



2017



# Neighborhood Traffic Calming Programs



## Arcadia Neighborhood



**Scott Logan**

**Traffic Engineering Supervisor**

**City of Phoenix Street  
Transportation Department  
Traffic Services Division**





# Meeting Agenda

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- Current traffic conditions
  - Neighborhood streets
  - Crash history
  - Traffic Volume
- Traffic calming programs
  - Speed Hump/Speed Cushion
  - Neighborhood Traffic Management
- Next steps

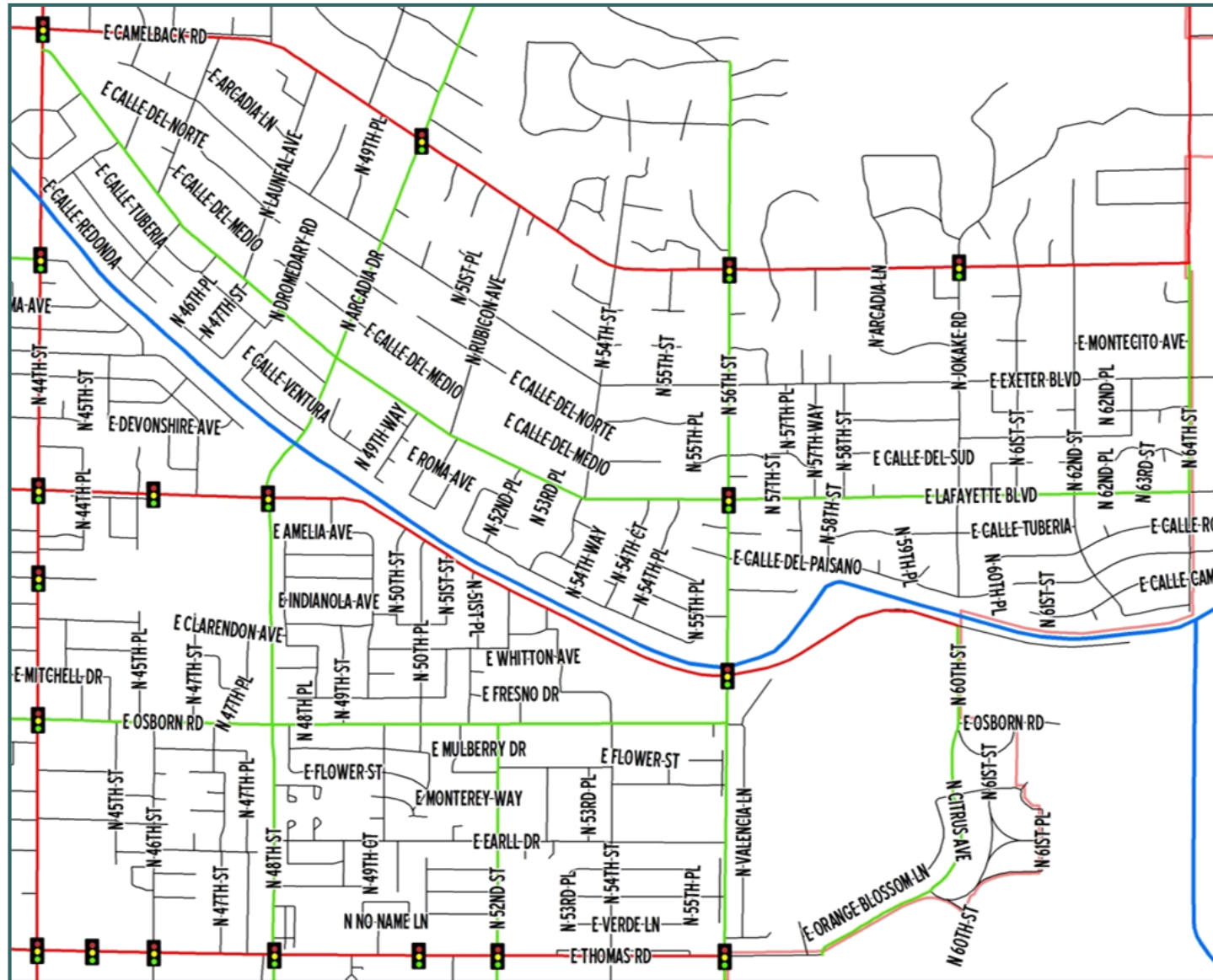
# Neighborhood Streets

 Arterial Street

 Collector Street

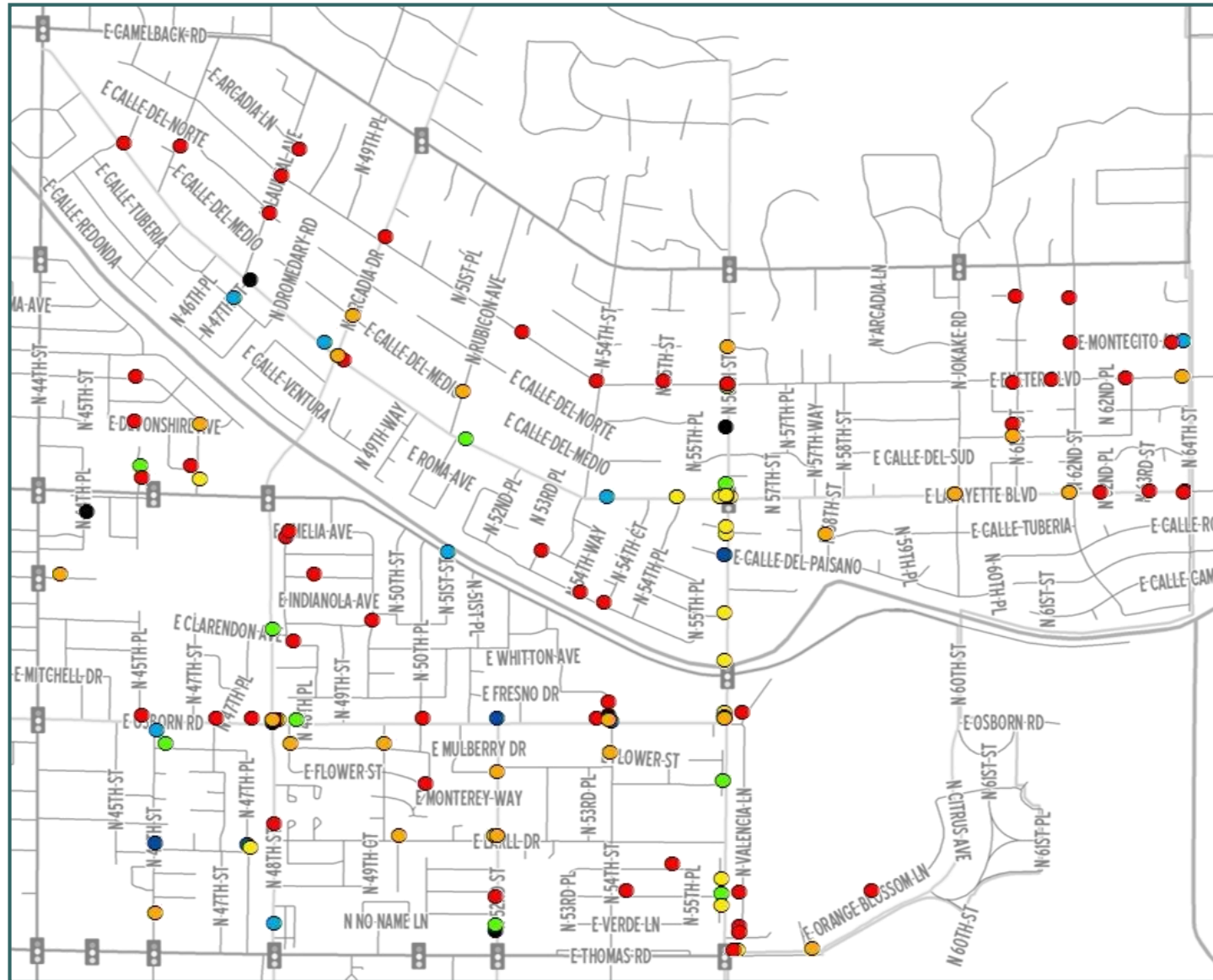
 Local Street

