



## SUSTAINABILITY & TRANSPORTATION COMMITTEE

November 2, 2017

The Sustainability & Transportation Committee of the City of Mesa met in the lower level meeting room of the Council Chambers, 57 East 1st Street, on November 2, 2017 at 8:38 a.m.

### COMMITTEE PRESENT

Kevin Thompson, Chairman  
David Luna  
Jeremy Whittaker

### COMMITTEE ABSENT

None

### STAFF PRESENT

Kari Kent  
Dee Ann Mickelsen  
MaryGrace McNear

Items on the agenda were discussed out of order, but for purposes of clarity will remain as listed on the agenda.

#### 1. Items from citizens present.

There were no items from citizens present.

#### 2-a. Hear a presentation, discuss and provide a recommendation on a proposed decorative tree lighting policy.

Transportation Director RJ Zeder introduced Deputy Director of Operations Gordon Haws who displayed a PowerPoint presentation (**See Attachment 1**) related to the proposed decorative tree lighting policy.

Mr. Zeder advised that a tree lighting policy stems from a request for tree lighting at the Hilton Hotel & Resorts and at the East Valley Institute of Technology (EVIT).

In response to a question posed by Committeemember Luna, Mr. Haws advised that there have only been two requests from commercial properties to install decorative tree lighting and those were processed through City Management. He advised that if this policy is approved, each future request would be submitted to Council for budget approval.

Assistant City Manager Kari Kent clarified that decorative tree lighting was installed at the Hilton Hotel & Resort due to the benefit of increased tourism, bed tax, and aesthetics. She advised that once the second request was received from EVIT, and due to the significant cost, it was determined a policy was needed.

Chairman Thompson expressed concern over spending taxpayer dollars to enhance and beautify private property, and whether decorative tree lighting provides a return on investment.

In response to a question posed by Committeemember Luna, Mr. Zeder advised the City would be responsible for building the entire project and the property would have a complete lighting system. He advised that Council would have the opportunity to decide if it is practical to utilize resources for decorative tree lighting.

Discussion ensued related to the City providing power to the property and the property owner providing the tree lighting.

Committeemember Whittaker pointed out that property of a governmental agency is different than a commercial property and explained that it is not the City's role to provide staff and funding to analyze private property requests for decorative tree lighting.

Chairman Thompson proposed that the City not consider providing lighting on private or governmental properties.

Committeemembers Luna and Whittaker agreed that the City should work with governmental agencies that request assistance with decorative tree lighting on their property.

Ms. Kent advised the policy will be changed to work with governmental agencies and not commercial properties related to installing decorative tree lighting. She commented the requests will be presented to Council during the budget process.

2-b. Hear a presentation, discuss and provide a recommendation on a proposed pedestrian hybrid beacon policy.

Transportation Director RJ Zeder introduced Deputy Director of Engineering Erik Guderian and City Traffic Engineer Sabine Ellis who displayed a PowerPoint presentation (**See Attachment 2**) related to the proposed Pedestrian Hybrid Beacon (PHB) policy.

Mr. Zeder advised that periodically the City will receive requests to install a PHB and recently Council approved a budget adjustment request to install a PHB at University Avenue and Grant Street.

Ms. Ellis described a PHB and provided the intent of the new policy. She advised a PHB is effective and used at mid-block locations to allow pedestrians to cross safely. She pointed out that a PHB is installed where a traffic signal is not warranted or cost prohibitive. (See Page 2 of Attachment 2)

Ms. Ellis advised a PHB functions in the following ways:

1. When not in use, the PHB signal is dark and vehicles proceed through the intersection.
2. Pedestrians push a button to activate the PHB.
3. Drivers will see a flashing yellow, a solid yellow, and finally a solid red signal.
4. Vehicles will stop and pedestrians or bicyclists can cross.

5. After a certain amount of time the solid red signal starts to flash and vehicles can continue through the intersection if the crosswalk is vacant.

Ms. Ellis displayed where PHBs are currently located in the City. She pointed out that a PHB was installed on Sossman Road to assist golf carts in crossing, on Mesa Drive as part of the Mesa Drive Phase 1 project, at the Alama School Road and 7<sup>th</sup> Street intersection for school children to cross, and Brown Road near an assisted living facility. (See Page 3 of Attachment 2)

In response to a question posed by Committeemember Luna, Ms. Ellis advised that currently City staff weigh whether a PHB should be installed when it is requested and the Mesa Police Department and community input is not included in this process. She advised that communication will occur with a property owner if modifications must be made to the property when installing a PHB.

