

Jessie Maran | HHPR



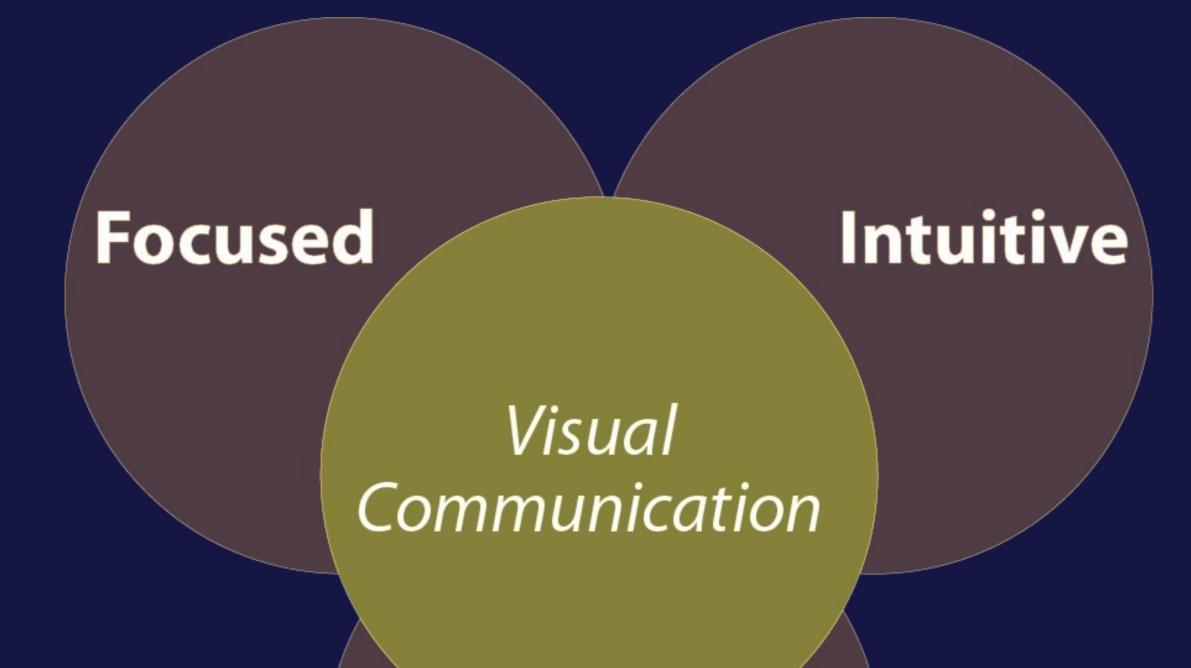


#### What is Visual Communication?









Concise



Jessie Maran | HHPR





# Visual Communication for Public Presentations

Presented by Jessie Maran, HHPR

**Public Communications Camp** 

sponsored by Pacific Northwest Clean Water Association (PNCWA)
April 11, 2014



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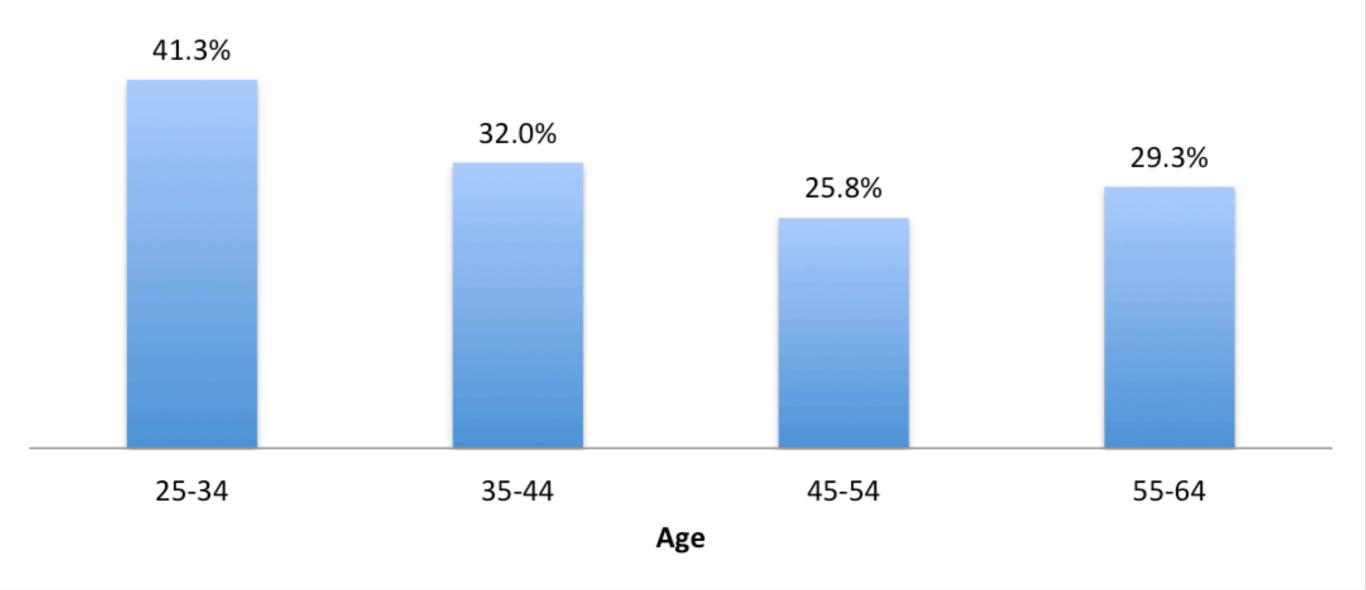
Jessie Maran | HHPR



#### **■**

# Percent of Americans who spend at least a year earning less than 150% of the poverty line, by age group

Mark Rank, Thomas Hirschl, and Kirk Foster, Chasing the American Dream, forthcoming

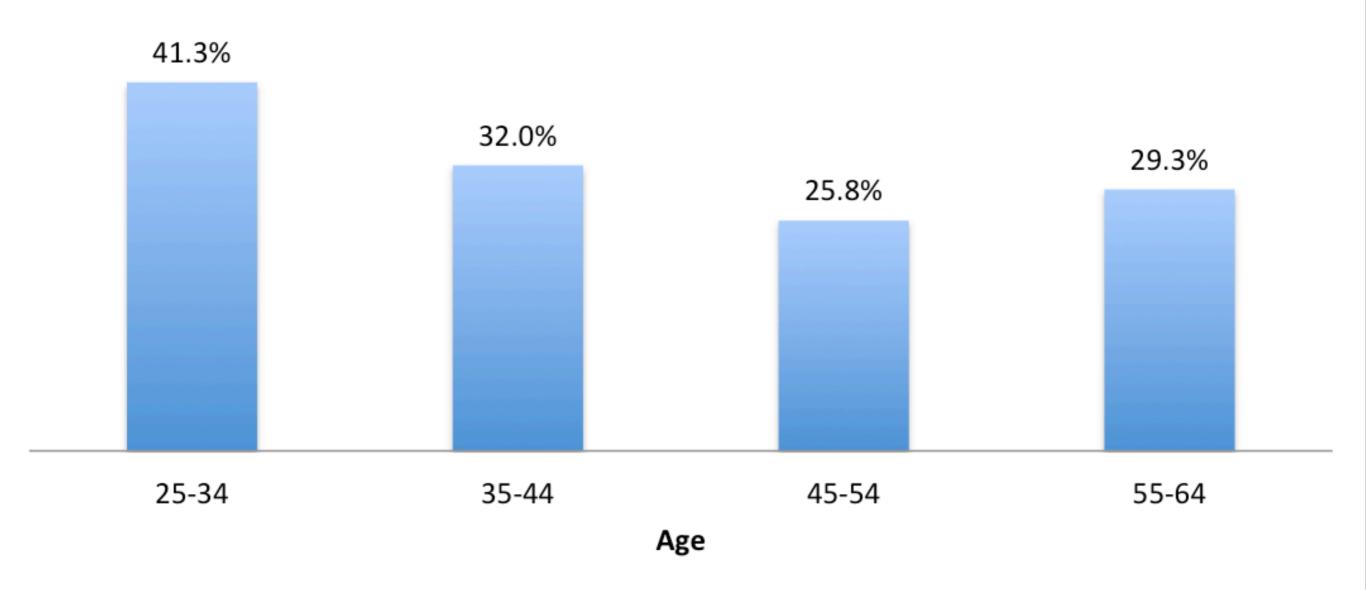


#### **■**

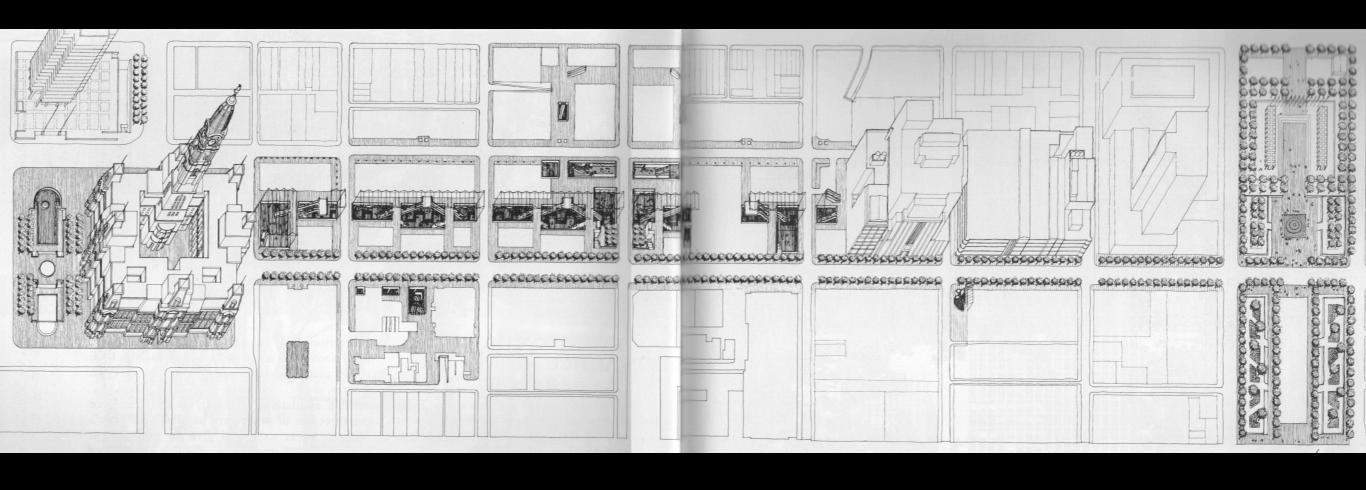
#### Young Adults Are More Likely to be Broke

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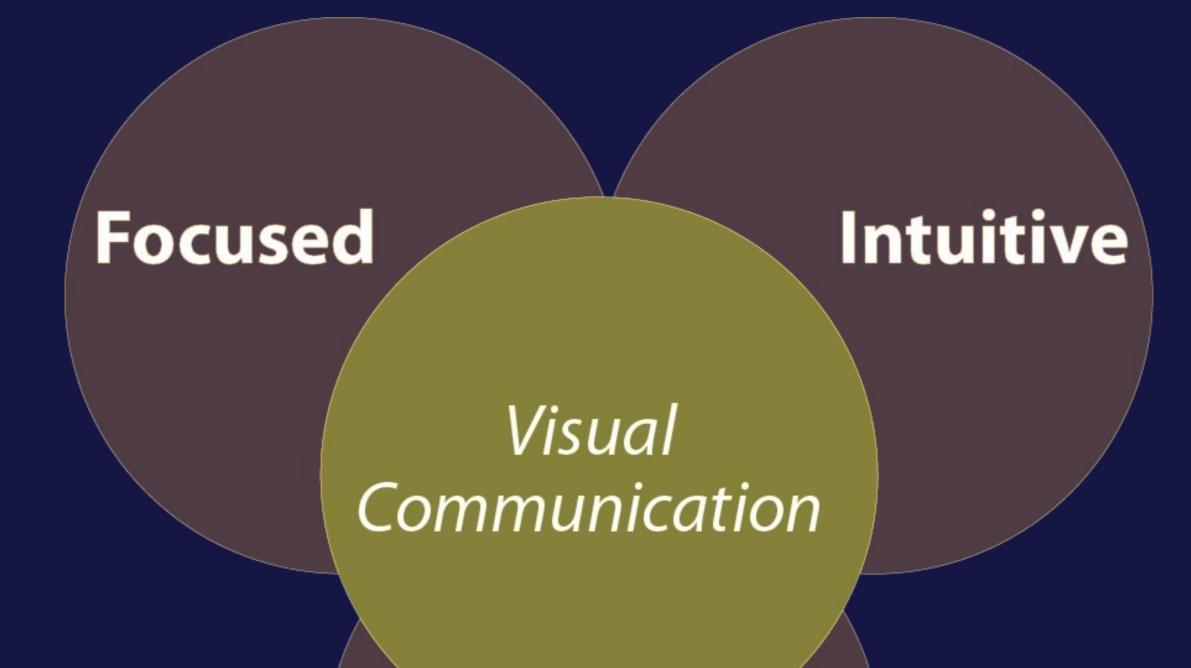








