

City of Clyde Hill Cut-Through Traffic Management & Speeding Plan

Mayor's Meeting

2-1-17



Problems

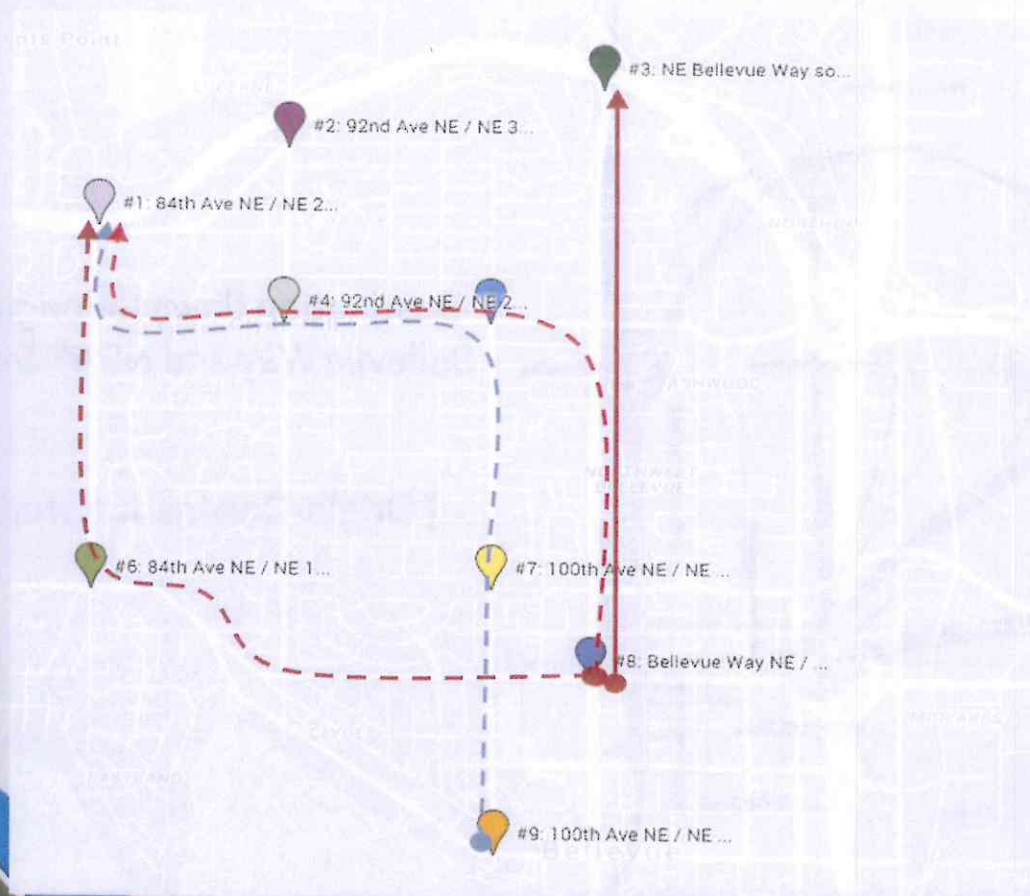
- **Cut-Through Traffic (Traffic)**

- 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

