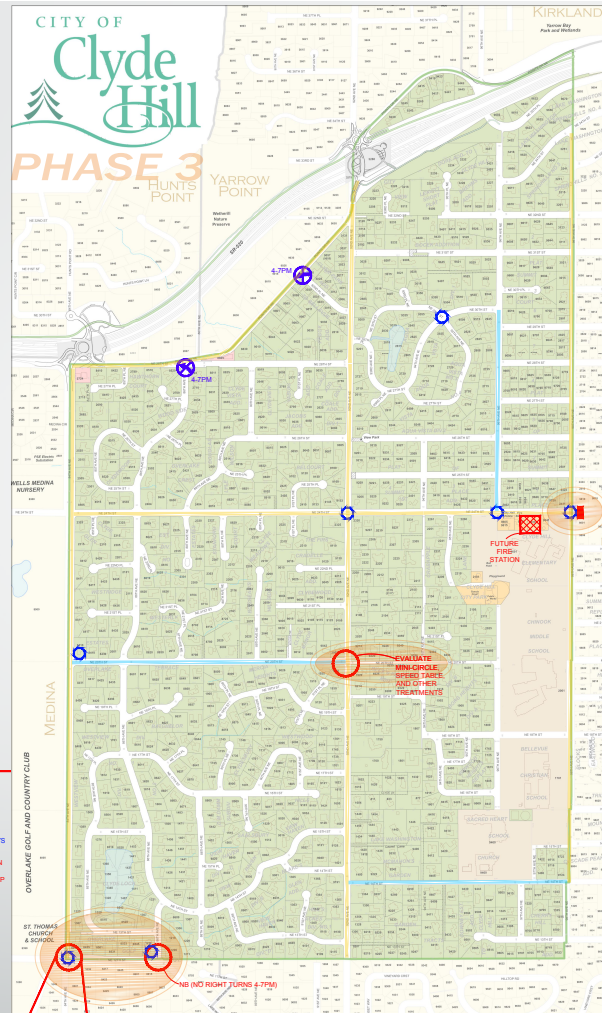
LEGEND

- NO RIGHT ON RED/TURN RESTRICTIONS ARE WEEKDAYS 4-7PM.
- STOP CONTROLLED I/S
- EXISTING TURN RESTRICTIONS WEEKDAYS 4-7PM
- LED FLASHING STOP SIGN
- FUTURE SIGNALIZED STOP SIGN
- LED SPEED SIGN
- CURRENT CUT THRU PATTERN
- ARTERIAL
- SECONDARY ARTERIAL
- NEW TRAVEL PATH THRU ROUNDABOUT



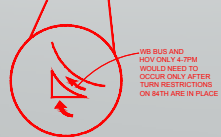
DKS

719 Second Ave, Suite 125
Seattle, WA 98104
(206) 382-9800
www.dksassociates.com



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Communications Plan

Clyde Hill residents need to know about the Plan and sequencing ideas

Other Points cities/towns should be made aware of the Plan

- **Open Sub-Committee meetings** during development of plan
- **Use of City website** to communicate the Plan and outreach opportunities
- **Use of social media** to communicate the Plan and outreach opportunities
- **Special 1-topic Newsletter** mailed to Clyde Hill residents
- **Develop a short video to describe the Plan**
 - Can be placed on City website, TV, Facebook, Police Sentinel or linked to others sources
- **Mobile LED Sign/AM Transmitter** possibly use to communicate traffic updates &/or up-coming events
- **Community Open House** before implementation of restrictions
 - With boards/information to view (Sub-Committee/staff available to answer questions and receive comments)
- **Opportunity for Council to evaluate the effectiveness of each phase before a next one is implemented**
 - Would take place at a Council meeting or a Sub-Committee meeting



Key Elements of Success

Engineering
Education
Enforcement

It will take all 3 to be successful

How To Measure Success

New solar speed signs will collect both traffic speeds and traffic volumes
This information will allow evaluation before/after impacts of new plan elements
Will collect and use the following to evaluate effectiveness:

Speed

- o Average speed
- o 85th percentile
- o % of cars traveling at no faster than 5MPH over the speed limit

Volumes

- o AADT
- o Weekday traffic average
- o Weekday PM traffic 4-7pm total
- o Weekday Peak hour traffic
(noting the peak hour)

Cut-Through Traffic

- o Difference (#) between peak 4-7 PM count (towards 520) and the 4-7 PM count on a similar peak average count.
 - The 7-9 AM count will serve as a lowest end variable...will have a larger delta when the counts are compared
 - Comparing w/the average will provide the other end of the spectrum showing the total cut through is somewhere in-between these numbers

Not yet sure how or if we even want to keep track of weather or other outside influences like a sporting event or a traffic jam on I-5

Council's Decision

Decide whether more work needs to be done on any part of the Plan & if so, describe

If comfortable w/Plan and direction then:

Consider a motion to authorize the staff to purchase 10 speed signs, implement a Communications Plan and investigate WSDOT's willingness to slow down the metering on the SR 520 ramp meter