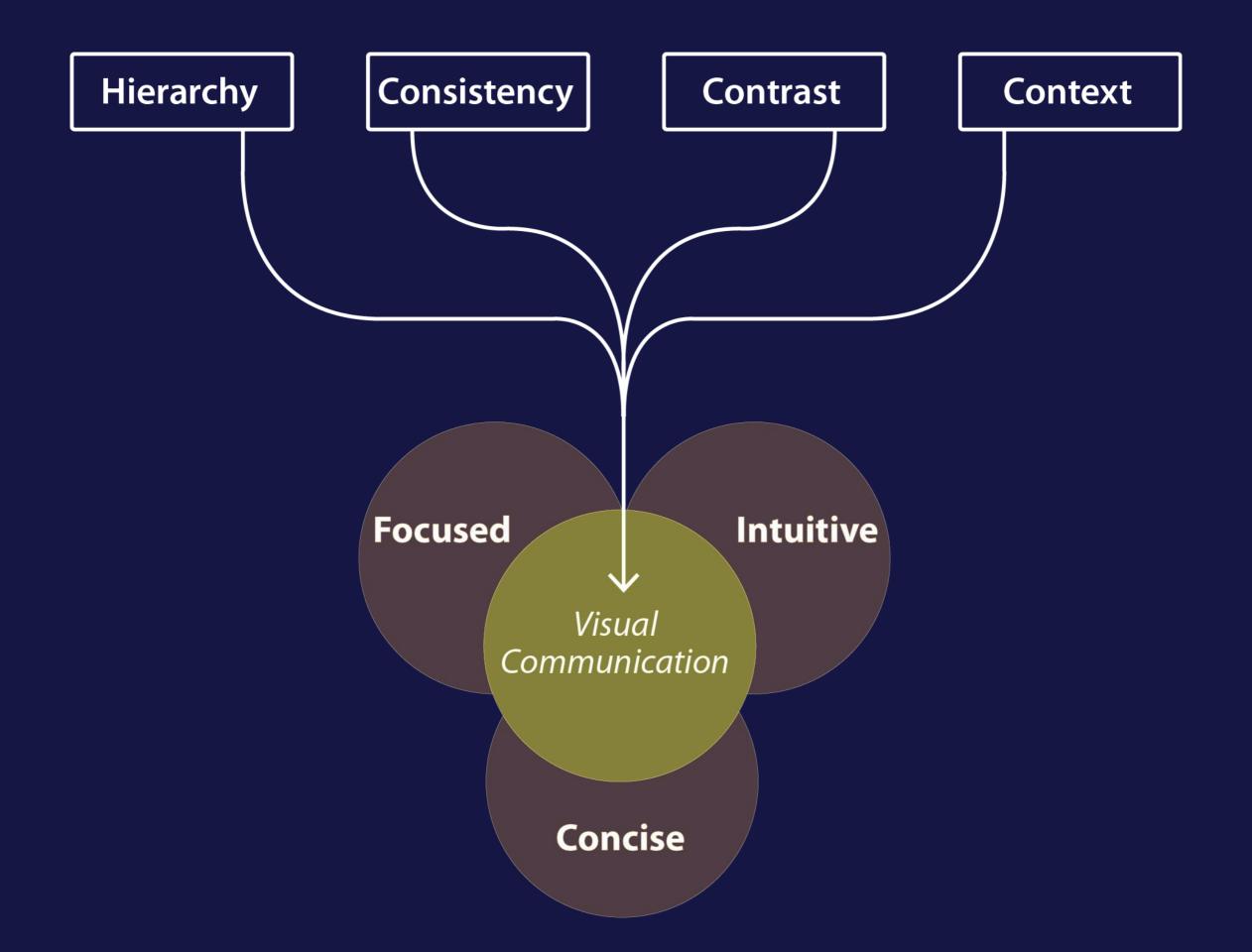




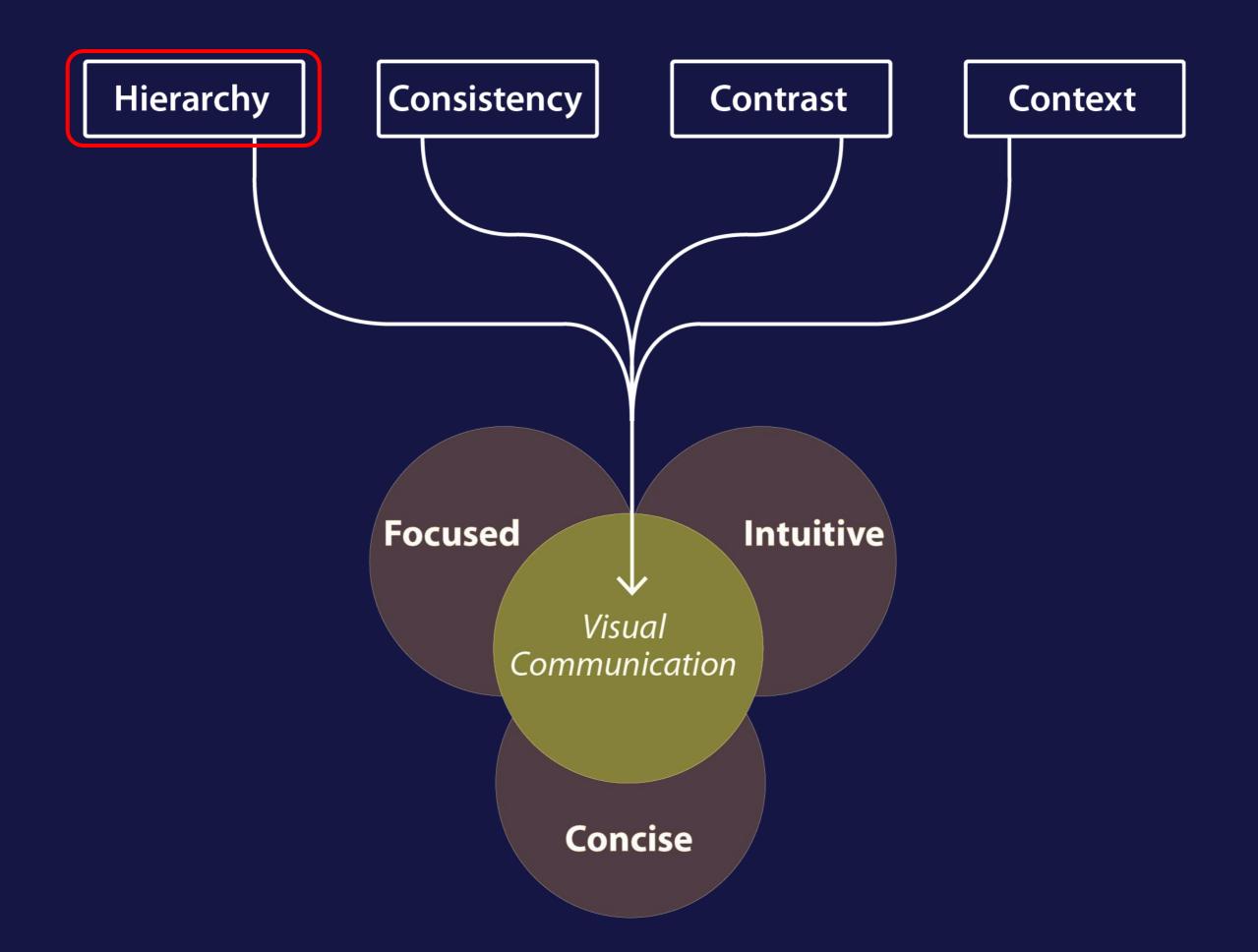
Concise

# DESIGN PRINCIPLES









#### Establish a *Hierarchy*

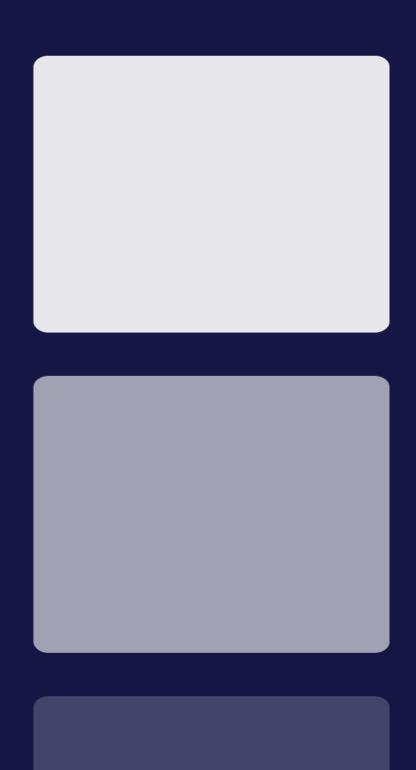
# This is the first.

This is the second.

This is the third.

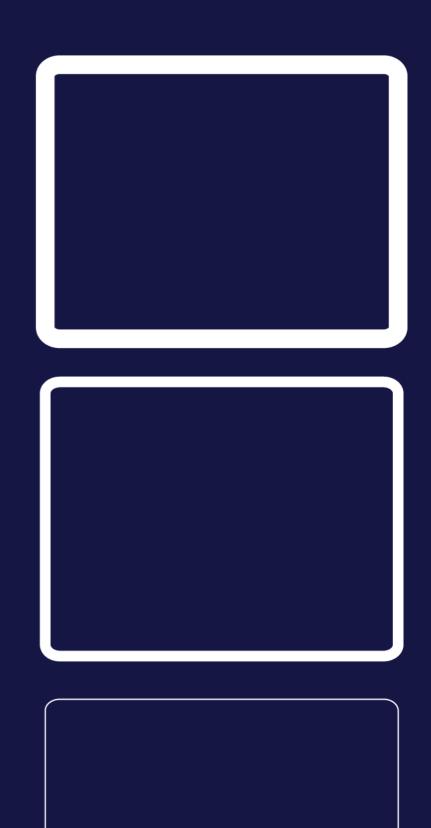
#### Establish a *Hierarchy*

This is the first.
This is the second.
This is the third.