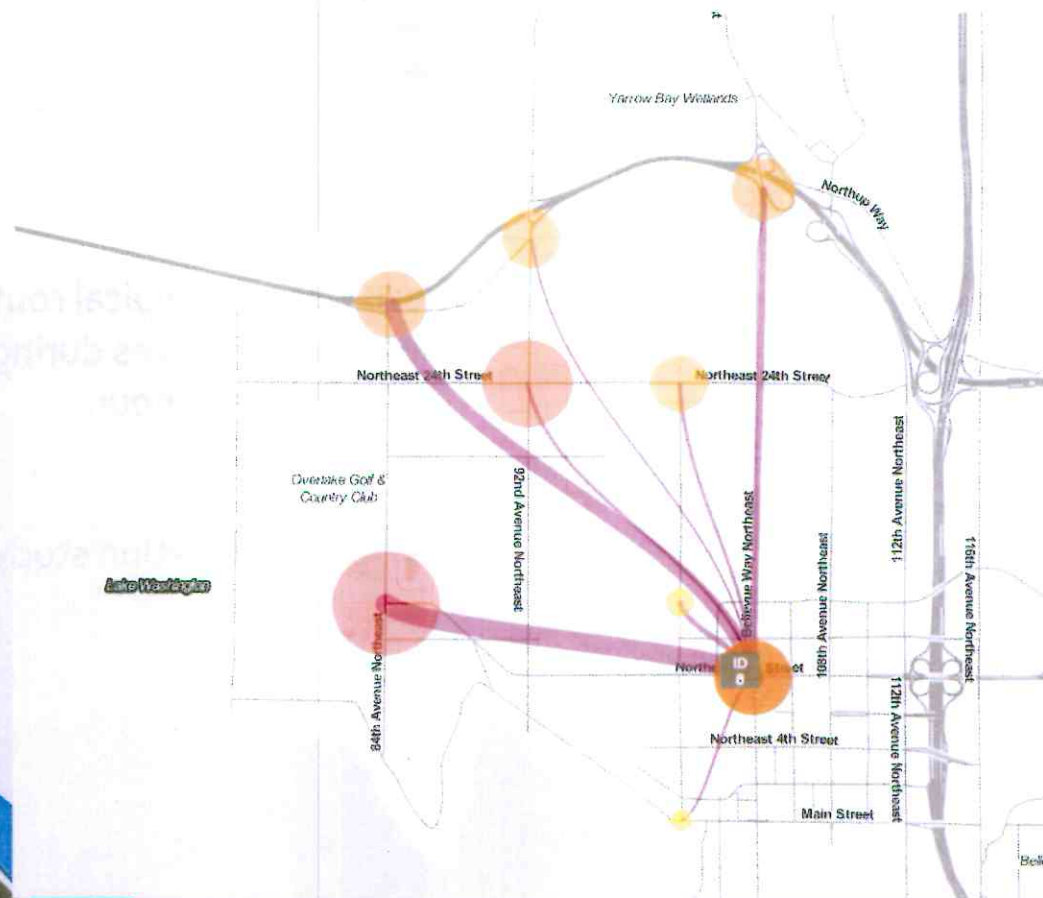
2016 Traffic Study



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

[Origin-Destination study]

2016 Traffic Study



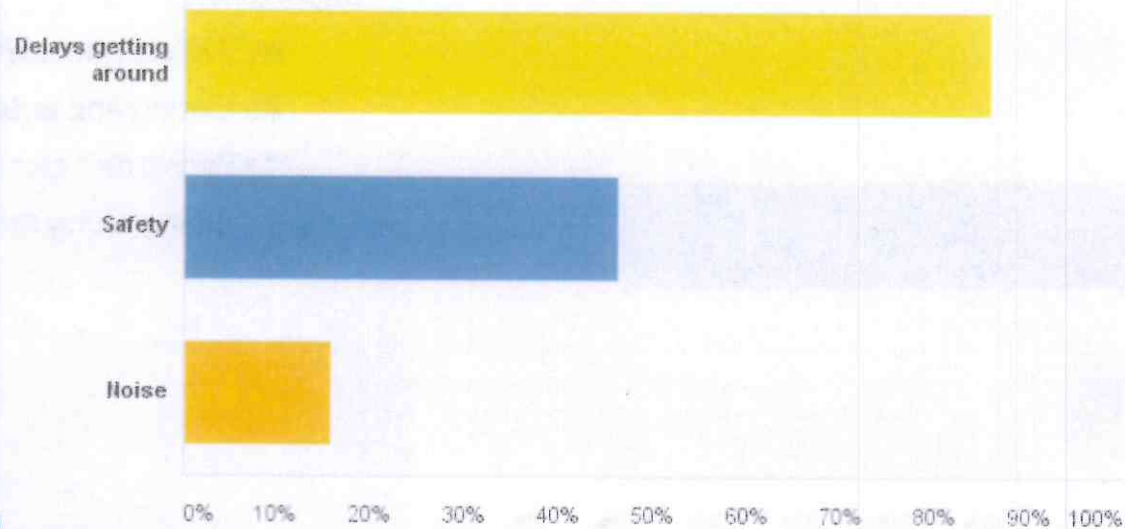
Destination flows for origin at
Bellevue Way and NE 8th Street