Mr. Zeder clarified that if a citizen submits a request for a PHB to be installed, communication will occur with that requestor during the process.

Discussion ensued related to adding public comment as part of the PHB policy and before being presented to Council during the budget process.

In response to a question posed by Committeemember Whittaker, Ms. Ellis advised that in the past, City staff would count pedestrians crossing at a location that is being considered for a PHB. She added that with the implementation of the PHB Warrant Analysis Evaluation Policy, City staff can gain insight into pedestrian use at future PHB locations based on those previously installed.

Discussion ensued related to other options in counting potential pedestrian use of a future PHB and the cost of installation.

In response to a question posed by Committeemember Whittaker, Mr. Guderian advised that it is more cost effective to hardwire a PHB as opposed to using a battery pack system. He advised that most of the cost comes from labor and that it is not feasible to try and salvage equipment to be placed at a different location.

Assistant City Manager Kari Kent advised the recommendation of including public comment will be placed in the PHB policy and future requests will be presented to Council during the budget process.

2-c. Hear a presentation, discuss and provide a recommendation on a modification to the speed humps policy.

Transportation Director RJ Zeder introduced Deputy Director of Operations Gordon Haws, Deputy Director of Engineering Erik Guderian, and City Traffic Engineer Sabine Ellis who displayed a PowerPoint presentation (**See Attachment 3**) related to a modification to the speed humps policy.

Mr. Zeder stated there are residents in favor of the speed humps and speed cushions and some residents have expressed concern regarding the impact the speed humps have on their neighborhood.

Mr. Guderian outlined the common requests the Transportation Department receives on a weekly basis regarding traffic issues in neighborhoods. He explained that speed humps and speed cushions span the entire street width and are made from asphalt. He pointed out that speed cushions have gap cutouts in the asphalt. He stated speed cushions are placed on collector streets and along fire routes and speed humps are placed on neighborhood streets. He advised that national studies have found that stop signs, striping, and driver feedback signs do not reduce traffic speeds, and the most cost-effective solution is using speed humps and cushions on streets. (See Page 2 of Attachment 3)

Mr. Guderian displayed the current speed hump process and pointed out that if a speed study is requested, the resident or community that submitted the request pays a \$58 traffic count fee. He advised that the neighborhood survey is conducted by the resident requesting a speed hump or cushion, and that City staff will contact out-of-state property owners via letter, along with providing the survey, survey area map, and signature sheet. He stated that currently if a speed hump request meets the 70% approval threshold within the study area, the speed hump will be installed, but there is more public outreach before a speed cushion is installed. He clarified by stating that during the two-week public comment period, signs are placed on the affected streets advising residents of the possibility for speed cushions and the opportunity for residents to voice their opinion. (See Page 4 of Attachment 3)

In response to a question posed by Committeemember Luna, Mr. Guderian advised the survey is conducted on the homes along the street where the speed humps would be placed and then 300-feet on any intersecting streets. He clarified by stating that the Transportation Department has found that 300-feet involves part of the neighborhood that drives on the affected street.

Mr. Zeder added that the main question and the biggest concern is if 300-feet is sufficient or if the survey area needs to be expanded to include more households.

In response to a question posed by Committeemember Whittaker, Mr. Guderian stated that approximately 10% to 20% of requests for speed humps or cushions received are installed.

Discussion ensued related to possibly expanding the survey zone, properly determining households impacted with the addition of speed humps and cushions, and the Transportation Advisory Board's involvement in the current process.

In response to a question posed by Committeemember Luna, Mr. Guderian advised that at any given time there are 5 to 10 surveys being conducted and that residents are given six months to complete this process.

Jim Michaud, a Mesa resident, advised that he lives on a street where a speed hump survey was completed but adjacent streets were not part of the survey. He stated the opinion that households adjacent to the affected street should be surveyed and their vote should matter as much as the households on the directly affected street.

Courtney Snell, a Mesa resident, stated that he lives near a collector street where speed humps have been installed and it has defeated the purpose as drivers are now going down residential streets instead. He pointed out that since measurements on residential streets were not done before the speed humps were installed, there is not a way to measure how those streets are now affected. He advised that his street has seen an increase in traffic since the speed humps were installed on the collector street. He explained that there should be a way to measure where traffic is likely to go once speed humps are installed.