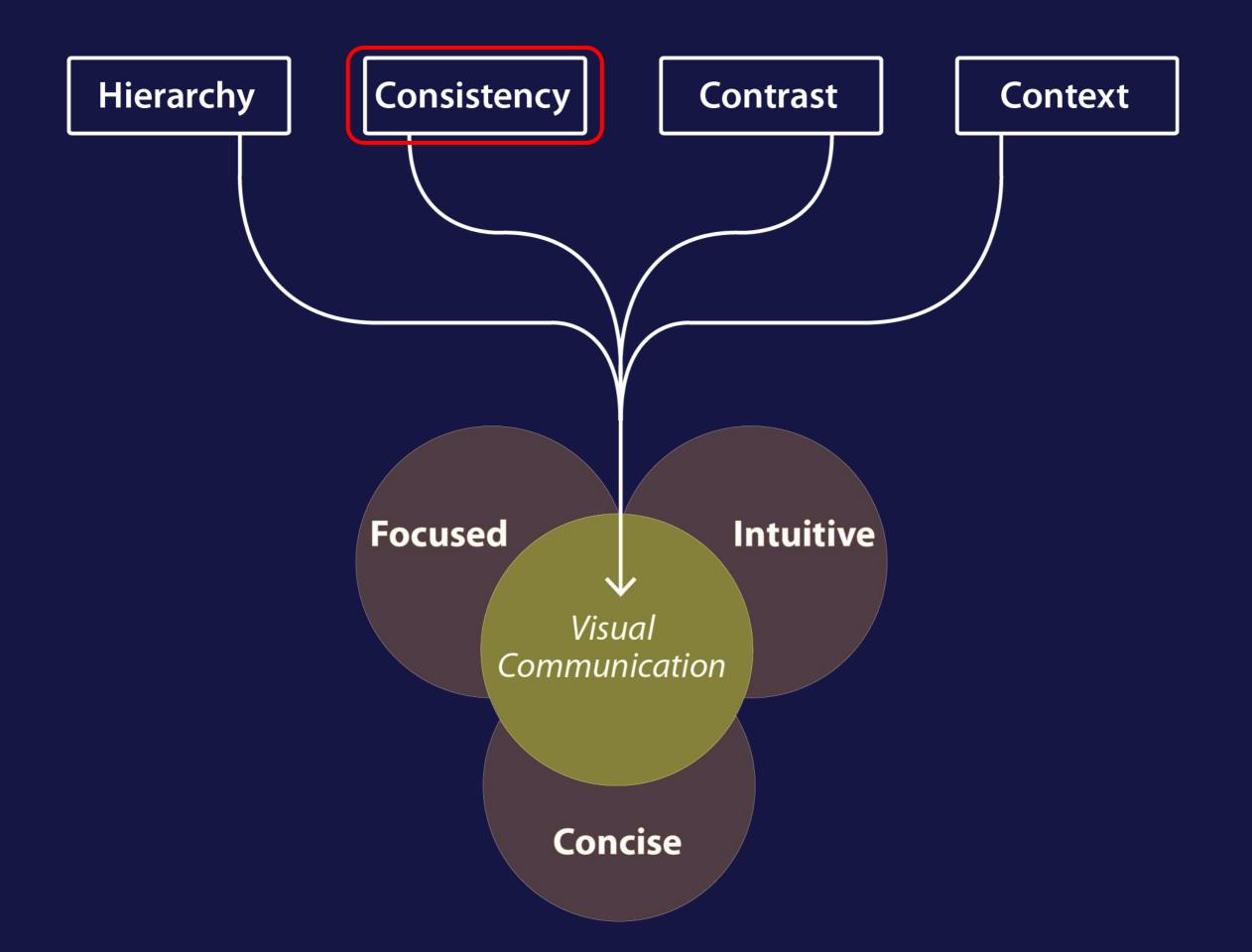


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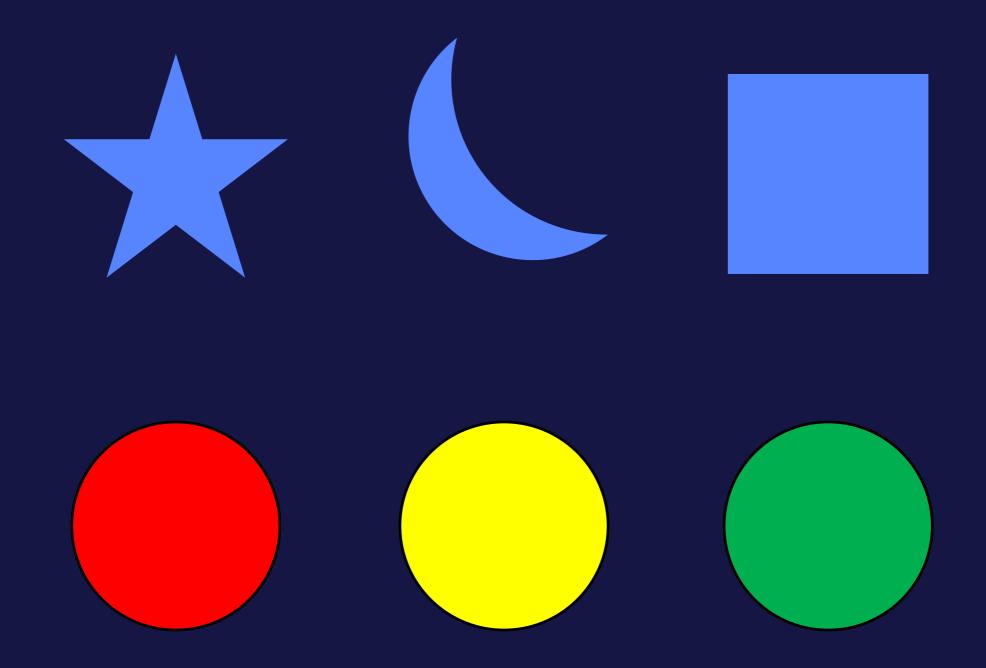
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This is the third.







#### Maintain Consistency



#### Maintain Consistency

## The Key to Consistency

Consistency is not found in sameness, but in the recognizable similarity of features.

– Anonymous

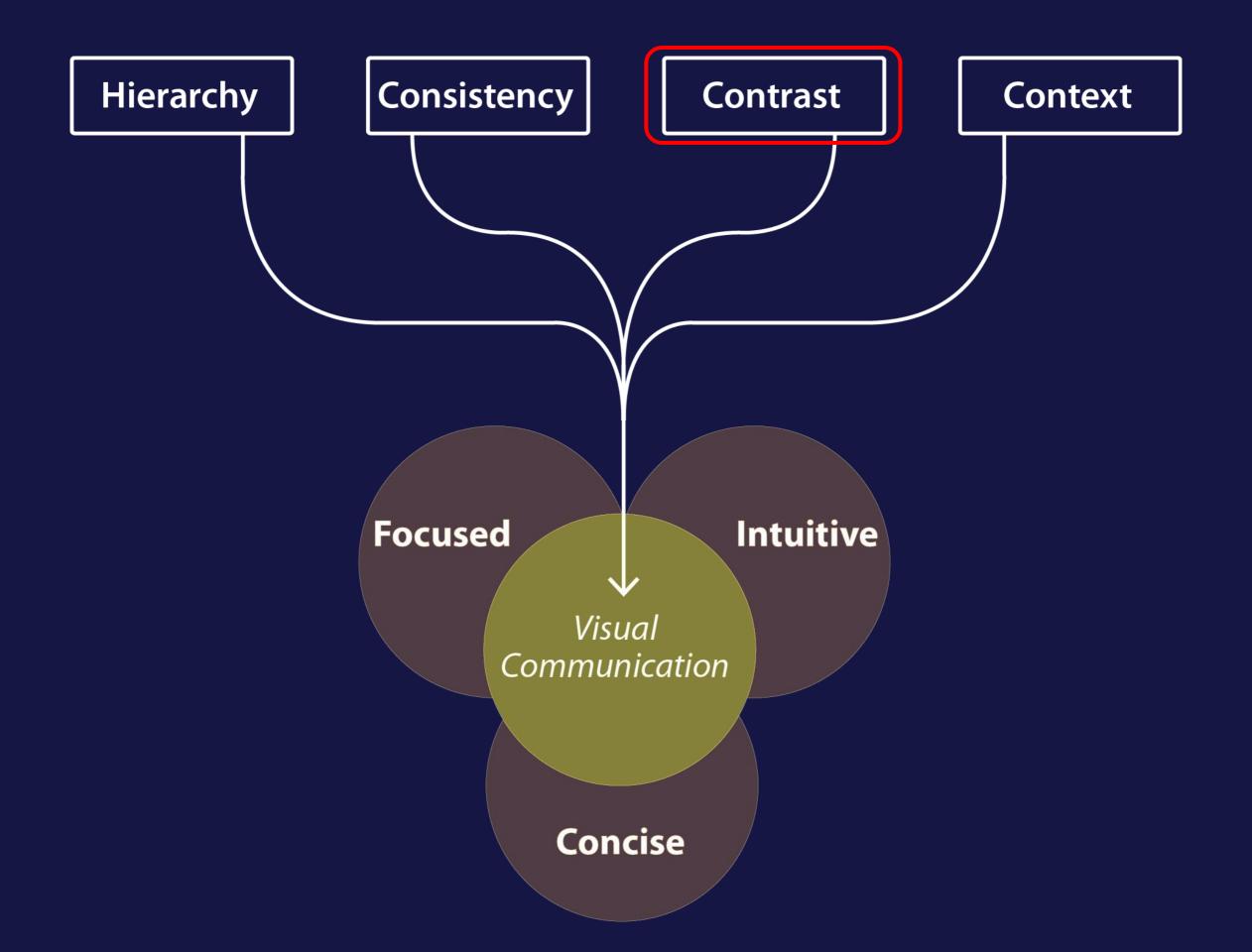
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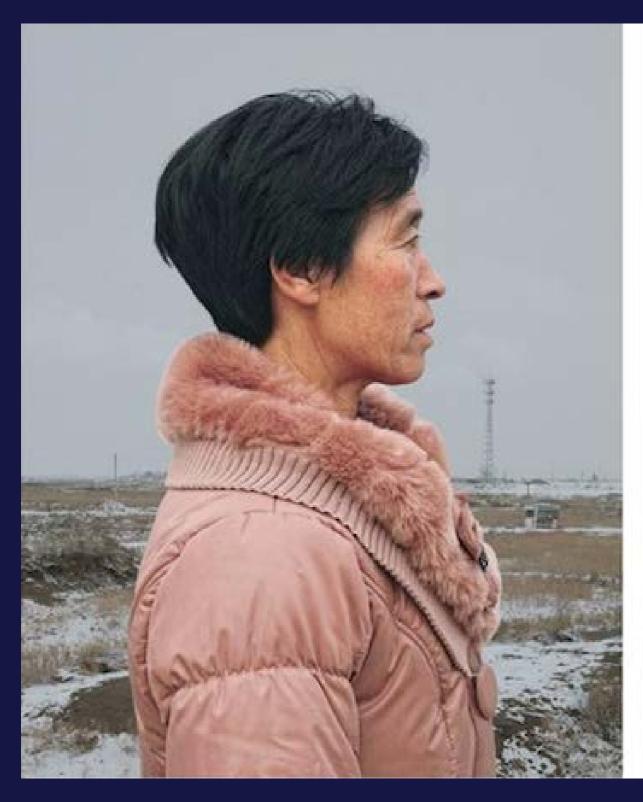
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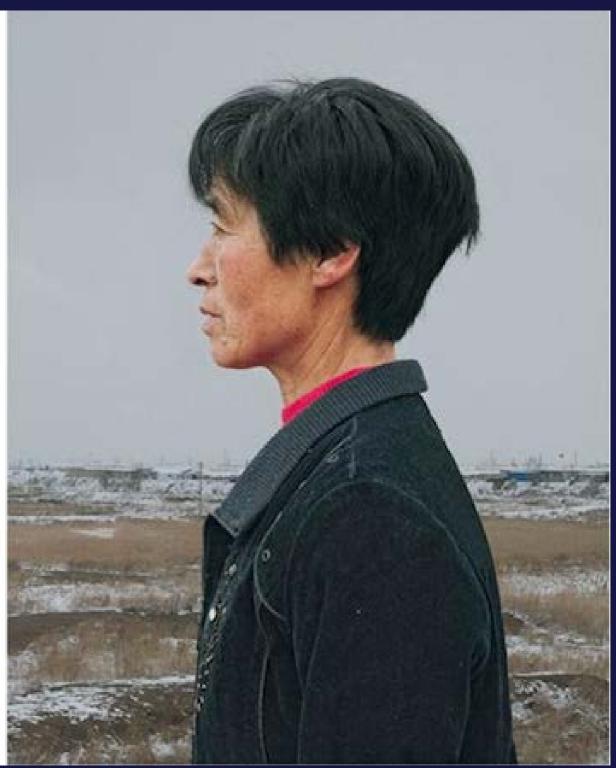
- Anonymous