[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

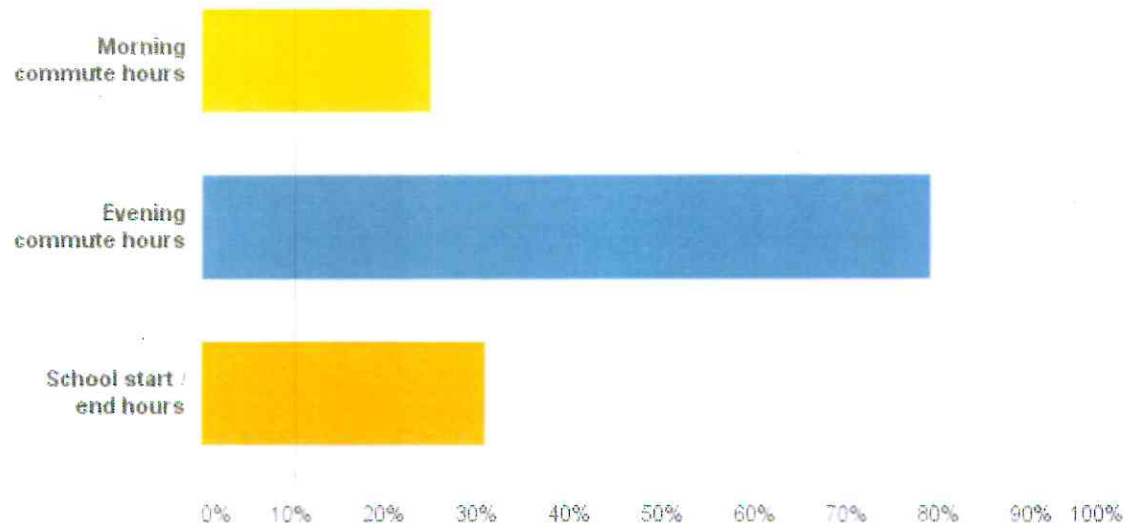
17% Hunts Point

2% Yarrow Point

2016 Traffic Study

Q3 What time of day is most important for you?