Seth Miller, a Mesa resident, stated that when traffic is slowed on a collector street it moves traffic to other streets. He believes the current discussion should be how to treat the residents that don't live immediately on or adjacent to a collector street. He explained that with the current policy, residents that don't live on a collector street and would not be a part of the 70% approval threshold must go out of their way to have their voice heard.

Megan Miller, a Mesa resident, stated that the policy should include surveying more households on collector streets. She expressed concern regarding emergency vehicles when speed humps are installed on a street since not all emergency vehicles are the same width as the speed humps and therefore will need to slow down on those streets.

David McNamara, a Mesa resident, opposes installing speed humps and believes the City should be responsible for surveying the neighborhood that requests the speed humps. He advised that with the addition of speed humps comes further damage to vehicles as they travel down those streets multiple times a day. He hoped there would be better communication in the future in regard to the additional changes on streets when a speed hump is installed.

Jennifer Peters, a Mesa resident, advised she hopes Council will recognize that the affected area of a collector street includes neighboring streets. She suggested surveying and receiving approval from 50% of residents on neighboring streets.

Ondria Cesar, a Mesa resident, believes the biggest issue is determining who is truly affected when speed humps are installed. She advised there are other ways to reduce speeds and stated the airport saw a reduction in speed once driver feedback signs were installed. She pointed out that emergency vehicle tires are not the same width and the City has now purchased four fire trucks that will not make it over the speed hump without slowing down and this could reduce response times.

Shauna Day-Gomes, a Mesa resident, proposed two changes to the current policy. She suggested expanding the surveyed area and provide a way for residents to vote and provide feedback online. She commented that having residents conduct surveys causes conflicts when there are differing opinions and social pressures.

Dale Sabin, a Mesa resident, advised that he opposes the 300-foot survey area as everyone in the neighborhood is affected when speed humps are installed. He commented that schools should not be included in the collector areas and more resident's opinions should be considered.

Chairman Thompson advised that it is his opinion that the current process should change with added opportunity for public comment and encouraged expanding the survey area beyond 300-feet.

In response to a question posed by Committeemember Whittaker, Mr. Guderian advised that the tires on the fire trucks are wider than the gaps between the speed cushions and therefore one set of tires needs to maneuver over the cushions. He pointed out that a national study was conducted on the delay time of emergency vehicles due to speed humps and cushions and it varied between two to nine seconds per speed hump or cushion.

In response to a question posed by Committeemember Whittaker, Mr. Zeder advised photo radar has not been implemented in neighborhoods and is a program administered by the Police Department. He commented that driver feedback signs were posted in a neighborhood for a two-week period and the results were insignificant.

Committeemember Whittaker agreed that as traffic is diverted due to a speed hump or cushion, the neighboring streets are directly affected and he suggested that staff include a formal override process involving approval of 70% of residents that live 600-feet from the street that would be receiving speed humps or cushions.

Discussion ensued related to the current process and when to include public comment.

Committeemember Luna commented that residents who live outside the 300-foot survey area should have a voice as well when it comes to the installation of speed humps or cushions.

Chairman Thompson advised that Council was under the impression the gaps between the speed cushions allowed for unabated access down the street for emergency vehicles. He stated it is concerning to now hear that emergency vehicles will need to slow down when maneuvering over speed cushions.

Mr. Guderian advised that the policy will also be changed to include a public comment period for speed humps and the two processes would be mirrored.

### 3. Adjournment.

Without objection, the Sustainability and Transportation Committee Meeting adjourned at 10:43 a.m.

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Sustainability & Transportation Committee meeting of the City of Mesa, Arizona, held on the 2<sup>nd</sup> day of November, 2017. I further certify that the meeting was duly called and held and that a quorum was present.

  
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DEE ANN MICKELSEN, CITY CLERK

# Decorative Tree Lighting Policy Transportation Department

RJ Zeder, Transportation Director

Gordon Haws, Deputy Transportation Director



# What are Decorative Tree Lights?







# valuation Criteria

## Overview

- **Located on a commercial property in a commercial district/gateway location**
- **Should increase tourism or commercial activity**
- **Positive cost/benefit analysis**
- **Not meant to offset normal lighting requirements**
- **Located within existing City of Mesa right-of-way/easement or property owner must dedicate necessary right-of-way/easement to the City of Mesa**

# Responsibilities

**City of Mesa** is responsible for:

## **Work and Costs associated with:**

- Design
- Construction
- Bringing electricity to site for lights

**Property Owner** is responsible for:

## **After Construction:**

- Maintenance costs
- Utility costs
- Other associated costs
- Expansion and/or modifications \*