## Distinguish through *Contrast*





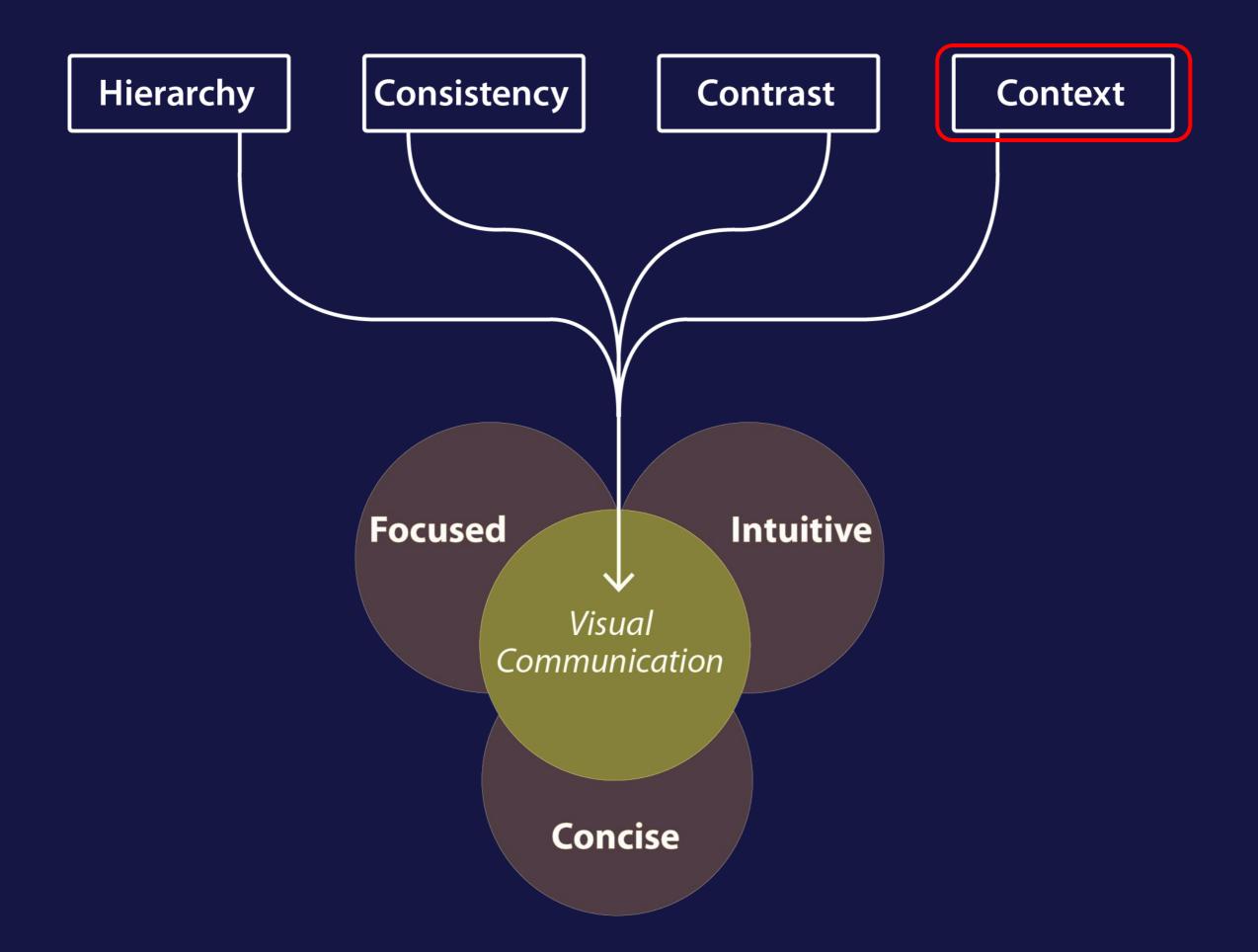
## Distinguish through *Contrast*



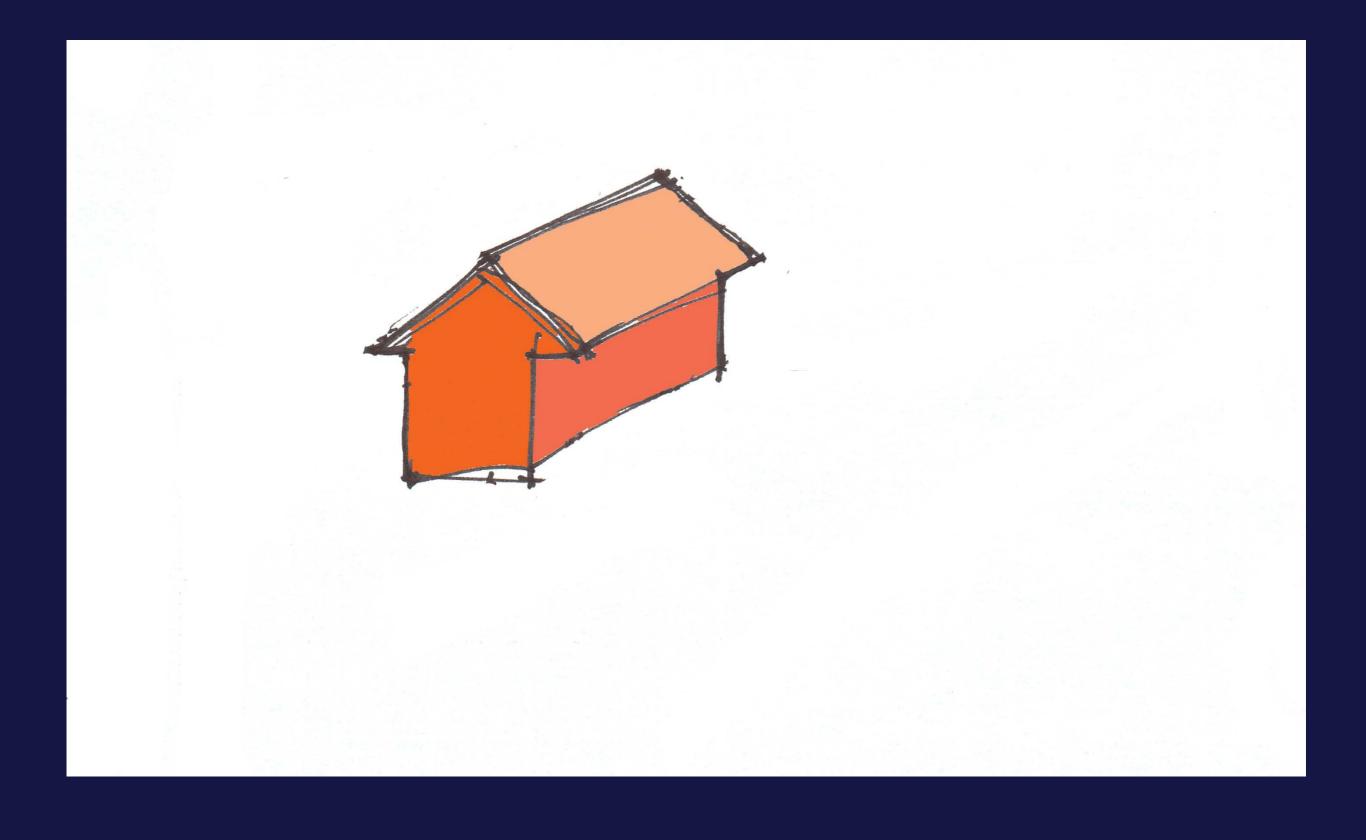
## Distinguish through *Contrast*







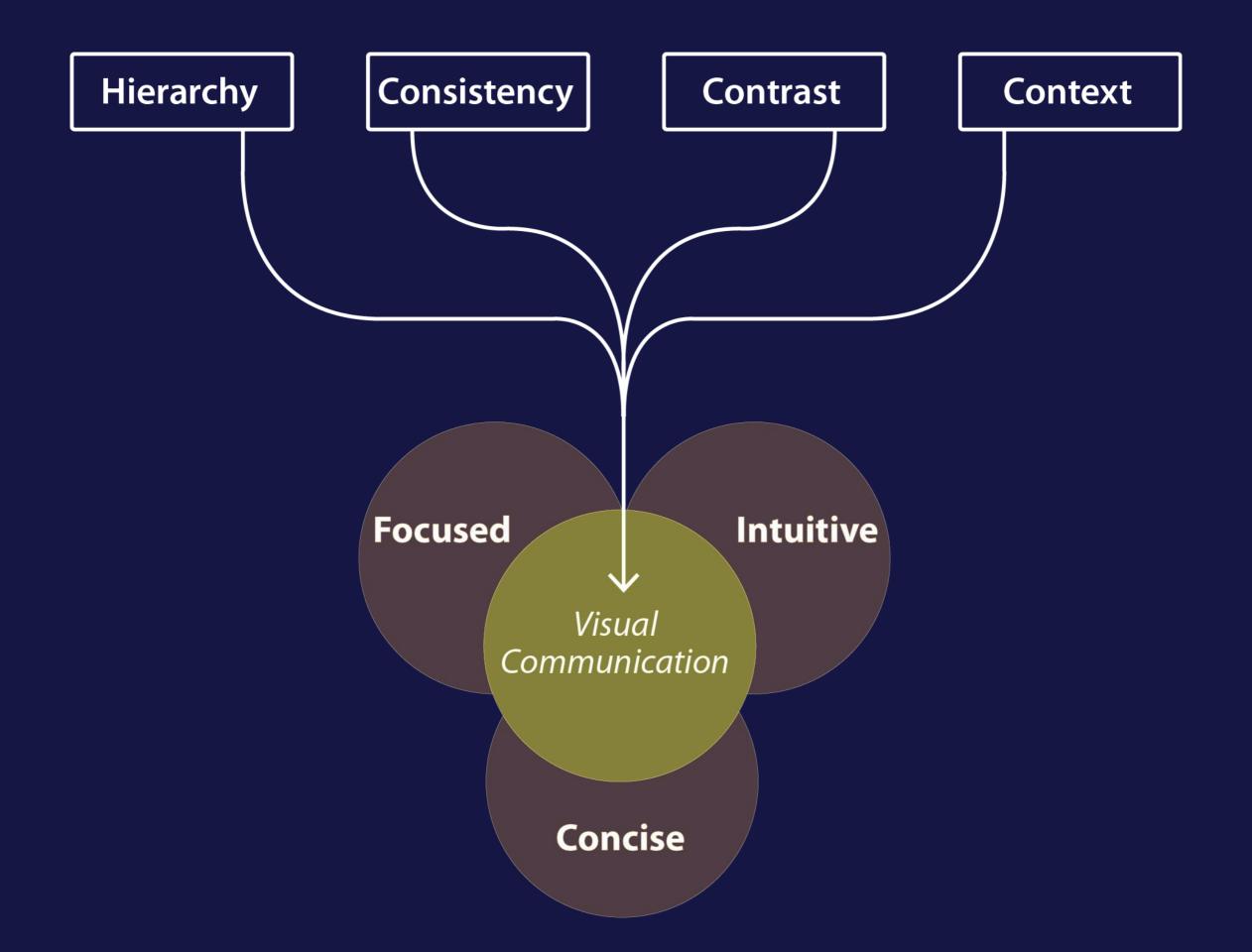
### Connect with Context



### Connect with Context







# CASE STUDIES

Collateral

**Diagrams** 

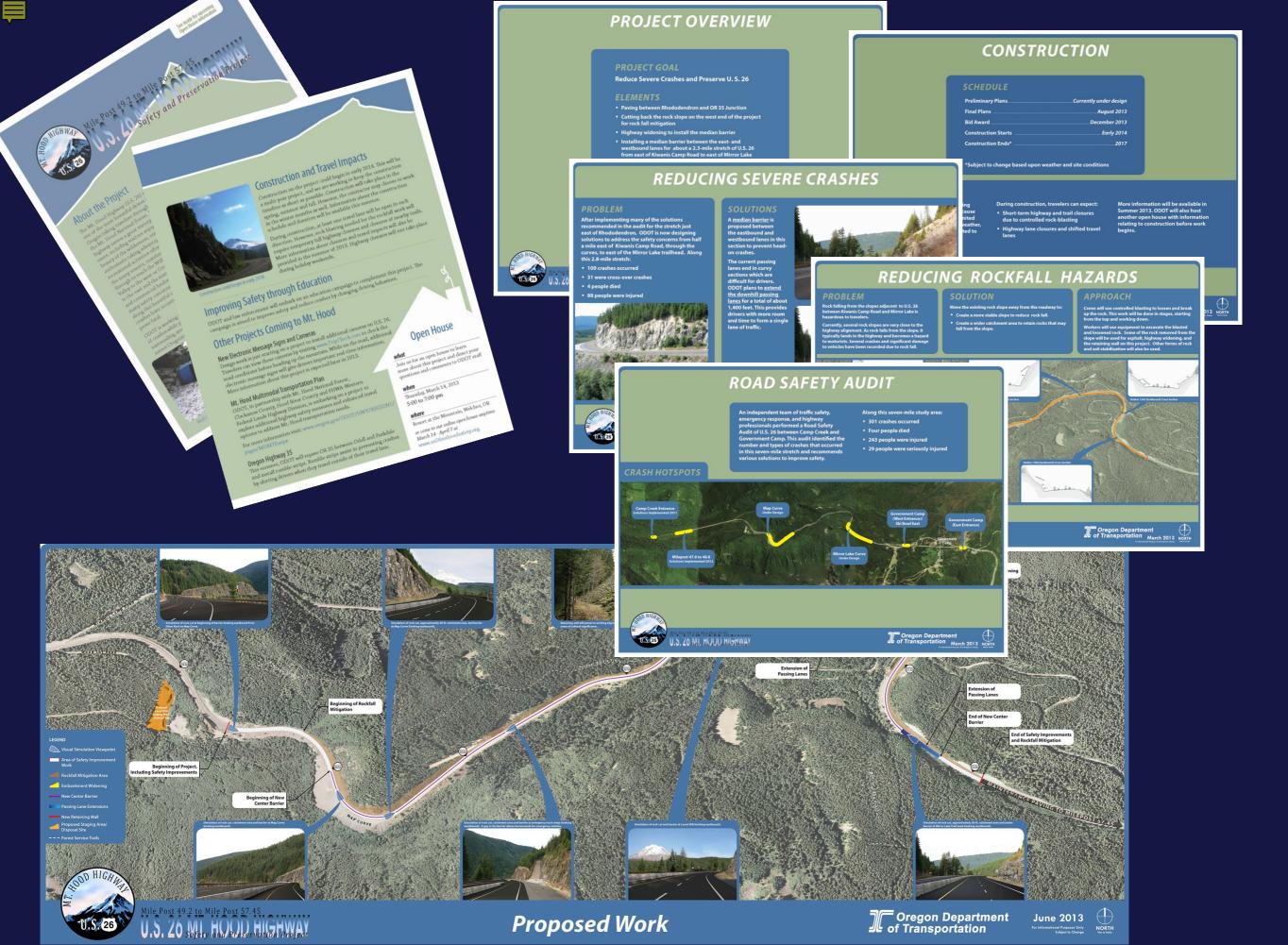
**Plans** 

Sections/Perspectives

Collateral

**Diagrams** 

**Plans** 



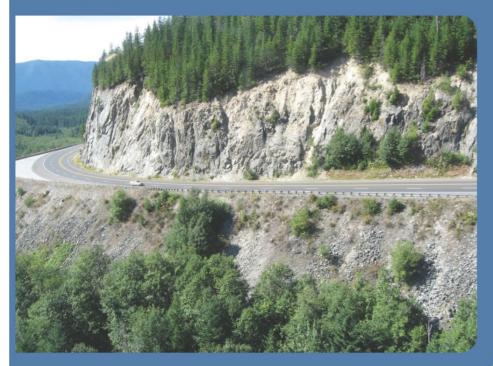


# REDUCING SEVERE CRASHES

# **PROBLEM**

After implementing many of the solutions recommended in the audit for the stretch just east of Rhododendron, ODOT is now designing solutions to address the safety concerns from half a mile east of Kiwanis Camp Road, through the curves, to east of the Mirror Lake trailhead. Along this 2.8-mile stretch:

- 109 crashes occurred
- 31 were cross-over crashes
- 4 people died
- 88 people were injured



# **SOLUTIONS**

A median barrier is proposed between the eastbound and westbound lanes in this section to prevent headon crashes.