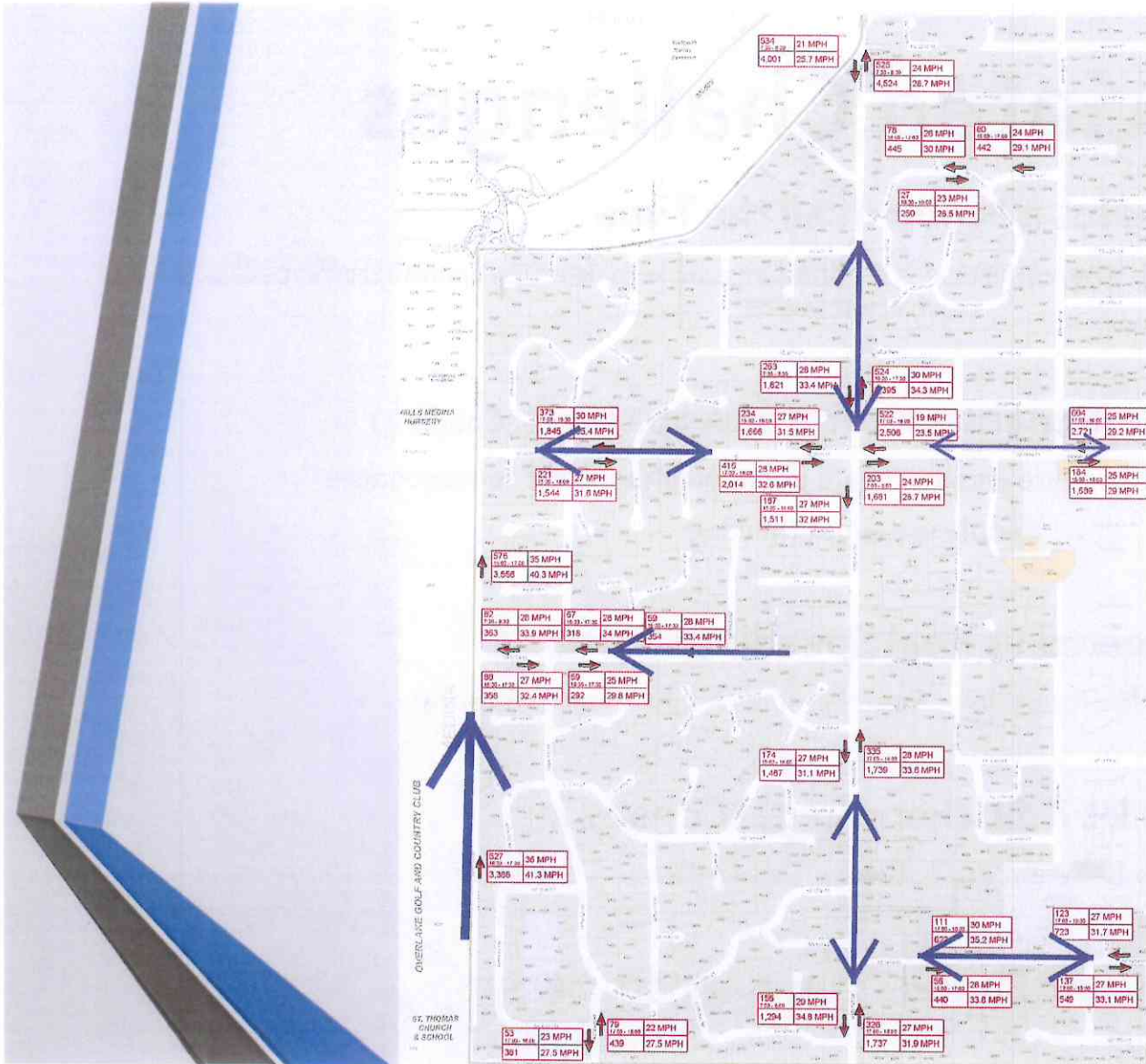
Answered: 346 Skipped: 0



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

LEGEND

PEAK HOUR VOLUME	AVG SPEED
AADT	85% SPEED

TRAFFIC DATA SUMMARY



TRAFFIC DIRECTION



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

- 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
- 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