Greater  
Neighborhood



**2011-2015 Citywide Average**  
**24,131 Crashes/yr**

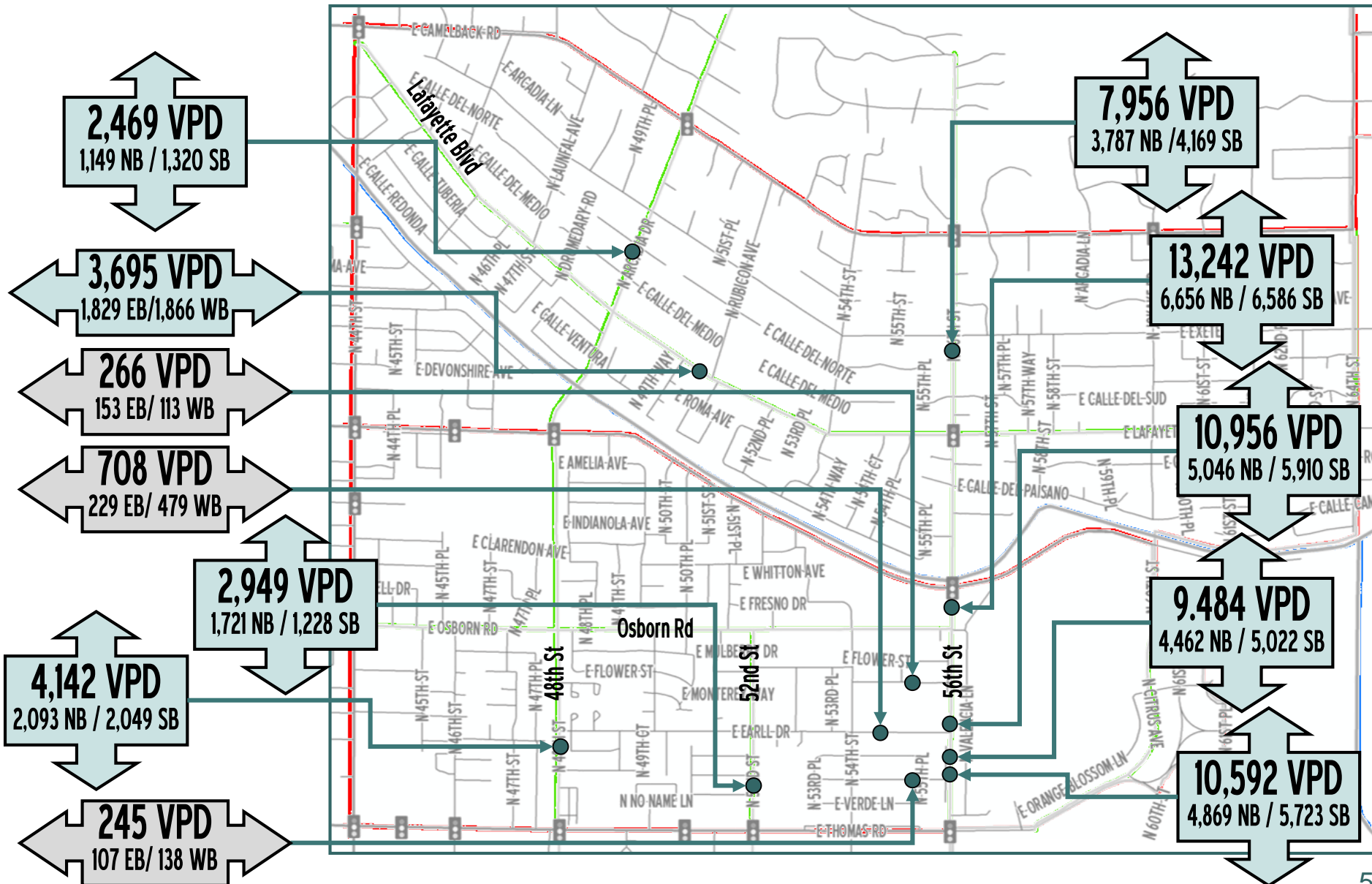
## 97 No Injury





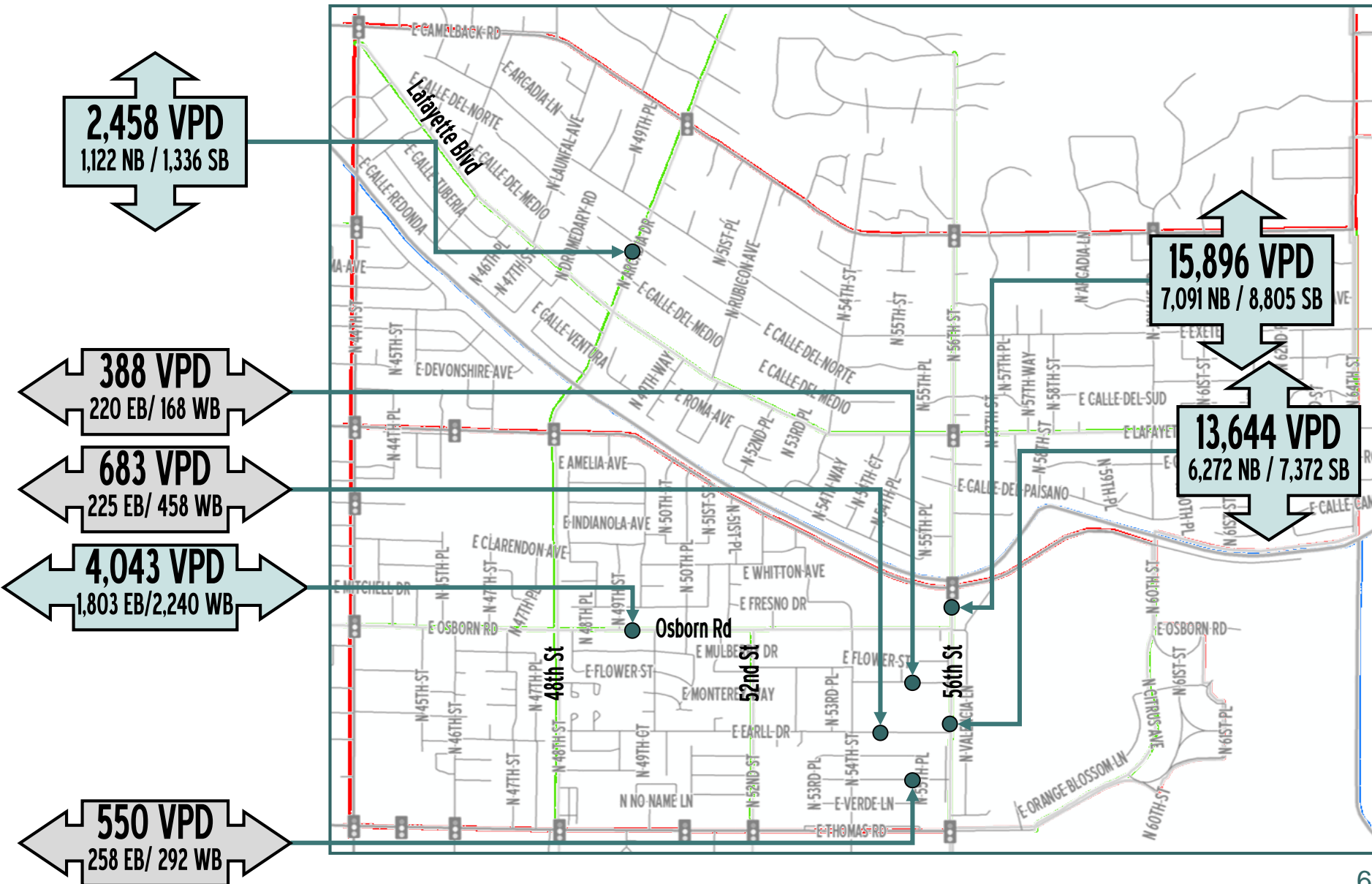
# 2009 - 2012

## Traffic Volume VPD (Vehicles Per Day)



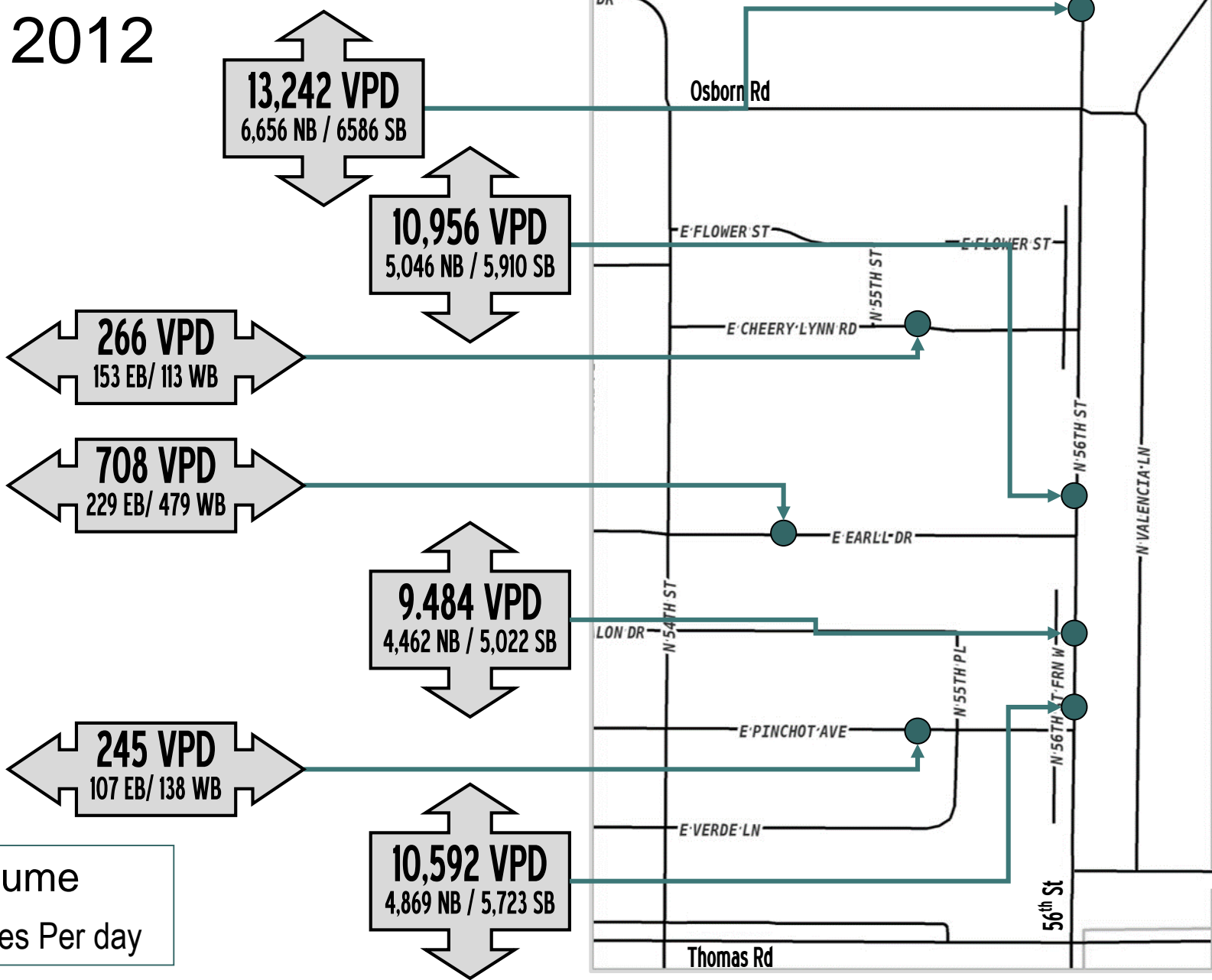