The current passing lanes end in curvy sections which are difficult for drivers.

ODOT plans to extend the downhill passing lanes for a total of about 1,400 feet. This provides drivers with more room and time to form a single lane of traffic.













# **Proposed Project Elements**

#### Reducing Rockfall Hazards

Rocks fall onto U.S. 26 on Mt. Hood east of Rhododendron near the run-away truck ramp. The rocks are hazardous to travelers if they impact or need to weave around the fallen rocks in the road. ODOT maintenance crews regularly clear the roadway of rocks.

ODOT plans to cut back the rock slope away from the highway. ODOT is currently designing the rock cut slope so that it is stable and has an adequate rock catchment area to contain any future rock fall.

#### Reducing Head-On Crashes

Head-on crashes can often result in serious injury. Eleven head-on crashes occurred in the curves east of Kiwanis Camp Road to east of the Mirror Lake Trail Head. This is highest total of these types of crashes in the seven-mile study area.

ODOT is planning to install a median barrier between the eastbound and westbound lanes of this one-and-a-half mile section of U.S. 26 to prevent head-on crashes.

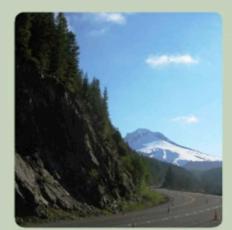
#### Extending Passing Lanes

The passing lanes on this segment of U.S. 26 start and end in curving sections of the highway creating a dangerous situation for all road users.

ODOT is planning to extend the downhill passing lanes about 1,400 feet on both ends of the existing passing lane. This will give drivers more room to return to a single lane of traffic.

#### Improving the Pavement Surface

Pavement along U.S. 26 is rutted and creates hazard for all travelers. This project includes re-paving from Rhododendron to Oregon Highway 35.



Construction could begin in early 2014

## **Construction and Travel Impacts**

Construction on the project could begin in early 2014. This will be a multi-year project, and we are working to keep the construction timeline as short as possible. Construction will take place in the spring, summer and fall. However, the contractor may choose to work in the winter months as well. Information about the construction schedule and duration will be available this summer.

During construction, at least one travel lane will be open in each direction. However, rock blasting needed for the rockfall work will require temporary full highway closures and closures of nearby trails. More information about closures and travel impacts will also be provided in the summer of 2013. Highway closures will not take place during holiday weekends.

# Improving Safety through Education

ODOT and law enforcement will embark on an education campaign to complement this project. The campaign is aimed to improve safety and reduce crashes by changing driving behaviors.

# Other Projects Coming to Mt. Hood

#### New Electronic Message Signs and Cameras

Design work is just starting on a project to install additional cameras on U.S. 26. Travelers can view these cameras by visiting www.TripCheck.com to check the road conditions before heading up the mountain. While on the road, additional electronic message signs will give drivers important real-time information. More information about this project is expected later in 2013.

#### Mt. Hood Multimodal Transportation Plan

ODOT, in partnership with Mt. Hood National Forest, Clackamas County, Hood River County and FHWA-Western Federal Lands Highway Division, is embarking on a project to explore additional highway safety measures and enhanced travel options to address Mt. Hood transportation needs.

For more information visit: www.oregon.gov/ODOT/HWY/REGION1/pages/MHMTP.aspx

#### Oregon Highway 35

This summer, ODOT will repave OR 35 between Odell and Parkdale and install rumble-strips. Rumble-strips assist in preventing crashes by alerting drivers when they travel outside of their travel lane.

# Open House

#### what

Join us for an open house to learn more about this project and direct your questions and comments to ODOT staff

#### when

Thursday, March 14, 2013 5:00 to 7:00 pm

#### where

Resort at the Mountain, Welches, OR or come to our online open house anytime March 14 - April 7 at www.us26mthoodsafety.org

For more information contact:

Kimberly Dinwiddie, ODOT Community Affairs 503-731-8281 | Kimberly Dinwiddie@odot.state.or.us







ODOT is looking to cut the rock slope back from the roadway and design a more stable rock slope

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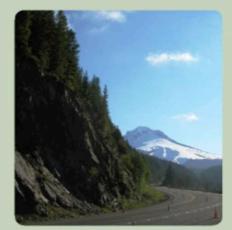
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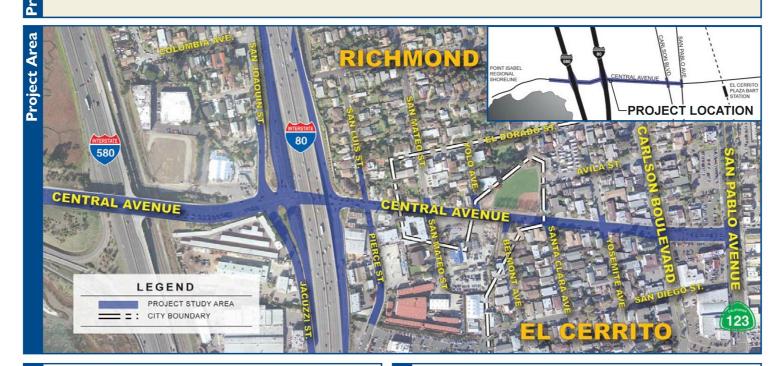
Project

Central Avenue serves as the primary connection between the El Cerrito Plaza BART station and the I-80 and I-580 freeways. It also serves as an important east-west route between commercial areas and local neighborhoods. The four closely spaced signalized intersections along Central Avenue between Jacuzzi Street and Pierce Street lack sufficient storage capacity, resulting in poor intersection operations and heavy congestion during peak travel times.

A Project Study Report is being prepared to examine possible improvements for the I-80/Central Avenue Interchange. Alternatives under consideration may include modifications to the existing I-80/Central Avenue Interchange and/or to the local street intersections. Following approval of the Project Study Report, it is anticipated that a Project Report and an Environmental Document will be prepared.

t Benefit

The goal of the I-80/Central Avenue Interchange Improvement Project is to improve overall traffic operations at the I-80/Central Avenue Interchange and along Central Avenue between Jacuzzi Street and San Pablo Avenue.



#### Funding Sources:

Contra Costa County Sales Tax Measure J: \$14M

Developer Fees: \$7.1M Federal Earmarks: \$2.7M

Anticipated Project Costs: To be determined

#### Task Name:

#### Milestone Date:

Preliminary Conceptual Alternatives
Project Open House
Draft Project Study Report

Final Project Study Report Draft Environmental Document

Final Environmental Document

Summer 2007 Fall 2007 Winter 2007-08

Spring 2008 Summer 2009 Summer 2010

Sponsor

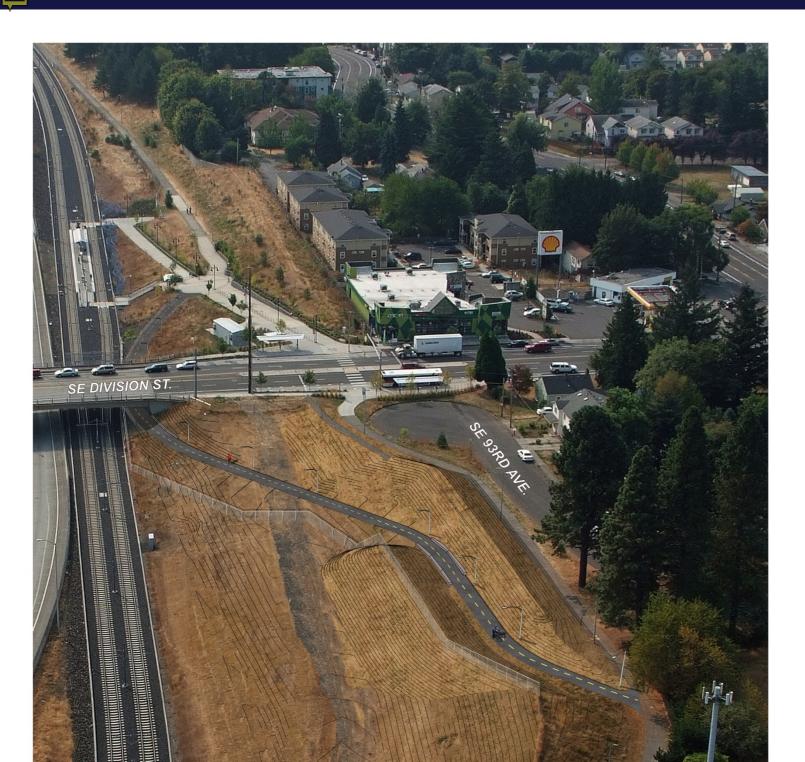














# Safety Improvements and Features:

- Efficient connectivity to Shared-Use Path
- Clear sight lines through curves
- Visibility to adjacent MAX line and Powell/Division ramp
- Path lighting
- Low-growing vegetation
- Fencing along East side of path



I-205 Shared-Use Path at SE Division St.

Path Alignment









## Safety Improvements and Features:

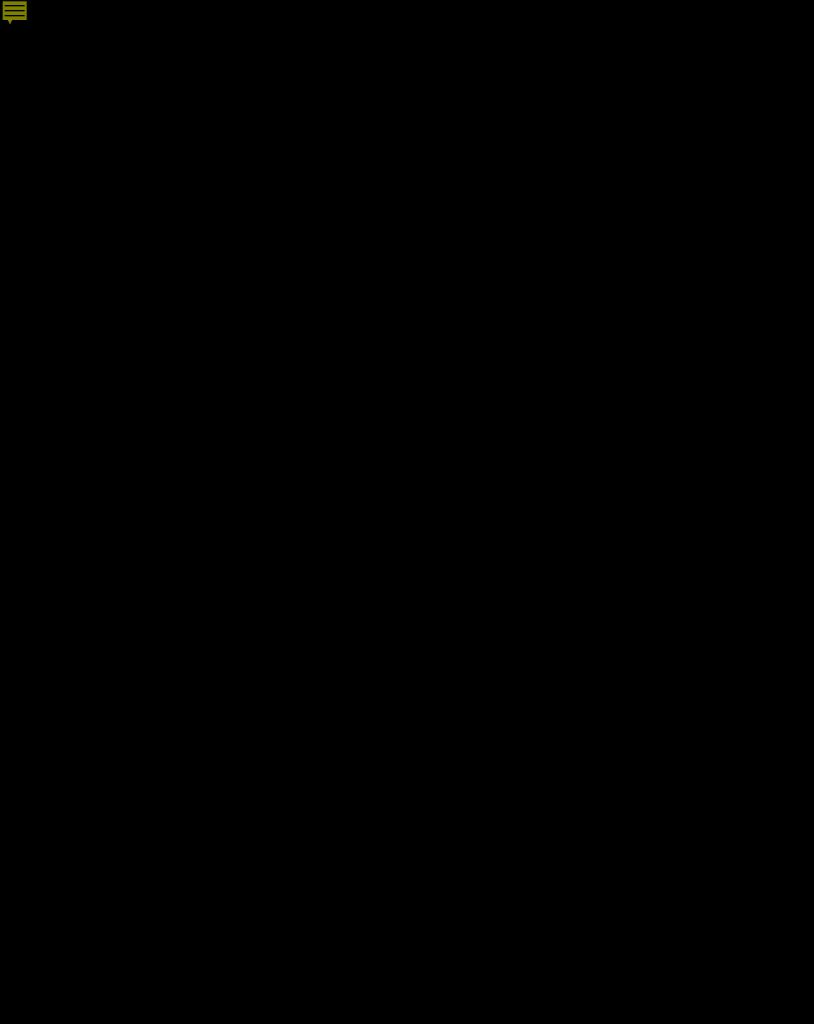
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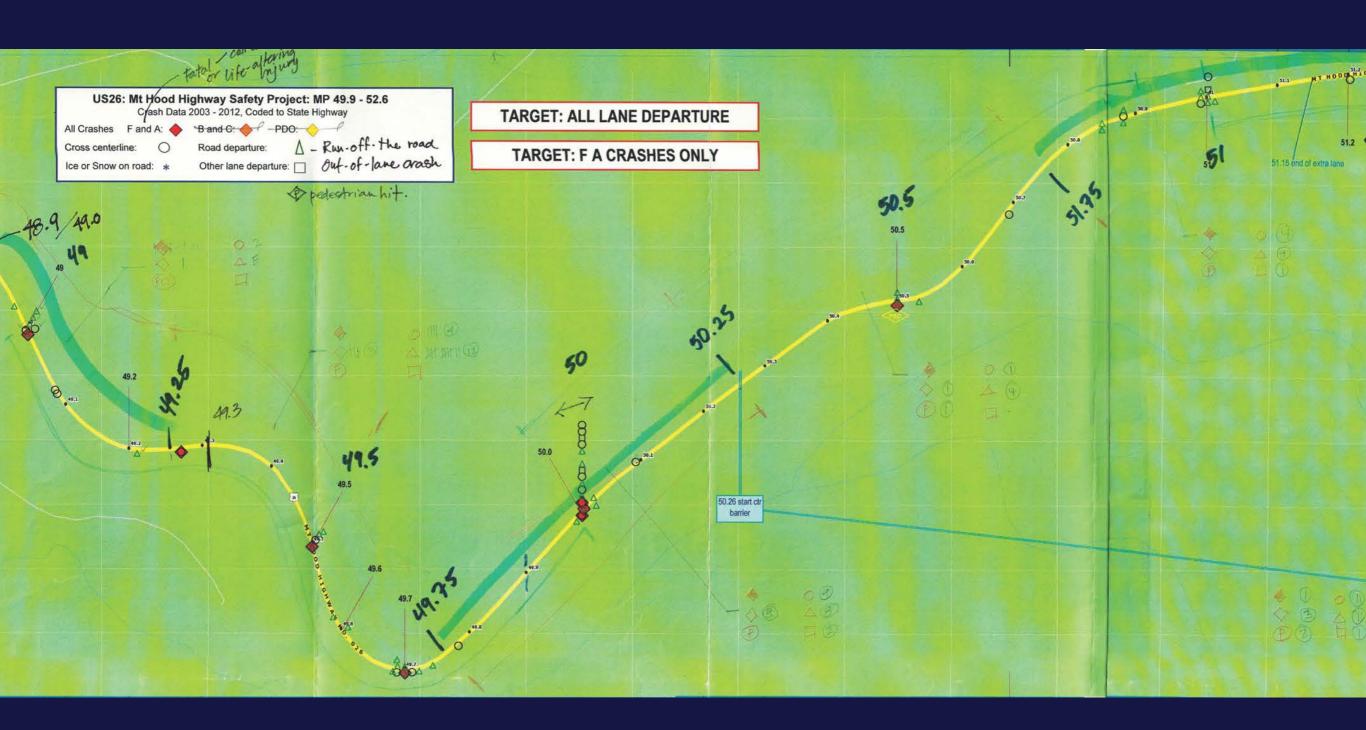
I-205 Shared-Use Path at SE Division St.