Traffic Sub-Committee Guiding Principles

Communicate, Communicate, Communicate

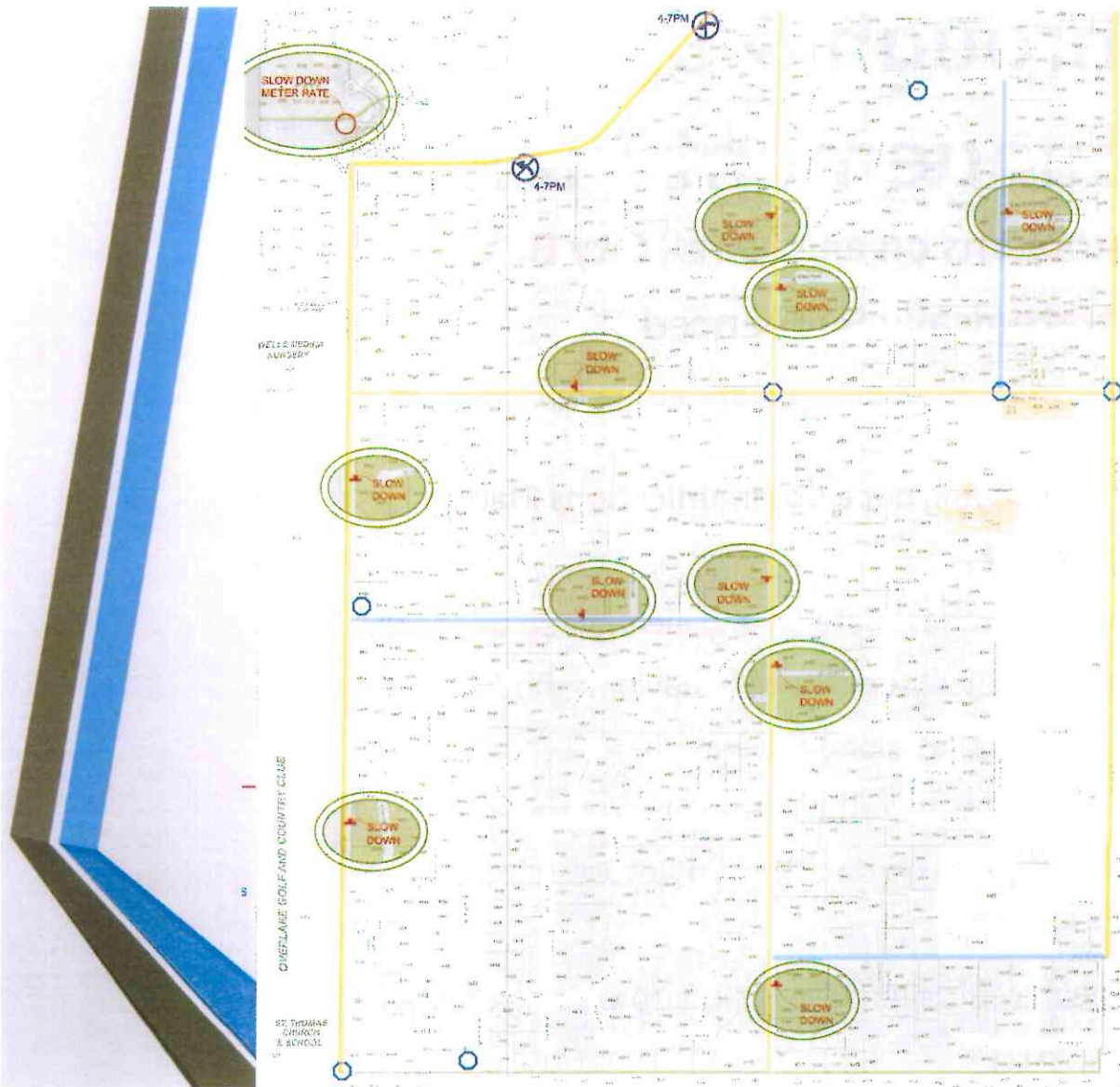
- Create environment encouraging residents to share their concerns about traffic volumes and traffic safety with the City in an objective and constructive manner
- Be sure the problem is clearly defined. Is it a traffic volume or safety issue (e.g., speed - traffic) or both?
- Develop and review potential 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

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)