# 2015 - 2016

## Traffic Volume VPD (Vehicles Per Day)



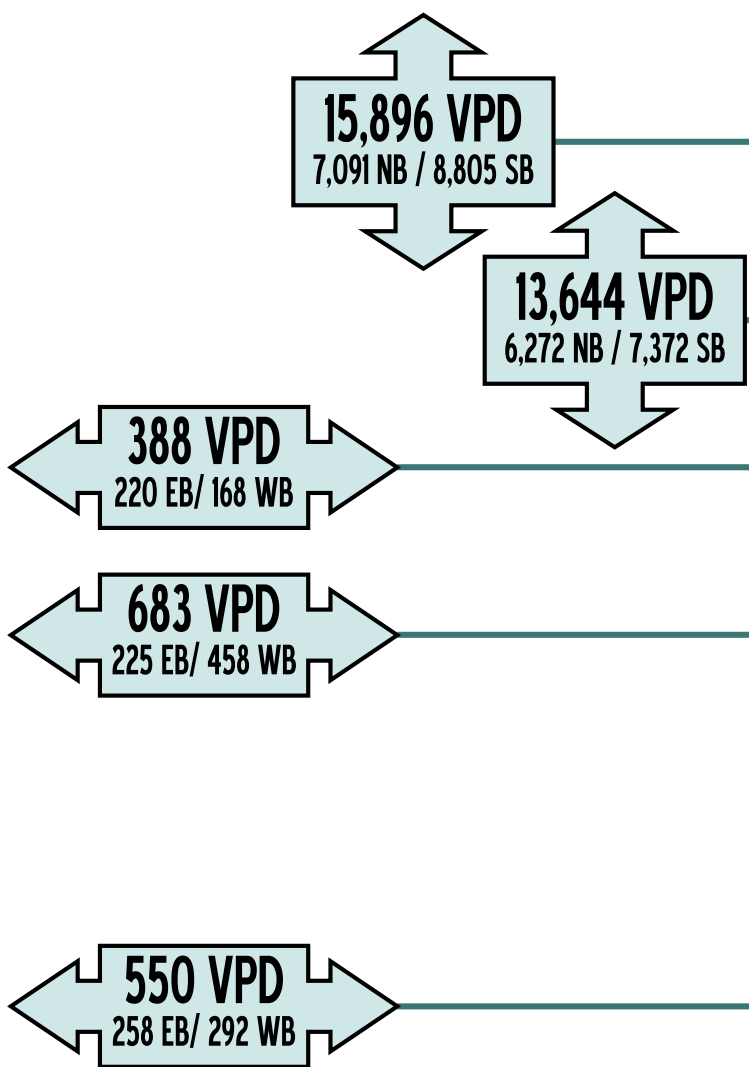
# Traffic Study Results

## 2009 - 2012

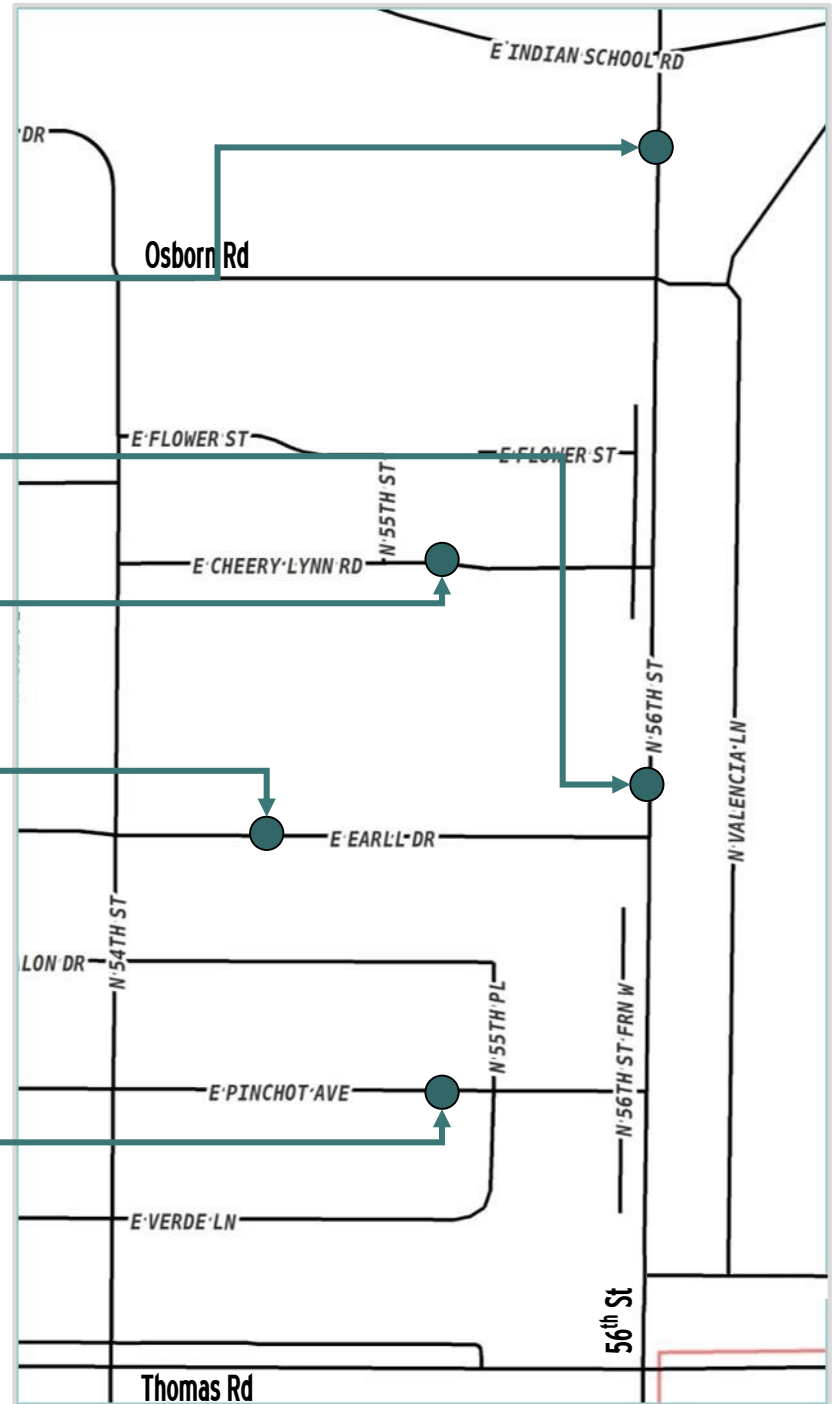


# Traffic Study Results

## 2016



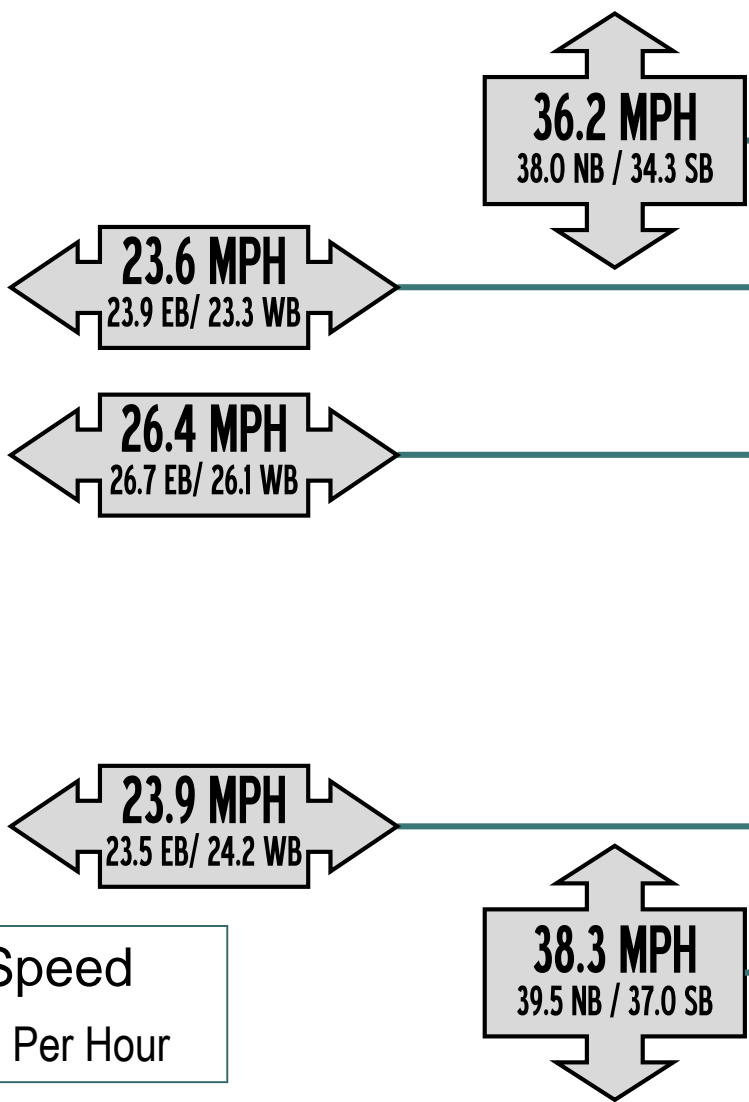
Traffic Volume  
VPD = Vehicles Per day



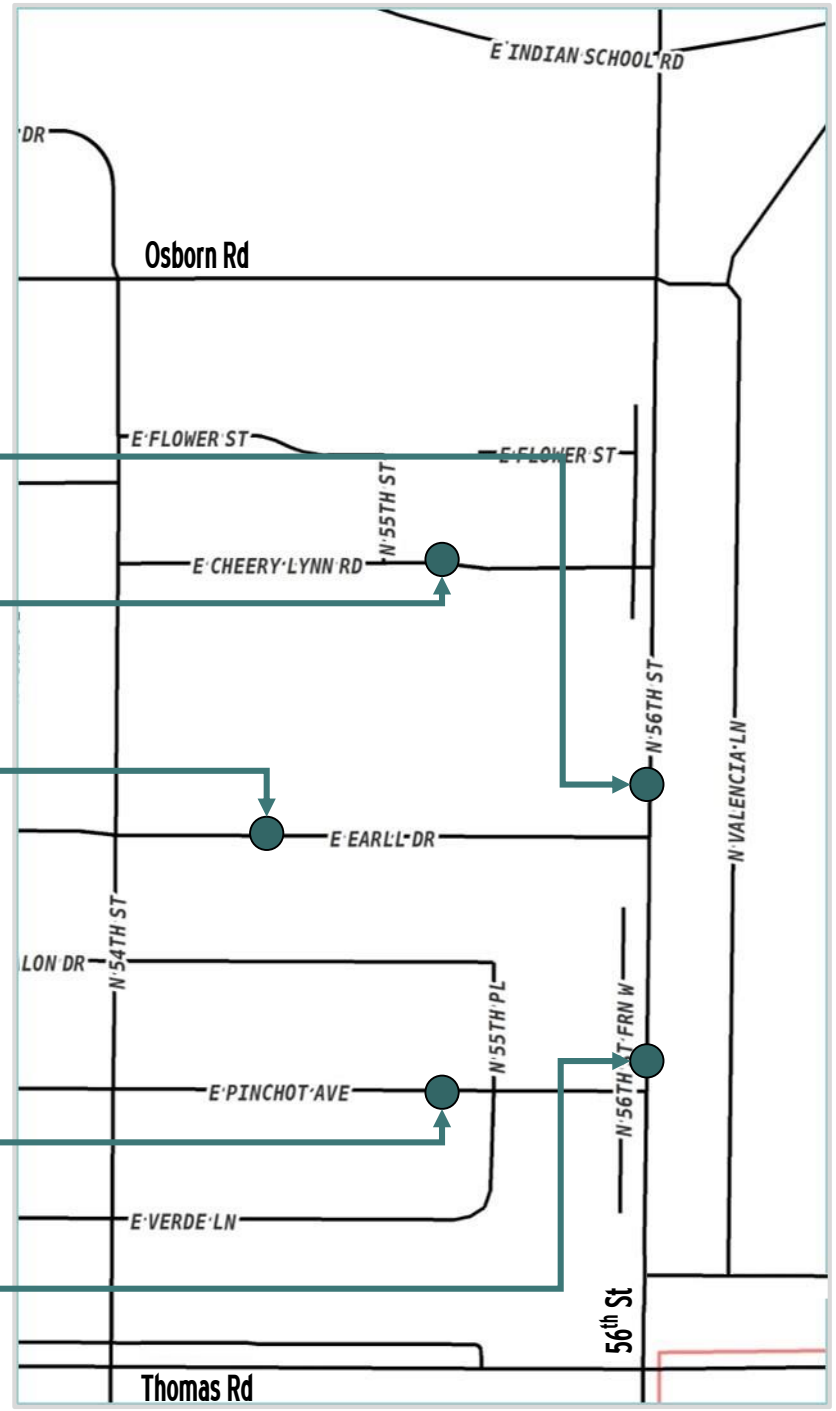


