

# Phase 1

## Ramp Meter - Implement slowing down of the 84th WB Ramp Meter

**Purpose:** This approach would be to discuss with WSDOT slowing down the processing rate at the 84th ramp meter. The purpose of slowing down the ramp meter rate is to create additional congestion within the local roadway network. This approach will combat cut-through traffic that occurs during peak PM congestion along the SR520 freeway in the westbound direction. Congestion usually backups across the water and extends to Bellevue Way. Our previous study showed that the time to use Bellevue Way versus cutting through to the 84<sup>th</sup> Interchange is almost equivalent.

**Pros:** Depending on the results (which will require 1-2 months to evaluate), this approach, along with other tools the City will implement as part of this traffic calming, may be the only step needed to reduce cut-through traffic through the neighborhoods.

**Cons:** This approach will back up traffic on all arterials leading to SR520 within the Clyde Hill, Medina, Hunts Point and Yarrow Point neighborhoods. It is also contrary to the request the City made to WSDOT four years ago when the ramp meter system/interchange was being designed. Waze and Google maps will continue to show the shortest path (travel time) for routes so during non-peak parts of the day, some cut-through traffic will likely persist.

## Safety, Traffic Calming, and Data Collection: Adding LED speed signs

**Purpose:** There has been speeding occurring on the local streets and arterials, and the intent of these signs is to help provide live feedback to slow down when the speeding occurs. Studies have shown this to be fairly effective in moderating speeding along the corridor. One of the secondary benefits will be that these signs can collect speed information so that the corridors can be evaluated. Approximately three weeks of data collection needs to occur after the SR520 WB ramp meter timing changes. The City should anticipate lots of comments during this period. Purchases for the LED signs can't be made until 12/13/16 when the budget is passed, so this would be taken into account before the SR520 ramp meter timing is modified. If speeding continues to occur, these areas might be identified for additional enforcement to provide reinforcement to slow down.

**Pros:** The project has the ability to reduce speeding along these corridors. Additionally, the signs will be a benefit for collecting information (traffic volumes and speed) for these corridors.

**Cons:** This is an initial capital cost for the City of approximately \$10,000 per sign. Placement of these signs would need to be coordinated for the best location. Many times residents do not appreciate additional signs in front of their homes, however, the LED signs would be directionally aligned so that vehicles can see them, but they will not be visible from the houses.

# Phase 2

## Turn Restriction:

- **92nd Ave to Points Drive - No NB to WB left hand turn Weekdays from 4pm - 7pm**
- **24th St to 84<sup>th</sup> Ave - No WB right hand turn Weekdays from 4pm - 7pm**
- **20th St to 84<sup>th</sup> Ave - No WB right hand turn Weekdays from 4pm - 7pm**

**Purpose:** Phase 2 would occur no sooner than 3 weeks after the SR520 WB ramp meter timing changes. If the timing changes do not happen, then the erection of the signs can take place.

The purpose of these improvements is to enforce or restrict turn movements that are used by residents and cut-through vehicles to access the 84th Ave WB SR520 on-ramp. This change will significantly impact and thus modify current drivers' behaviors and expectations.

**Pros:** The turn restriction at 92nd Ave / Points Drive may be applied at all times during the day. This change would increase the safety of the intersections and also make for a smoother traffic flow at this location by requiring all vehicles to use the roundabout at 92nd Ave WB SR520 off-ramp in order to head west towards Tully's. For those cutting through to 84<sup>th</sup> Ave SR520 off-ramp, it would increase their time.

**Cons:**

- Bus service and the routes (Metro 271) will need to be taken into account to not unduly affect existing service.
- 92nd Ave - This intersection will need to be evaluated to see how vehicles from Points Drive take a left onto 92nd Ave
- 84th turn restrictions: This will be a significant change for all commuters during the peak periods. Given the lack of space to pull over vehicles, the officers will likely need to determine where to pull over violators. This is a significant change from how the intersections operate currently, so there will likely be concern from the public and local residents. It will be very important to provide high visibility on this change before it is implemented.

### **Aqua Vista traffic calming for cut through traffic** 1) No WB right hand turn

**Weekdays from 4pm - 7pm, 2) Adding a WB LED flashing stop sign, 3) 96th Ave / 30th St: Adding channelization, pylons, and RPMs to make SB left turns slower when coming from 96th Ave NE.**

**Purpose:** The proposed traffic calming for this location is to mitigate cut-through traffic from the Bellevue area through the Aqua Vista neighborhood. Communication w/Aqua Vista residents can be significantly increased by working with their HOA.

**Pro's:** These improvements will make it more obvious to drivers that they need to slow their speeds through this neighborhood, and will restrict right hand turns (weeknights from 4-7pm) from 28th Place onto 92nd Ave. Safety improvements with an LED stop sign and some combination of pylons or raised pavement markings on 30th St and 96th Ave will help prevent traffic from cutting the corner at this intersection, which has been a concern to both drivers and pedestrians.

**Con's:** This change will also restrict local residents and they too will need to modify their travel patterns during the restricted hours.

## **Phase 3**

### **Turn Restriction:**

- **WB 84th Ave / 12th St - WB right hand turn pocket restrictions to WB Bus and HOV**  
Weekdays from 4pm - 7pm
- **NB 86th Ave / 12th St - No NB right hand turns Weekdays from 4pm - 7pm**

**Purpose:** The purpose of these improvements is to enforce or restrict turn movements that are used by residents and cut-through vehicles to access the 84th Ave WB SR520 on-ramp. This change will significantly impact current drivers' behaviors and expectations.

**Pro's:** This has the potential to restrict vehicles before they can cut through the neighborhood. If the other previous phases are working, this change may not be necessary.

**Con's:** This restricts the intersection and delay for WB traffic to use the primary NB arterial 84th Ave. This change will also restrict local residents and they too will need to modify their travel patterns during the restricted hours.

### **Safety and Traffic Calming: 92nd Ave / 20th St - Evaluate a mini-circle and Cross hatching in front of Hawthorn Court**

**Purpose:** The mini-circle would be evaluated for this area or in close proximity to this location along 92nd Ave in an effort to help slow through traffic within this neighborhood. The mini-circle would still allow through movements for emergency vehicles and fire. The mini-circle would still be mountable and allow movement in both directions by emergency and fire vehicles.

**Pro's:** This would be an added physical element to narrow the through lane and provide some slowing along the 92nd Ave corridor.

**Con's:** This location has limited ROW available

### **Signalization: 98th Ave / 24th St - Evaluate signalizing this intersection**

**Purpose:** The purpose would be to help manage and control the operations of one of the key corridors for cut-through traffic. The signalization has the potential to tie into the City of Bellevue Adaptive signal systems,

especially the one located on Bellevue Way. It is possible that installation of this signal may provide additional opportunities to coordinate with Bellevue and possibly allow the connection to the 84<sup>th</sup>/24<sup>th</sup> intersection.

**Pro's:** This change would monitor and manage the traffic flows at this intersection in a more orderly way than the current stop controlled intersection. It could also help to delay specific travel movements in an effort to help reduce the impacts of the cut-through traffic. In addition, the signal would help to control walk movements for the students in the adjacent schools. Construction of a new Fire Station #5 near the intersection, four schools in the area and the intersection being co-owned by Bellevue and clyde hill mean partnership/grant opportunities for erecting this intersection.

**Con's:** Signalization of this intersection could come at a fairly high price. Approximately \$300,000 is the typical cost of a signal, not including curb ramp upgrades and other civil improvements. Signalization also requires meeting signal warrants per MUTCD before planning for the construction of a new signal.