*\* All aspects of design, construction, processes, and permit fees*

# Approval Process



# Staff Recommendation

**Staff is seeking a recommendation from SAT for the approval of the Decorative Tree Lighting Policy**

# Questions



# Pedestrian Hybrid Beacon Warrant Policy Transportation Department

**RJ Zeder**, Transportation Director  
**Erik Guderian**, Deputy Transportation Director  
**Sabine Ellis**, City Traffic Engineer



# at is a Pedestrian Hybrid Beacon

Pedestrian Hybrid Beacon (PHB) is a traffic control device used to stop vehicular traffic and allow pedestrians and bicyclists to cross safely



## Intent of PHB Warrant Policy

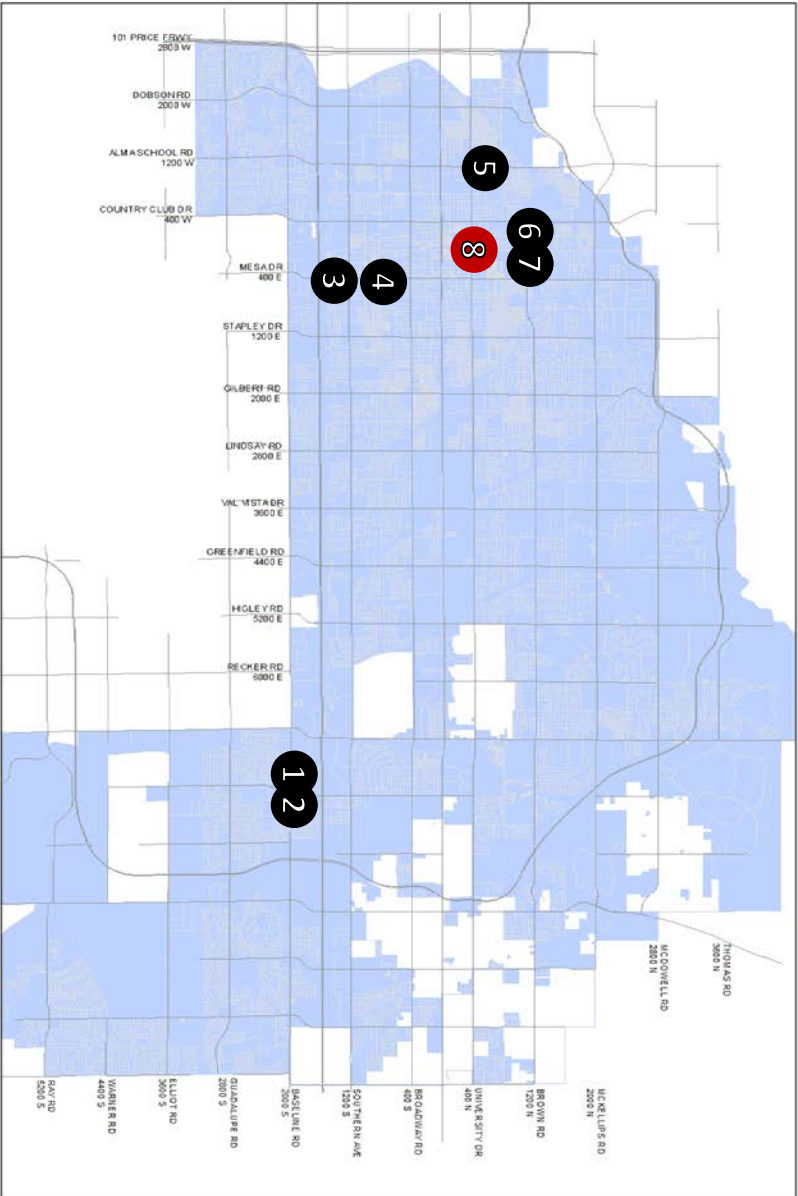
Identify criteria used when evaluating the installation of PHBs within the City of Mesa



# Locations

1. **Sossaman Rd**  
between Baseline Rd and Juanita Ave
2. **Sossaman Rd**  
between Iverness Ave and Irwin Ave
3. **Mesa Dr**  
between Hampton and Glade Ave
4. **Mesa Dr**  
between 10<sup>th</sup> Ave and 10<sup>th</sup> Dr
5. **Alma School Rd/7<sup>th</sup> St Intersection**
6. **Brown Rd**  
between Mesa Dr and Pasadena
7. **Brown Rd**  
between Center St and Grand
8. **University Dr/N Grand Intersection**  
Under Design