# Traffic Study Results

## 2009 - 2012



Average Speed  
MPH = Miles Per Hour



# Traffic Study Results

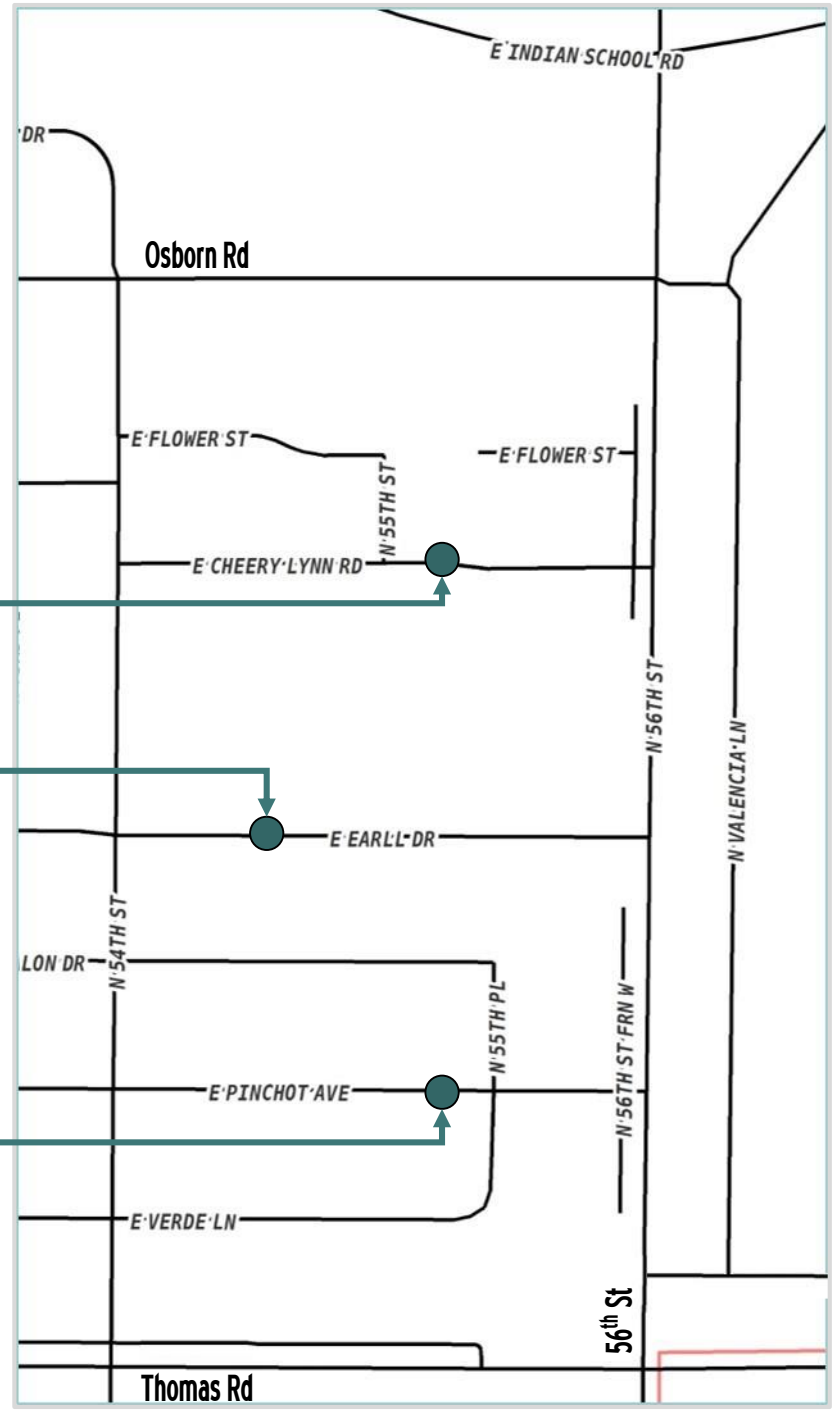
## 2016

**19.1 MPH**  
20.2 EB/ 17.9 WB

**22.3 MPH**  
23.4 EB/ 21.1 WB

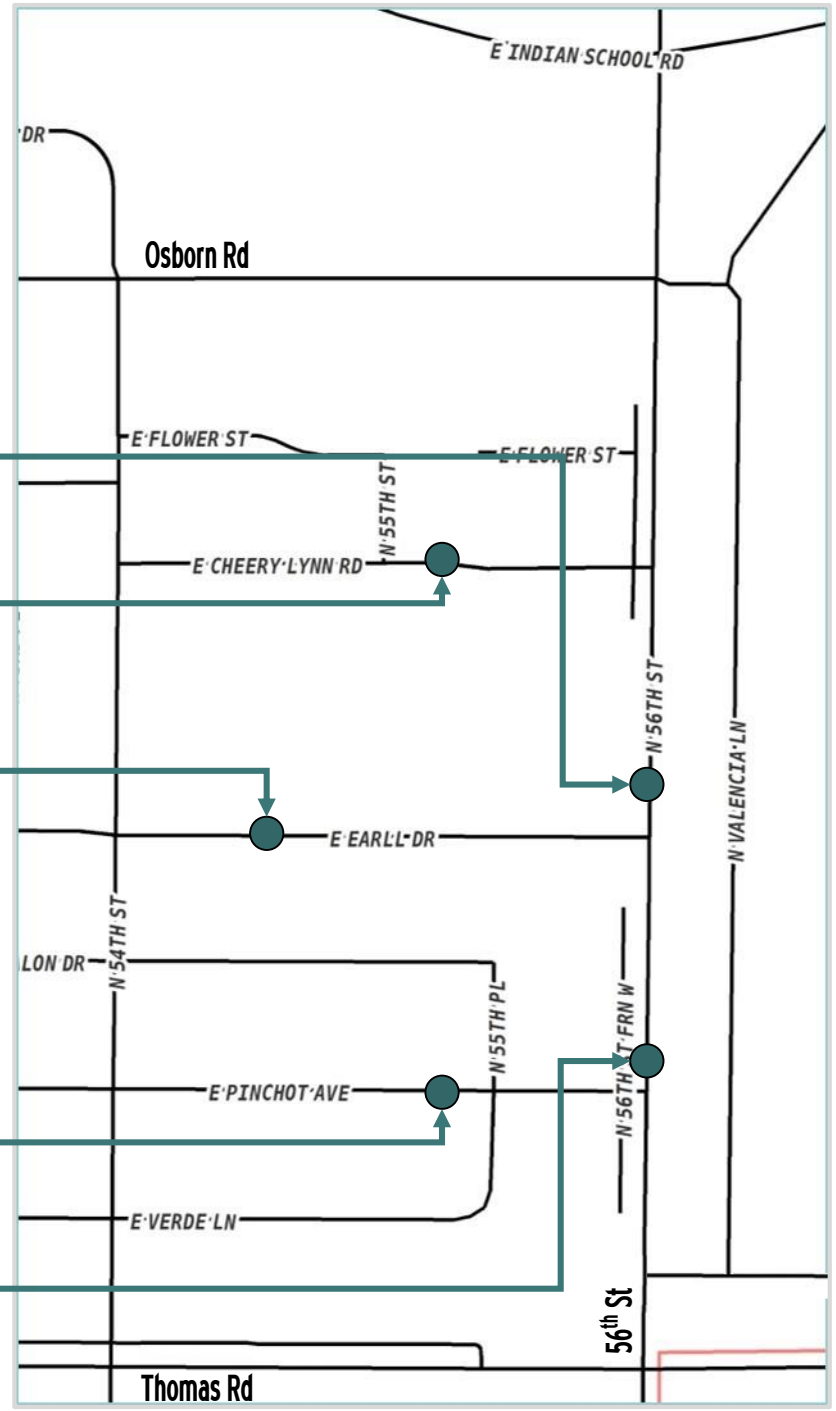
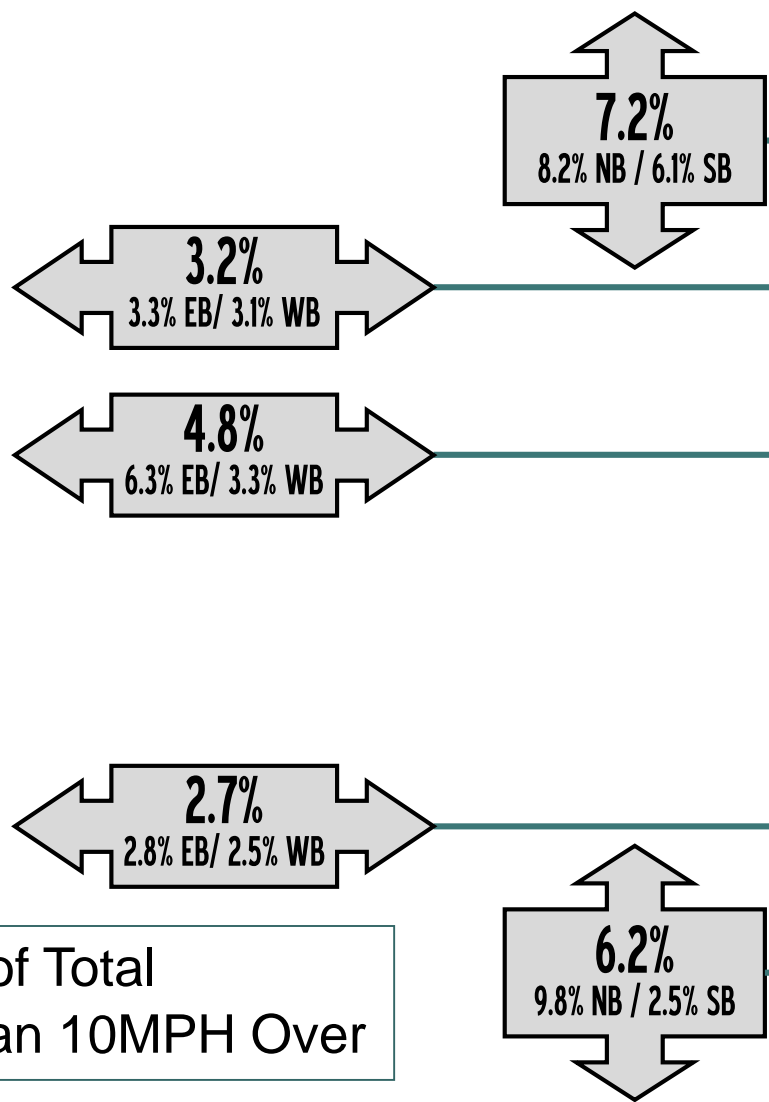
**19.8 MPH**  
20.5 EB/ 19.1 WB