Path Alignment



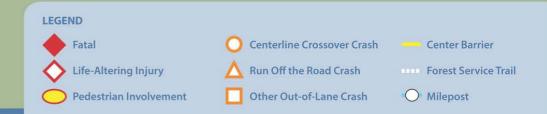






# FATAL AND SERIOUS INJURY CRASHES

From 2003 to 2012, these crashes were recorded between west of Map Curve to east of the Mirror Lake Trailhead. Due to the lack of landmarks along the roadway, most crashes are coded at the nearest half-milepost.







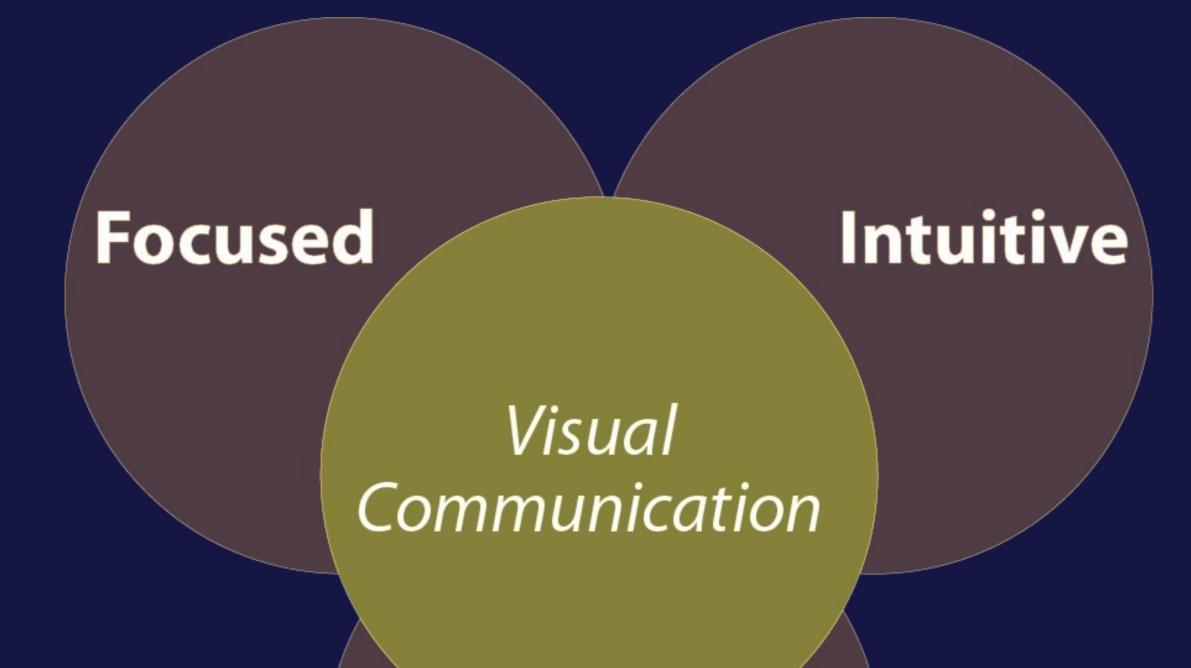




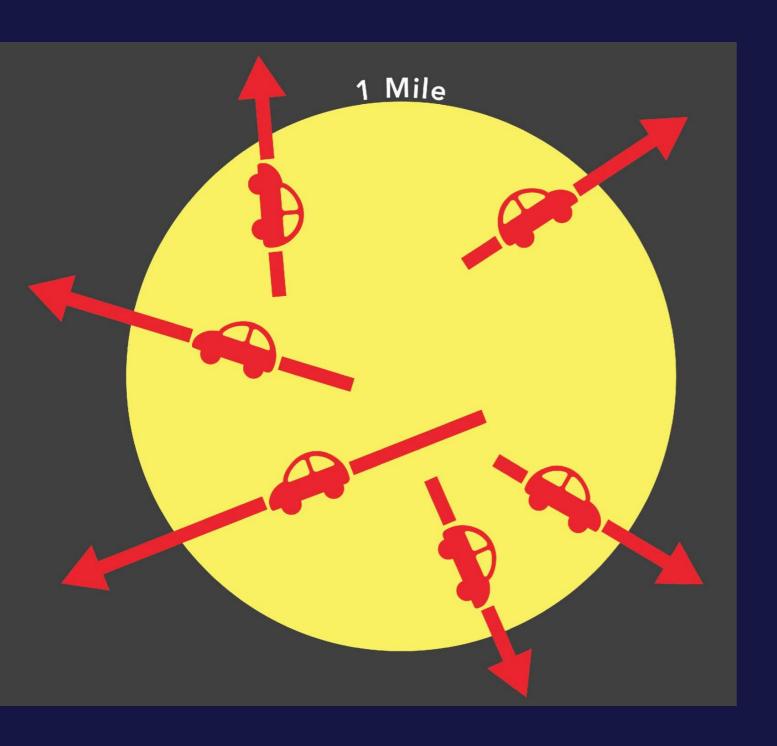
Collateral

Diagrams

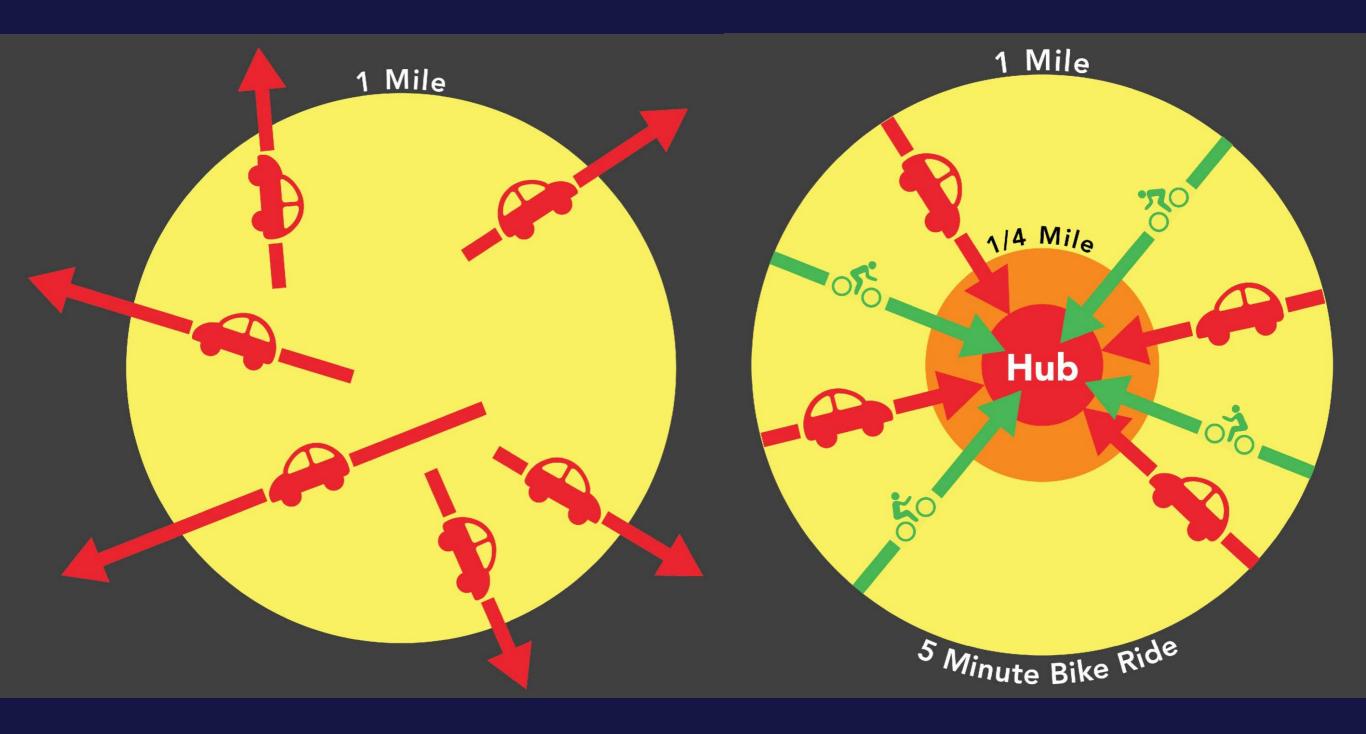
**Plans** 



Concise

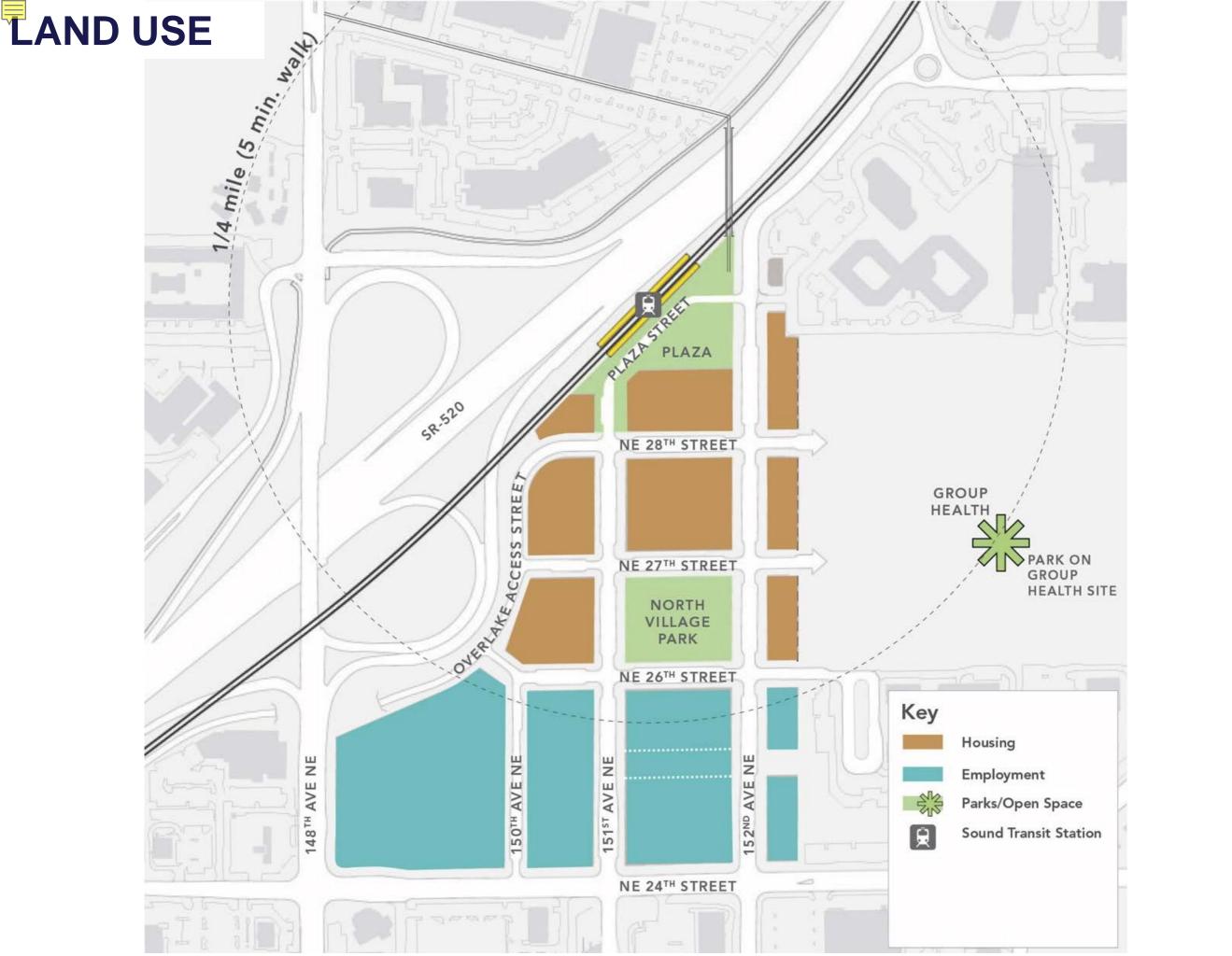


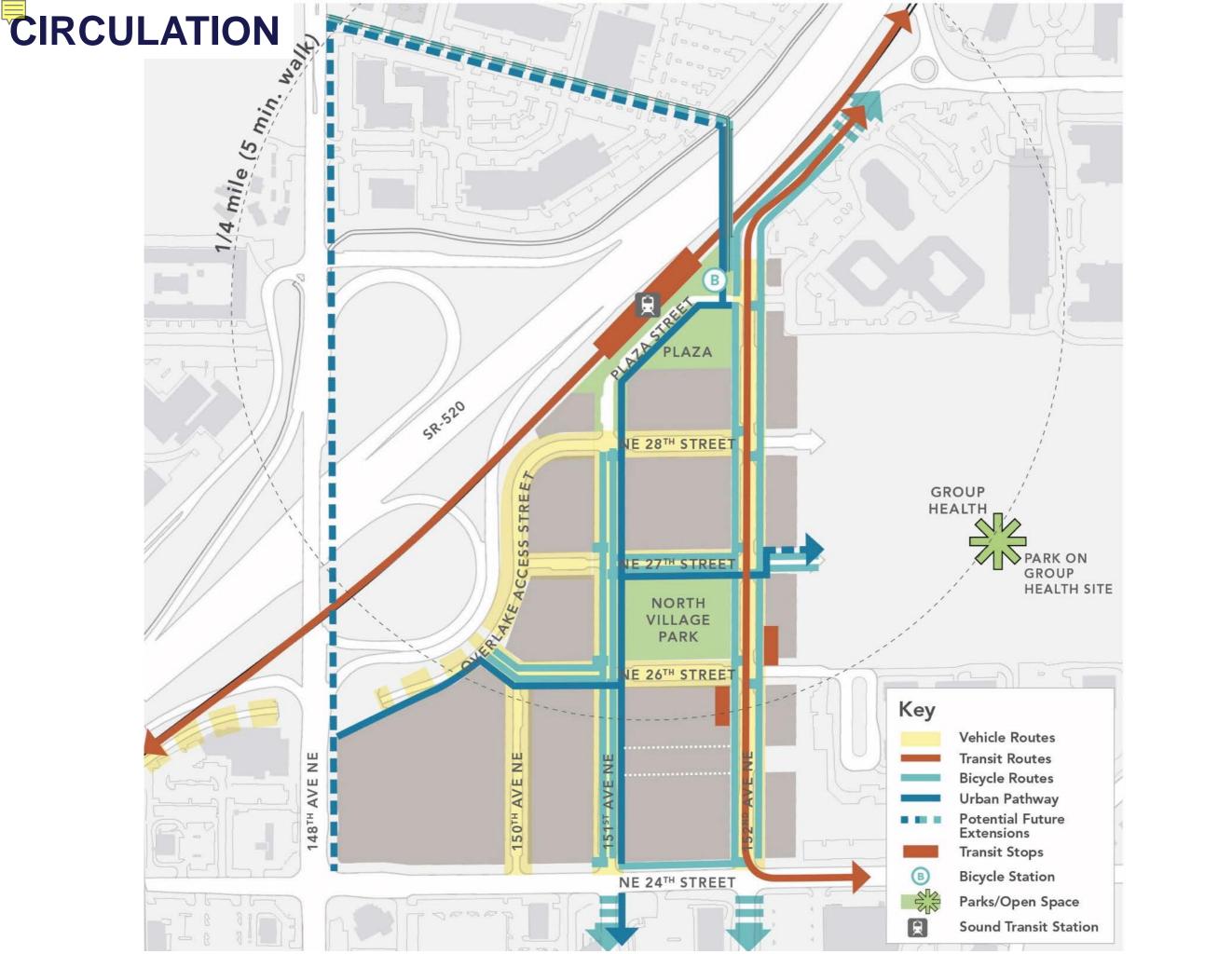
**Suburban Travel Patterns** 

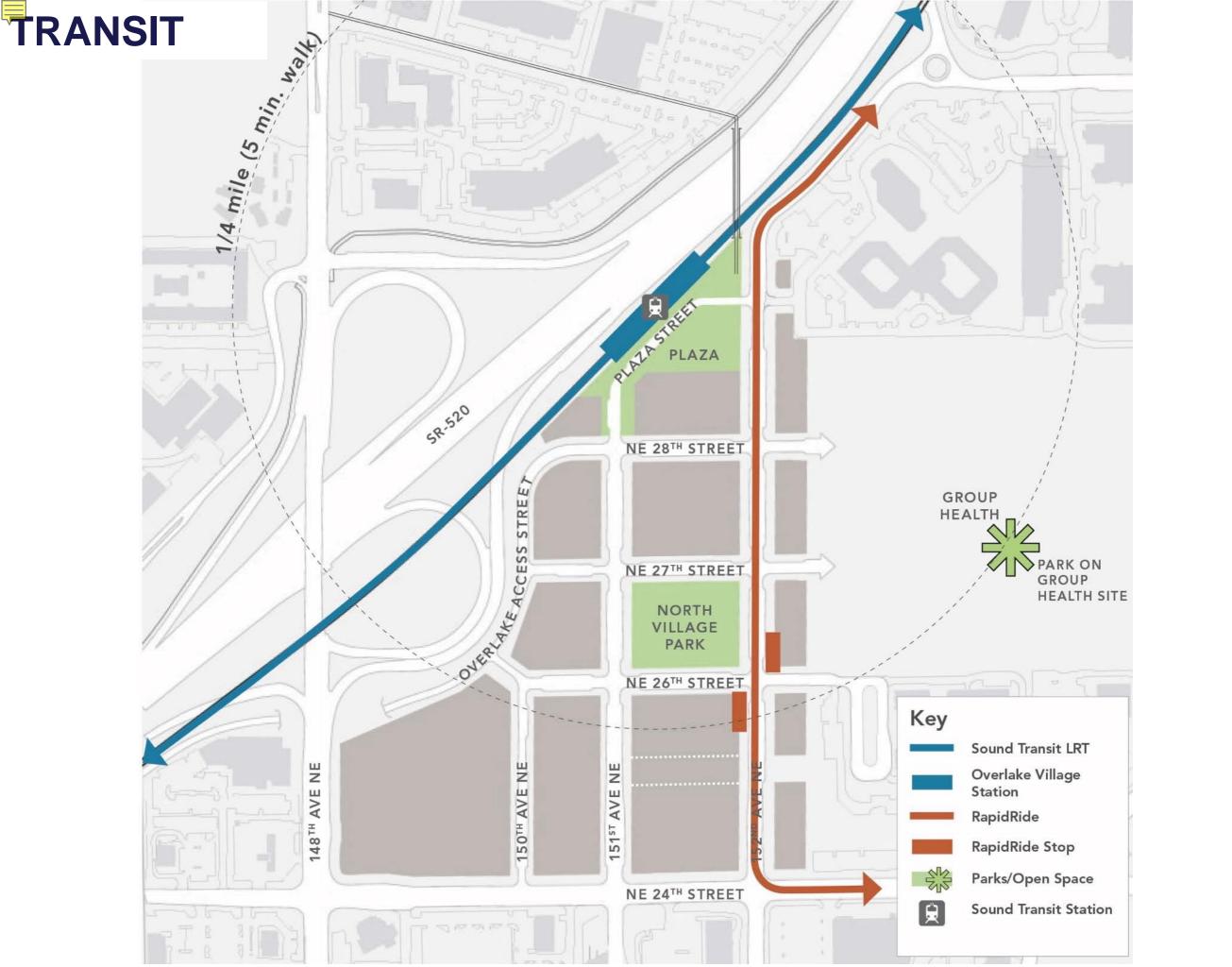


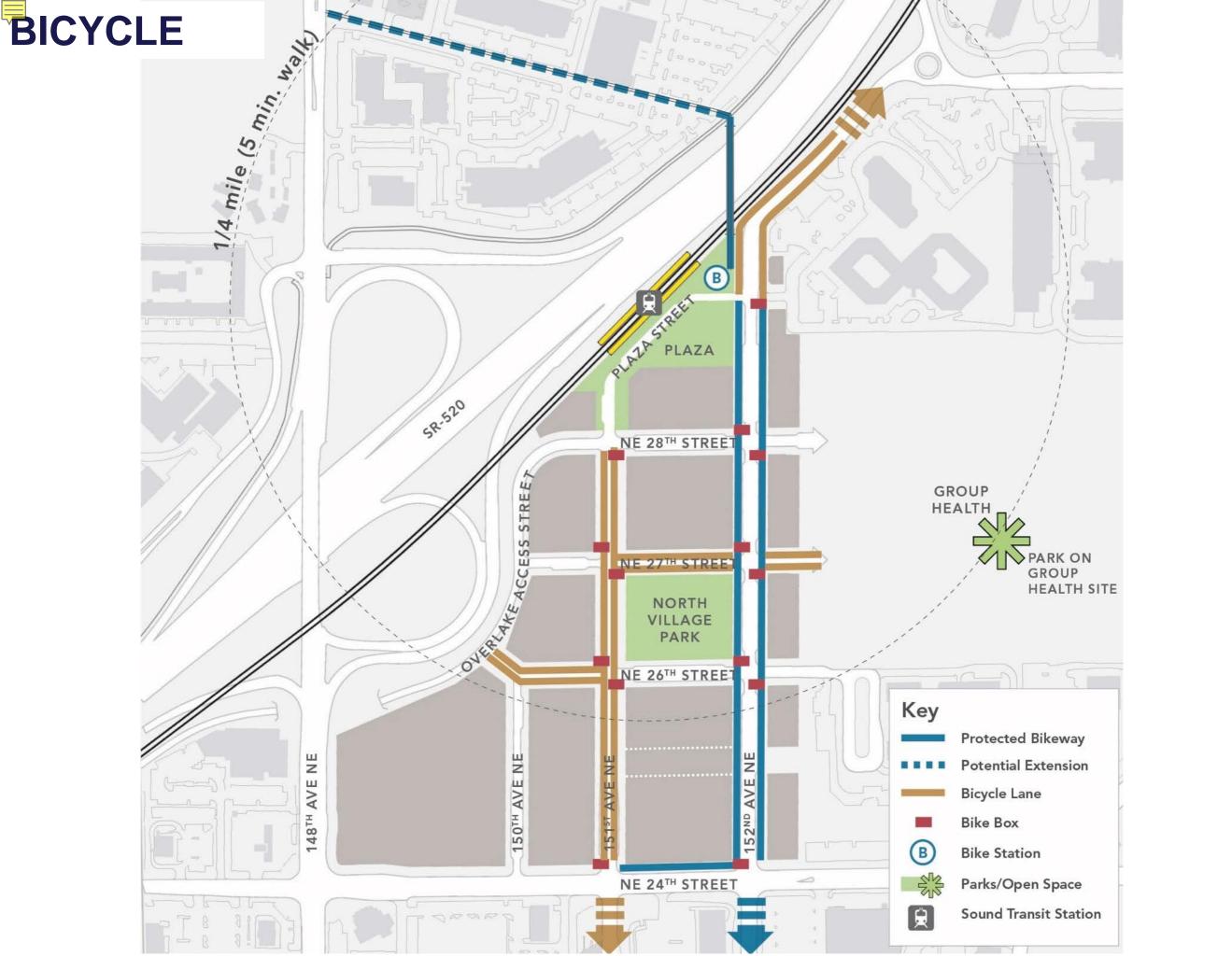
Suburban Travel Patterns

**Urban Travel Patterns** 





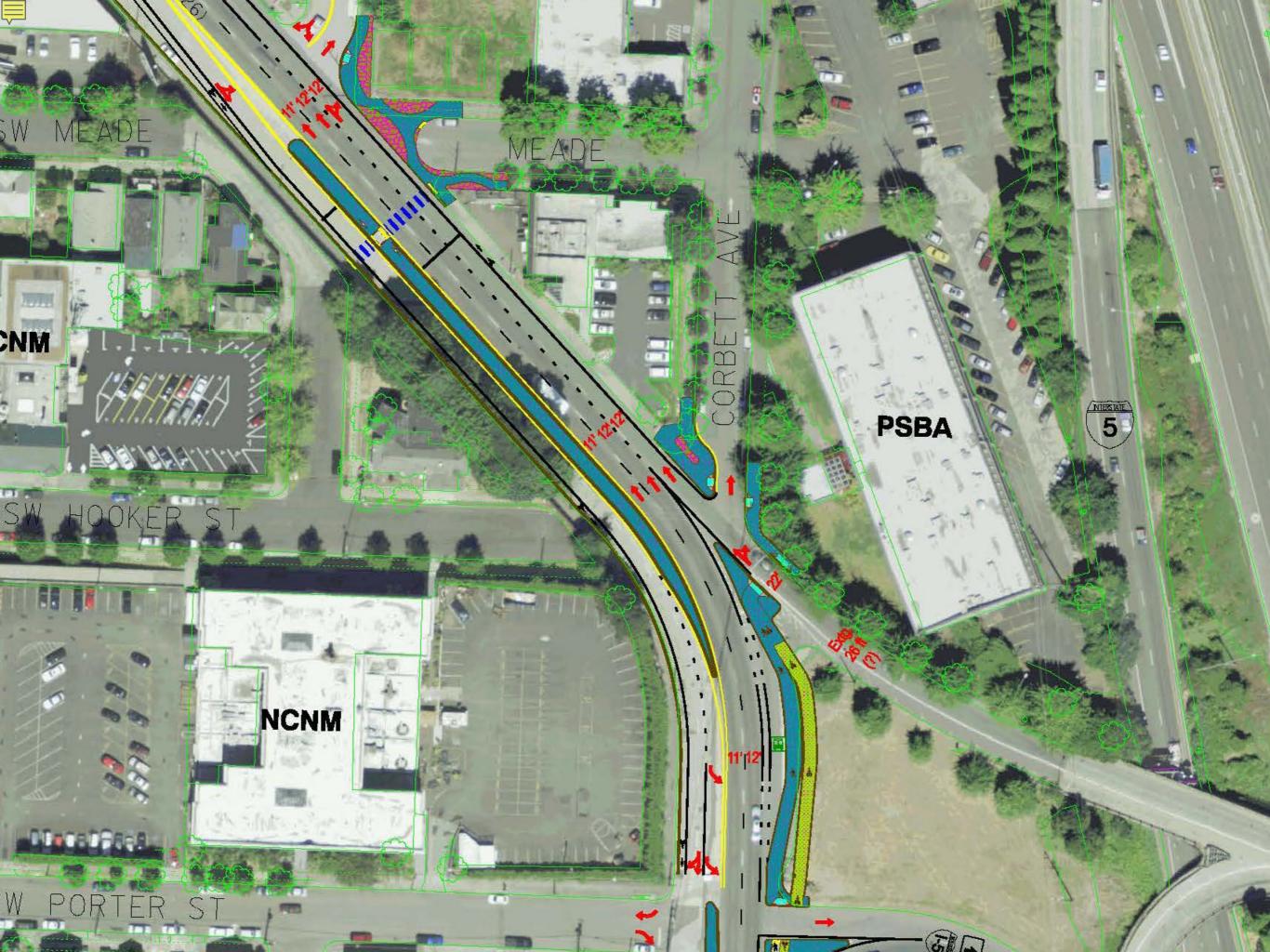




Collateral

**Diagrams** 

**Plans** 







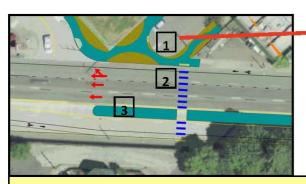
# 30

# U.S. 26 (Kelly Ave.): SW 1st Ave. to Ross Island Bridge

ODOT, the City of Portland, TriMet, the National College of Natural Medicine, Portland State Business Accelerator, and the South Portland Neighborhood Association have partnered on a bicycle and pedestrian safety project with a focus on traffic calming. The project extends along Kelly Avenue from the west end of the Ross Island Bridge to SW 1st Avenue. The project is expected to improve safety and to reduce the overall severity of crashes in the area.

#### Kelly Avenue at Naito Parkway

 Reduces the exit to Naito Parkway from Kelly Avenue from two lanes to one. This will allow a pedestrian crossing and marked bike lane up the ramp.

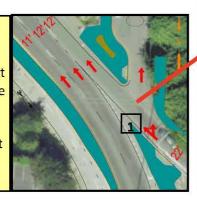


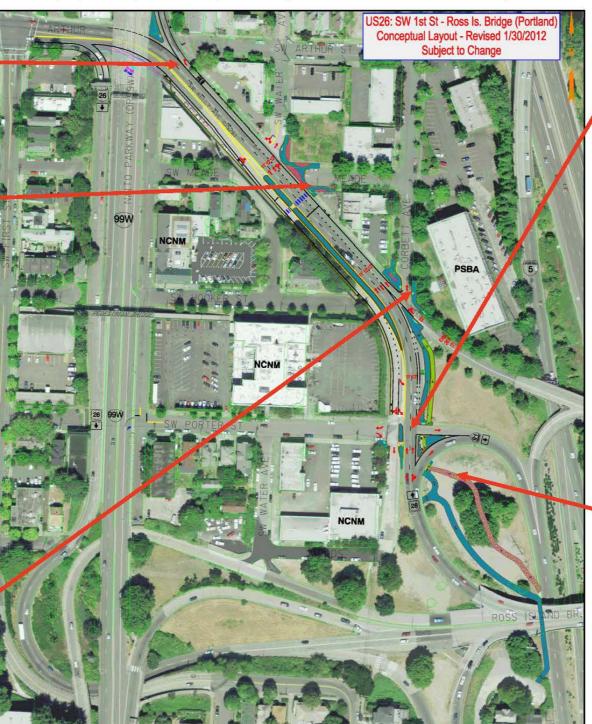
#### Kelly Avenue at Meade Street

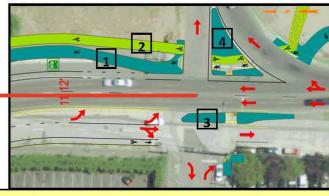
- Constructs a cul-de-sac on Meade at Kelly Avenue.
   Drivers will access Meade via Water, Arthur & Corbett.
- 2. Installs a Rapid Flash Beacon and marked crosswalk on Kelly Avenue just south of Meade.