# City of Mesa Pedestrian Hybrid Beacons



## Warrant Analysis Evaluation

The following factors are some items staff will evaluate prior to conducting a PHB Warrant Analysis

### Consideration factors

- **Crash history**
- **Roadway layout**
- **Sight visibility**
- **Right-of-way**
- **Utility conflicts**
- **Adjoining sidewalks or pathways**
- **Existing signal network**
- **Cost to supply power**

# PHB Warrant Analysis Evaluation

Staff will evaluate a PHB installation using the PHB Warrant Analysis. A minimum of **60 points** is recommended

## PHB Warrant Analysis

Category	Points Possible
Average peak hour pedestrian/bicycle activity	25
Roadway traffic volume	25
Proximity to signalized/STOP controlled intersection	15
Proximity to pedestrian activity generator (senior center, medical facility, school, etc.)	15
Posted speed limit	12
Roadway number of vehicle travel lanes	8
Total	100

Refer to Appendix B in PHB Warrant Policy for point breakdown

# Approval Process

Staff will budget for one (1) PHB per Fiscal Year. Additional PHB requests will be evaluated and prioritized using the PHB Warranty Policy.



## **Staff**

## **Recommendation**

**Staff is seeking a recommendation from SAT for the approval of the PHB Warrant Policy**

# Questions



# Speed Hump Policy

## Transportation Department

**RJ Zeder**, Transportation Director  
**Erik Guderian**, Deputy Transportation Director  
**Sabine Ellis**, City Traffic Engineer



# Traffic Calming 101

## Common Requests

- Speed Humps
- Speed Cushions
- Stop Signs
- Driver Speed Feedback Signs
- Striping





# History of Current Speed Hump Policy

**December 1997** – Policy formally adopted, typically only properties adjacent to the street included in survey and along cul-de-sacs or looping streets intersecting the subject street

**January 2000** – Policy revised to expand survey area and include three properties or a minimum of 300 feet on side streets

**July 2012** – Transportation Advisory Board (TAB) rejected to reduce the level of neighborhood support to something less than 70% and to only include properties adjacent to the street

**January 2013** – Policy revised to remove the “or” clause to ensure consistent application: properties within a minimum of 300 feet on side streets to be included in survey

**June 2016** – TAB rejected request to expand neighborhood survey area to include everyone who potentially drives the subject street

# Current Process

## Speed Cushions

**Step 1:** Traffic calming request made

**Step 2:** Staff evaluation; Fire Department Approval

**Step 3:** Conduct Speed Study (speed & volume)

**Step 4: Neighborhood survey conducted**  
*If speed and volume criteria have been met  
At least 70% of affected owners must approve*

**Step 5:** Two week public comment period

**Step 6:** Transportation Advisory Board (TAB)  
Approval

**Step 7:** Installation

## Speed Humps

**Step 1:** Traffic calming request made

**Step 2:** Staff evaluation; Fire Department Approval

**Step 3:** Conduct Speed Study (speed & volume)

**Step 4: Neighborhood survey conducted**  
*If speed and volume criteria have been met  
At least 70% of affected owners must approve*

**Step 5:** Installation

# Comparison by City: Engineering Process

	Eligible Streets	Max Posted Speed	Consider Emergency Routes	Speed Criteria	Volume Threshold
Mesa	Residential & Collector	30 MPH	Fire	85th percentile > 8 MPH Posted	500 to 5000
Phoenix	X	X	X	✓	X
Tempe	—	—	X	✓	—
Scottsdale	—	X	—	X	—
Chandler	—	—	X	✓	—
Glendale	X	X	—	X	—
Gilbert	X	—	✓	X	—
Peoria	—	—	—	✓	✓

X More Restrictive

— Similar

✓ Less Restrictive

Refer to Table 1 in Appendix B of the report for more information

# Comparison by City: Public Process

	Initial Support	Required Approval Rate	Properties included	City Funding available	Wider Support	Appeal Process	Removal Process
Mesa							
Phoenix							
Tempe							
Scottsdale							
Chandler							
Glendale							
Gilbert							
Peoria							

More Restrictive  
 Similar  
 Less Restrictive

Refer to Table 2 in Appendix B of the report for more information

# Feedback

## Speed Cushions

Step 1: Traffic calming request made

Step 2: Staff evaluation; Fire Department Approval

Step 3: Conduct Speed Study (speed & volume)

**Step 4: Neighborhood survey conducted**  
*If speed and volume criteria have been met  
At least **70% of affected owners** must approve*