Average Speed  
MPH = Miles Per Hour



# Traffic Study Results

## 2009 - 2012



Percent of Total  
More Than 10MPH Over

# Traffic Study Results

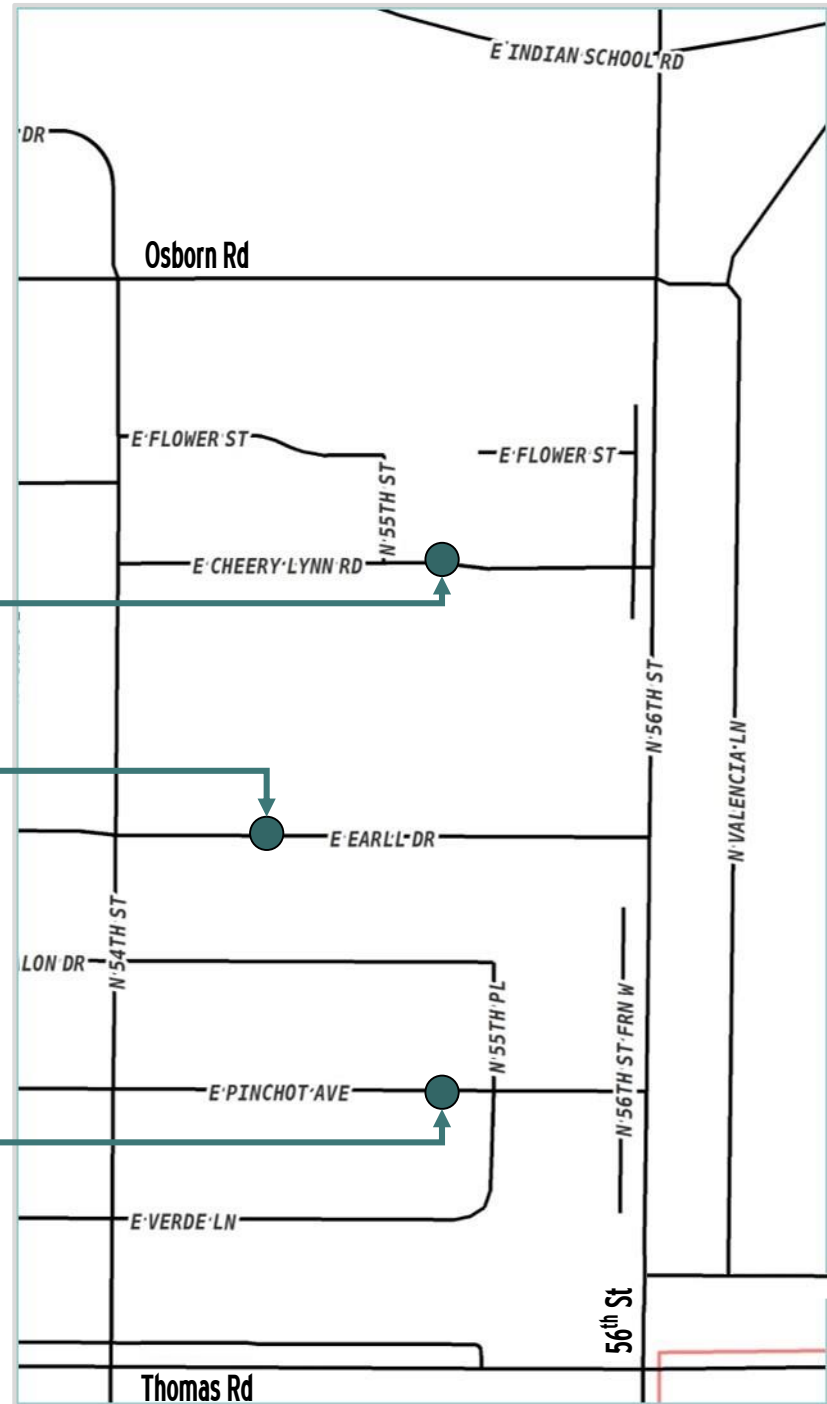
## 2016

0.0%  
0.0% EB/ 0.0% WB

0.5%  
0.9% EB/ 0.0% WB

0.0%  
0.0% EB/ 0.0% WB

Percent of Total  
More Than 10MPH Over



# ● ● ● | Traffic Calming Programs

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- Speed Hump/Cushion Programs
  - Costs
  - Petitioning requirements
- Other Traffic Calming Programs
  - Neighborhood Traffic Management Program
  - Striping changes
  - Radar Trailer Program

All Neighborhood Traffic Calming is Resident Driven



# ● ● ● | Stop Signs

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Stop signs are traffic control devices, not traffic calming devices

STOP control is justified when...

- Visibility obstructions exist
- Crash problems exist
- Driver expectation of traffic control exists

Improper use of stop signs can make intersection **more dangerous**



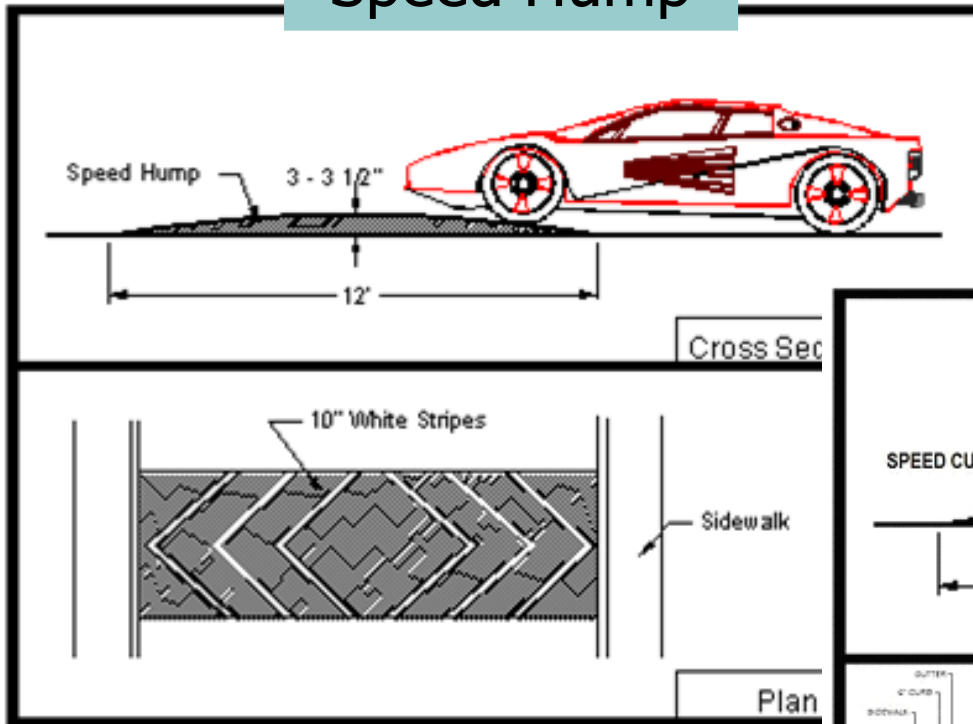
# ● ● ● | Cushions vs. Humps

- Speed humps:
  - Run continuously across street
  - Local streets only
  - Slows all vehicles
- Speed Cushions:
  - Runs continuously but with grooves cut for fire trucks
  - Collector streets only
  - Slow all vehicles except fire trucks