- Removes the inside southbound Kelly Avenue travel lane and replaces it with a raised concrete median island (from Meade to just south of Corbett). This will restrict turning movements and provide a pedestrian refuge.

#### Kelly Avenue at Corbett Avenue

 Restricts access to Corbett Avenue from Kelly Avenue for drivers traveling from the Ross Island Bridge drivers will access Corbett via Water and Arthur.

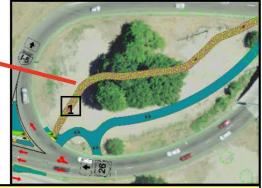






#### Kelly Avenue at Porter Street/Hood Avenue

- 1. Replaces the existing northbound Kelly Avenue access to Corbett with a new bus pullout and stop.
- 2. Installs a sidewalk and a new bike path adjacent to the new bus pullout.
- Installs a pedestrian refuge island at the intersection of Kelly and Porter; restricts vehicles from traveling through Porter to I-5 southbound and restricts vehicles from turning left onto Porter from the Ross Island Bridge.
- Installs a pedestrian refuge island at the intersection of Kelly Avenue and Hood Avenue (where cars access I-5 southbound from the Ross Island Bridge).



#### Kelly Avenue at Hood Avenue

 Constructs a new bicycle/pedestrian path that will connect to the new Gibbs Street Pedestrian Bridge.

www.oregongov/odot/hwy/region1/kellyavenue

# U.S. 26 (SW Kelly Avenue) Safety Improvements: SW 1st Avenue – Ross Island Bridge

ODOT, the City of Portland, TriMet, the National College of Natural Medicine, Portland State Business Accelerator, and the South Portland Neighborhood Association have partnered on a bicycle and pedestrian safety project with a focus on traffic calming.

The project extends along Kelly Avenue from the west end of the Ross Island Bridge to SW 1st Avenue. The project is expected to improve safety and to reduce the overall severity of crashes in the area.

#### **KELLY AVENUE AT NAITO PARKWAY RAMP**



- Change the existing thru/right turn option lane at the ramp to a thru lane only for Kelly Avenue.
- Change the existing lane striping on the ramp to Naito
   Parkway to provide one travel lane and a marked bike lane.