**Step 5: Public comment period**

**Step 6: Transportation Advisory Board (TAB)  
Approval**

**Potential Appeal Process**

**Installation**

## Speed Humps

Step 1: Traffic calming request made

Step 2: Staff evaluation; Fire Department Approval

Step 3: Conduct Speed Study (speed & volume)

**Step 4: Neighborhood survey conducted**  
*If speed and volume criteria have been met  
At least **70% of affected owners** must approve*

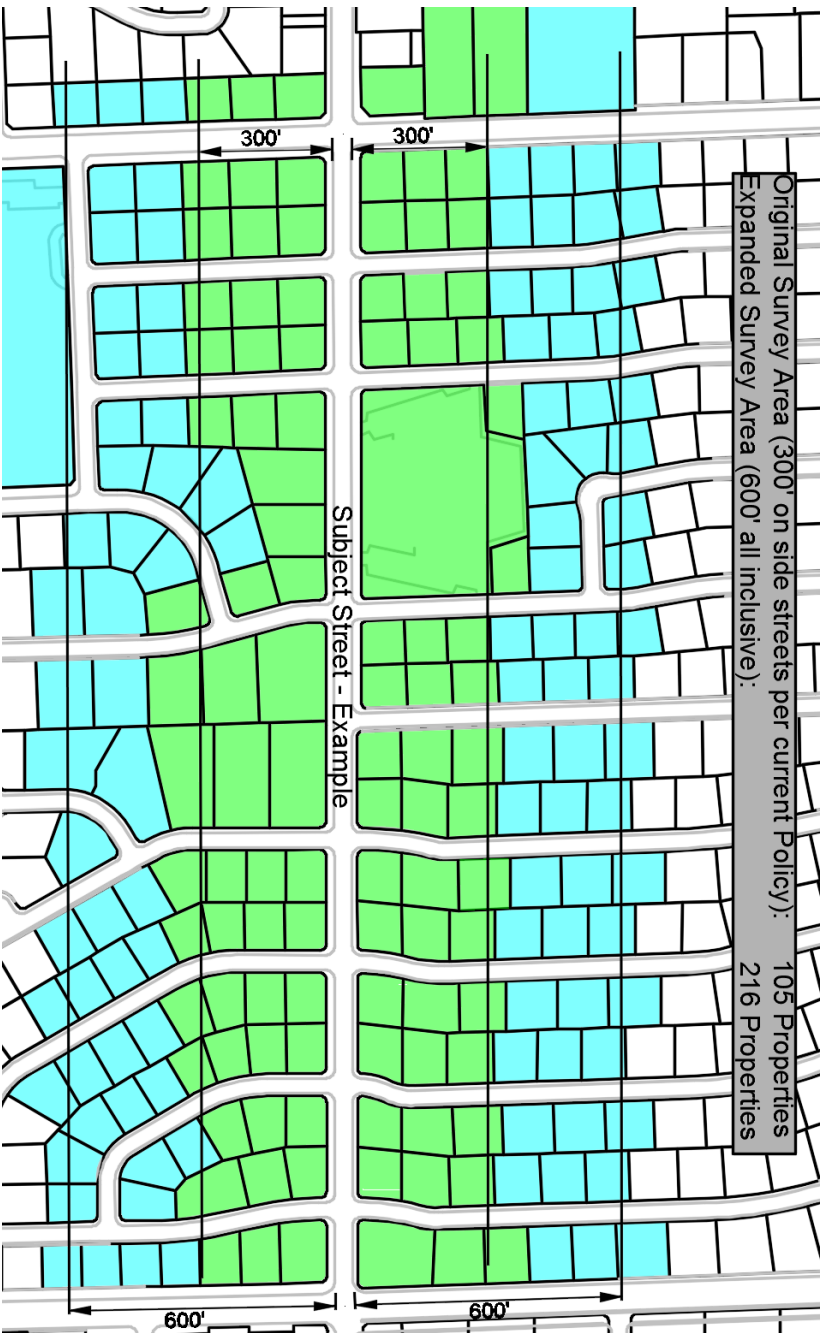
**Public comment period**

**Transportation Advisory Board (TAB) Approval**

**Potential Appeal Process**

**Installation**

# Example: Neighborhood Survey Area Expansion



# Policy Direction

Staff is seeking policy direction from SAT on:

- Properties included in neighborhood survey and approval rate
- Potential appeal process
- Public comment phase and TAB approval for speed humps

# Discussion & Questions