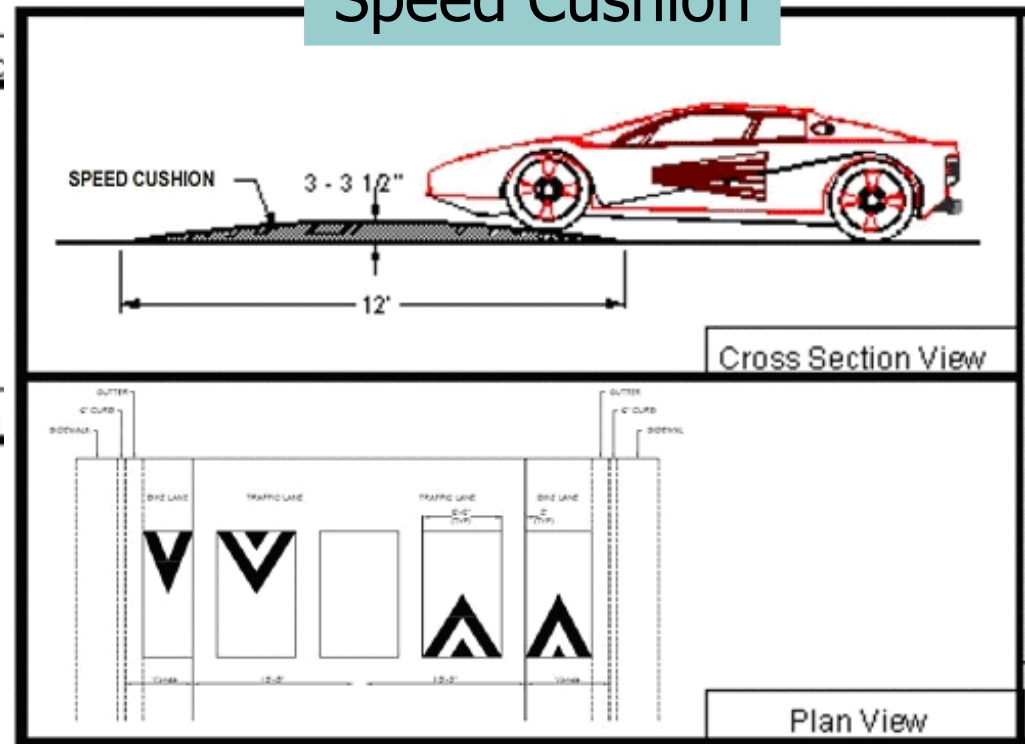


# Hump and Cushion Designs

## Speed Hump



## Speed Cushion





# Speed Hump Program

## Requirements – Costs

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Speed humps cost the City **\$2,200** each  
Residents may need to pay for some of  
installation

Average Speed on Street	Cost to Resident for Speed Humps
25 mph or Less	\$1,200/hump
26-29 mph	\$250/hump
30 mph or higher	\$100/hump

Once installed City will maintain



# Speed Cushion Program

## Requirements – Costs

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Speed Cushions cost the City **\$2,800** each  
Residents may need to pay for some or all  
of installation

Average Speed on Street	Cost to Resident for Speed Cushions
Speed Limit or Less	\$2,800/cushion
1 to 4 mph Above Limit	\$500/cushion
5 mph or more Above Limit	\$200/cushion

Once installed City will maintain



# Petitioning Requirements

Petition boundary:

Speed Humps – 20-30 homes

Speed Cushions – 50-60 homes

Consensus:

Super Majority Approval:

100% within 100 feet

70% of entire boundary

**Speed Hump Installation Petition**  
City of Phoenix • Street Transportation Department • 602-262-4659

We, the undersigned, request that the City of Phoenix install speed humps as shown on the reverse side of this page. In order for speed humps to be installed, at least 70 percent of residences within the petition boundary must approve, and all residences within 100 feet of a speed hump must approve. All residences within the petition boundary must be contacted. If renters occupy a household, the renters have the authority to sign the petition. However, by signing this petition I certify that I am an agent and authorized to sign this petition on behalf of all property owners. By signing, we understand the advantages and disadvantages listed below, and we agree to hold the City harmless if the proposed hump(s) cause any of the problems listed below. Completed original petitions along with all necessary monies should be returned to City of Phoenix, Street Transportation Department, 200 W. Washington St., 5th Floor, Phoenix, AZ, 85003. Questions about this program can be directed to 602-262-4659.

**Advantages of speed humps**

- Speed humps can reduce average speeds by up to 7 mph.
- Speed humps are effective all day, every day.
- Speed humps may discourage cut-through traffic.

**Disadvantages of speed humps**

- Vehicles driving over speed humps make noise.
- Vehicles may drive on sidewalks to avoid speed humps.
- Traffic may be diverted to previously quiet parallel streets.
- Emergency Service response time suffers.
- Street sweepers cannot clean the street near speed humps.
- Speed humps block drainage flow and can cause flooding.
- Signing and striping is required to alert motorists of humps.

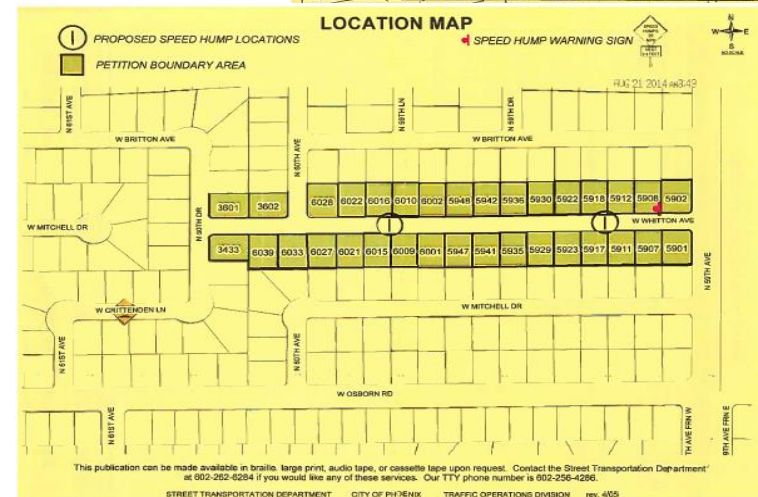
**LOCATION OF PROPOSED SPEED HUMPS**  
Whitton Avenue west of 59<sup>th</sup> Avenue

PETITION PREPARED BY	PETITION EXPIRY ON	PETITION EXPIRY ON	PORT OFFICE USE ONLY
Signature	Address	Date Signed	
Adrian Ochoc	6022 W. Whitton Ave.	7-23-14	
Ray Holt	6022 W. Whitton Ave.	7-23-14	
Jesus S. Hernandez	6023 W. Whitton Ave.	7-23-14	
Jeannette G. G. G.	6033 W. Whitton Ave.	7-23-14	
Lisa N. R. R.	6015 W. Whitton Ave.	7-23-14	
Wendy Stenice	6010 W. Whitton Ave.	7-23-14	
Shirley L. L.	5947 W. Whitton Ave.	7-23-14	
Margaret M. M.	5942 W. Whitton Ave.	7-23-14	
John J. J.	5929 W. Whitton Ave.	7-23-14	
Marvin J. J.	5935 W. Whitton Rd.	7-23-14	
Gabriela Rodriguez	5922 W. Whitton Ave.	7-23-14	

**LOCATION MAP**  
SPEED HUMP WARNING SIGN

1 PROPOSED SPEED HUMP LOCATIONS  
2 PETITION BOUNDARY AREA

Map showing the location of proposed speed humps (indicated by a red circle) and the petition boundary area (indicated by a red outline) on Whitton Avenue, west of 59th Avenue. The map includes street names: N 1ST AVE, N 2ND AVE, N 3RD AVE, N 4TH AVE, N 5TH AVE, N 6TH AVE, N 7TH AVE, N 8TH AVE, N 9TH AVE, N 10TH AVE, N 11TH AVE, N 12TH AVE, N 13TH AVE, N 14TH AVE, N 15TH AVE, N 16TH AVE, N 17TH AVE, N 18TH AVE, N 19TH AVE, N 20TH AVE, N 21ST AVE, N 22ND AVE, N 23RD AVE, N 24TH AVE, N 25TH AVE, N 26TH AVE, N 27TH AVE, N 28TH AVE, N 29TH AVE, N 30TH AVE, N 31ST AVE, N 32ND AVE, N 33RD AVE, N 34TH AVE, N 35TH AVE, N 36TH AVE, N 37TH AVE, N 38TH AVE, N 39TH AVE, N 40TH AVE, N 41ST AVE, N 42ND AVE, N 43RD AVE, N 44TH AVE, N 45TH AVE, N 46TH AVE, N 47TH AVE, N 48TH AVE, N 49TH AVE, N 50TH AVE, N 51ST AVE, N 52ND AVE, N 53RD AVE, N 54TH AVE, N 55TH AVE, N 56TH AVE, N 57TH AVE, N 58TH AVE, N 59TH AVE, N 60TH AVE, N 61ST AVE, N 62ND AVE, N 63RD AVE, N 64TH AVE, N 65TH AVE, N 66TH AVE, N 67TH AVE, N 68TH AVE, N 69TH AVE, N 70TH AVE, N 71ST AVE, N 72ND AVE, N 73RD AVE, N 74TH AVE, N 75TH AVE, N 76TH AVE, N 77TH AVE, N 78TH AVE, N 79TH AVE, N 80TH AVE, N 81ST AVE, N 82ND AVE, N 83RD AVE, N 84TH AVE, N 85TH AVE, N 86TH AVE, N 87TH AVE, N 88TH AVE, N 89TH AVE, N 90TH AVE, N 91ST AVE, N 92ND AVE, N 93RD AVE, N 94TH AVE, N 95TH AVE, N 96TH AVE, N 97TH AVE, N 98TH AVE, N 99TH AVE, N 100TH AVE.