FUTURE MODIFICATIONS

1. COMMUNICATION

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 SPEED SIGN

— ARTERIAL

— SECONDARY ARTERIAL

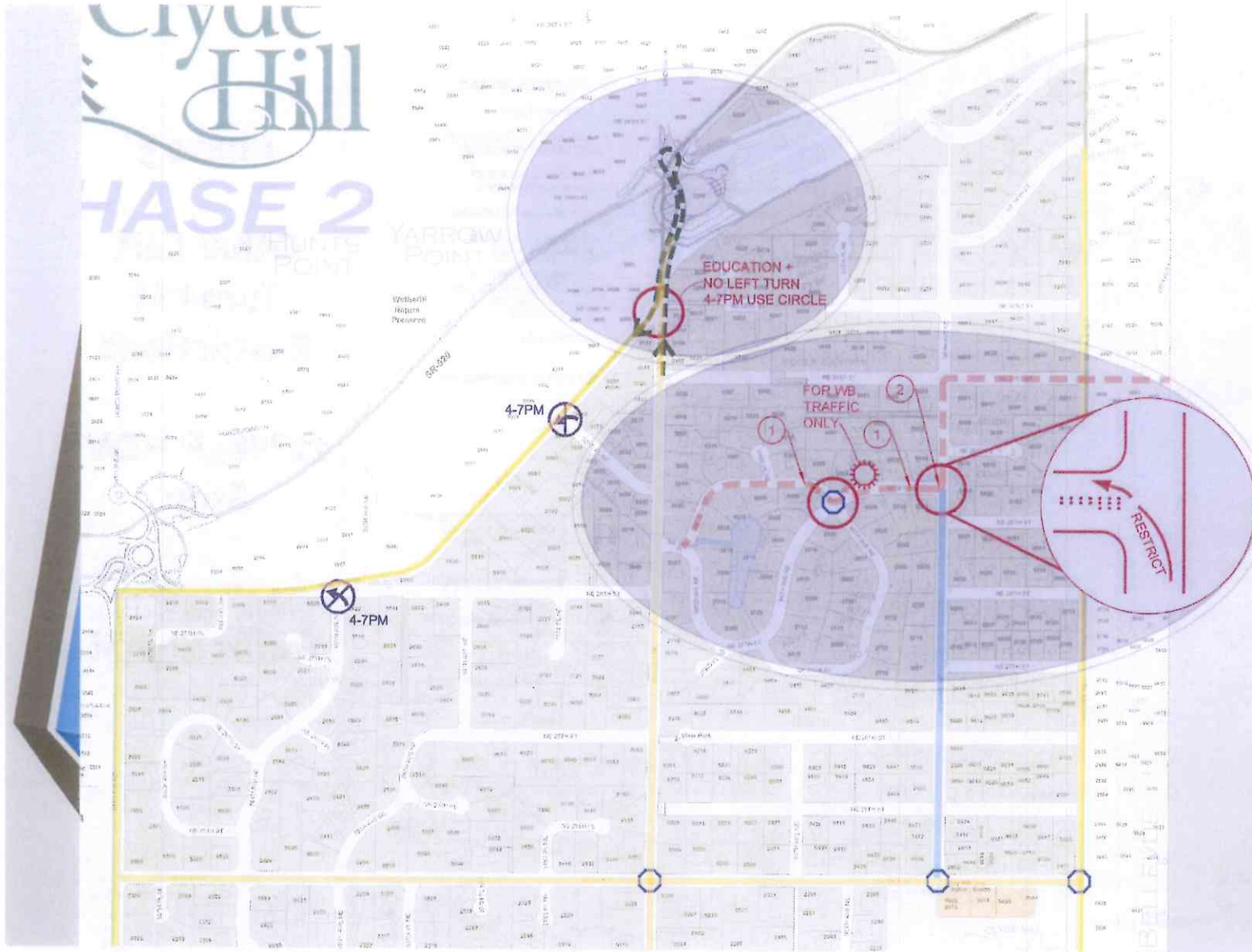
--- NEW TRAVEL PATH THRU ROUNDABOUT

Phase 1 Cut-Through Traffic Management & Speeding Plan

(10) Solar
Speed Signs

Tweak Ramp
Metering

Buttons & Flashing Stop Sign in Aqua Vista Area





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