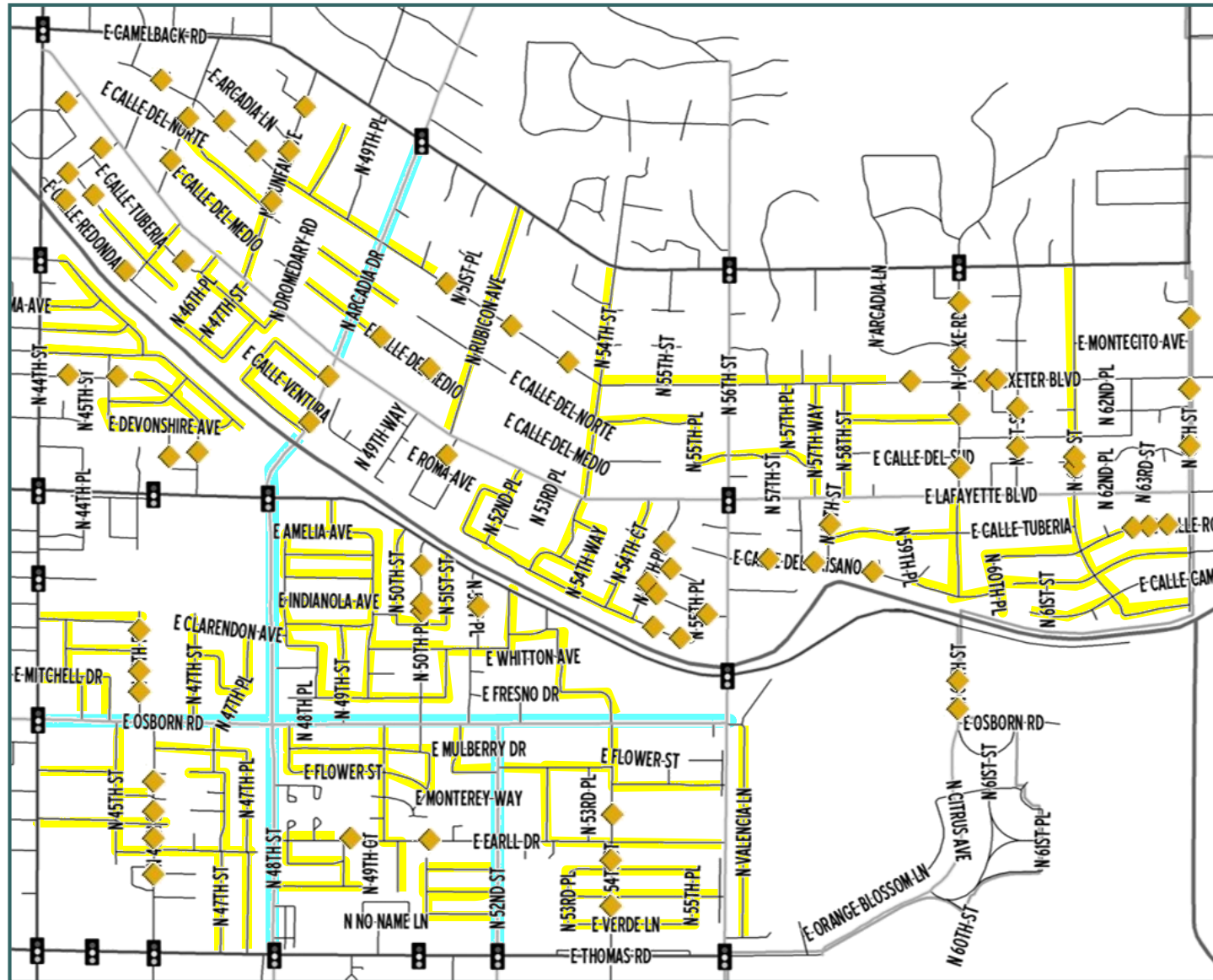


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## Existing Speed Humps



# Neighborhood Traffic Management

Designed to deter cut-through traffic on **LOCAL** streets

Criteria for Installation:

Volume: 1000 veh/day or 100 veh/hr

Speed (85-pctl): Exceeds 25 mph



# ● ● ● | Striping Changes

Defines travel lanes and separates road users

Includes bike lanes, parking lanes, turn lanes, etc.

Optically narrows travel lane and improves visibility

May reduce crashes

May slow traffic





# ● ● ● | Radar Speed Trailer Program

Intended to slow traffic – “Shame” drivers  
Deployed for one week interval, once per month  
Installed on any street with permission of resident







# Traffic Calming Program

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- ✓ Contact from Neighborhood
- Create Neighborhood Traffic Committee
- Conduct traffic study - Speed and Volume
- Devise Traffic Control Plan
- Obtain Neighborhood Consensus
- Implement and Test Solutions

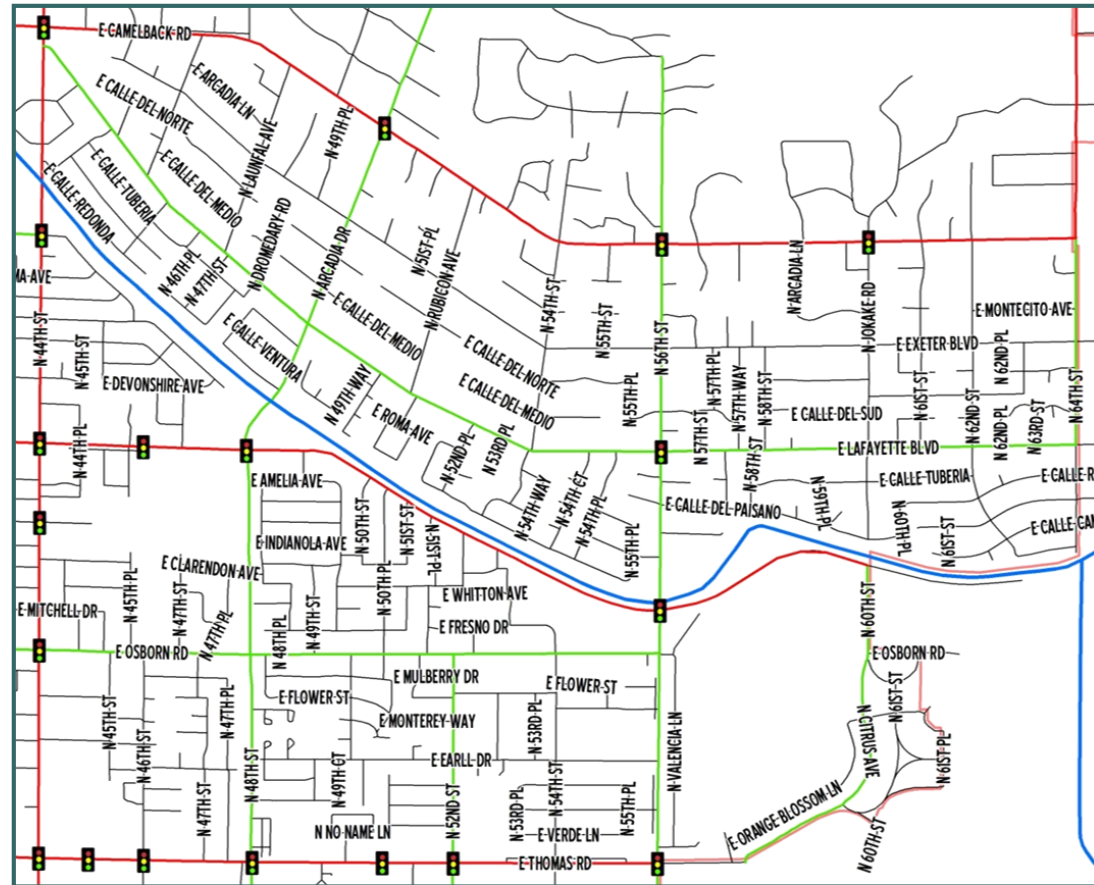
# ● ● ● | Create Traffic Committee

## ○ Commitment:

- 5-8 residents with city staff
- 2-3 meetings

## ○ Responsibility

- Where to count,
- What devices,
- Petition responsibilities



# • • • | Questions?

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City Contacts:

Scott Logan 602-495-7065  
[scott.logan@phoenix.gov](mailto:scott.logan@phoenix.gov)

Traffic Complaint Hotline:  
602-534-SPEED (7733)