- Provide a safer pedestrian crossing across the ramp.

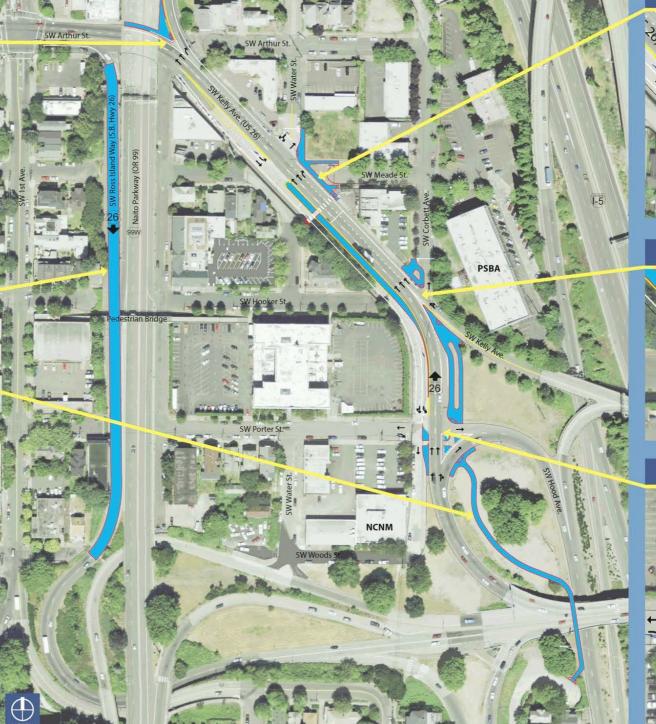
#### SW ROSS ISLAND WAY (U.S. 26 SOUTHBOUND)

Replace the concrete pavement between Arthur Street and the Ross Island Bridge on ramp.

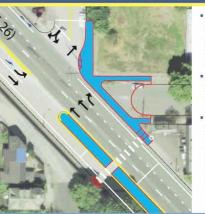
#### **KELLY AVENUE AT HOOD AVENUE**



Construct a new illuminated bicycle/ pedestrian path that will connect to the new Gibbs Street pedestrian bridge.



#### **KELLY AVENUE AT MEADE STREET**



- Turn Meade Street into a cul-de-sac at Kelly Avenue.
   Drivers will access Meade
   Street via Water Street, Arthur
   Street and Corbett Avenue
   instead.
- Install a rapid flash beacon and marked crosswalk on Kelly Avenue just south of Meade Street.
- Provide a pedestrian refuge and restrict left turns by removing the left lane from southbound Kelly Avenue from Meade Street to just south of Corbett Avenue and replacing it with a raised concrete median island.

#### **KELLY AVENUE AT CORBETT AVENUE**



Restrict access to Corbett Avenue from Kelly Avenue for drivers traveling from the Ross Island Bridge. Drivers will access Corbett Avenue via Water and Arthur streets instead.

#### **KELLY AVENUE AT PORTER ST/HOOD AVE**

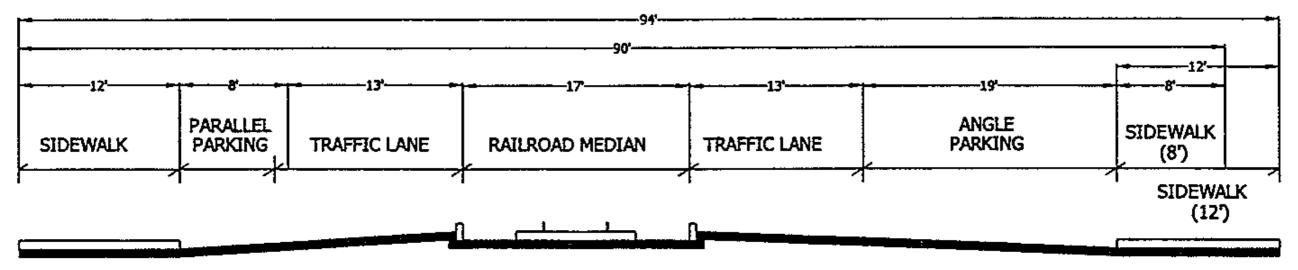


- Improve pedestrian connectivity and safety at the TriMet bus stop at the intersection by building a new bus pullout, sidewalks and bike lane. The adjusted curb line and new bus pullout will allow buses to merge back into traffic more safely after serving the stop.
- Install a pedestrian refuge island at the intersection of Kelly Avenue and Porter Street, which will:
- » Restrict vehicles on Porter Street from crossing the ramp from the Ross Island Bridge in order to get to the on-ramp for I-5 southbound
- » Restrict vehicles coming off the Ross Island Bridge from turning left onto Porter Street
- Install a pedestrian refuge island at the intersection of Kelly Avenue and Hood Avenue (where cars access I-5 southbound from the Ross Island Bridge).

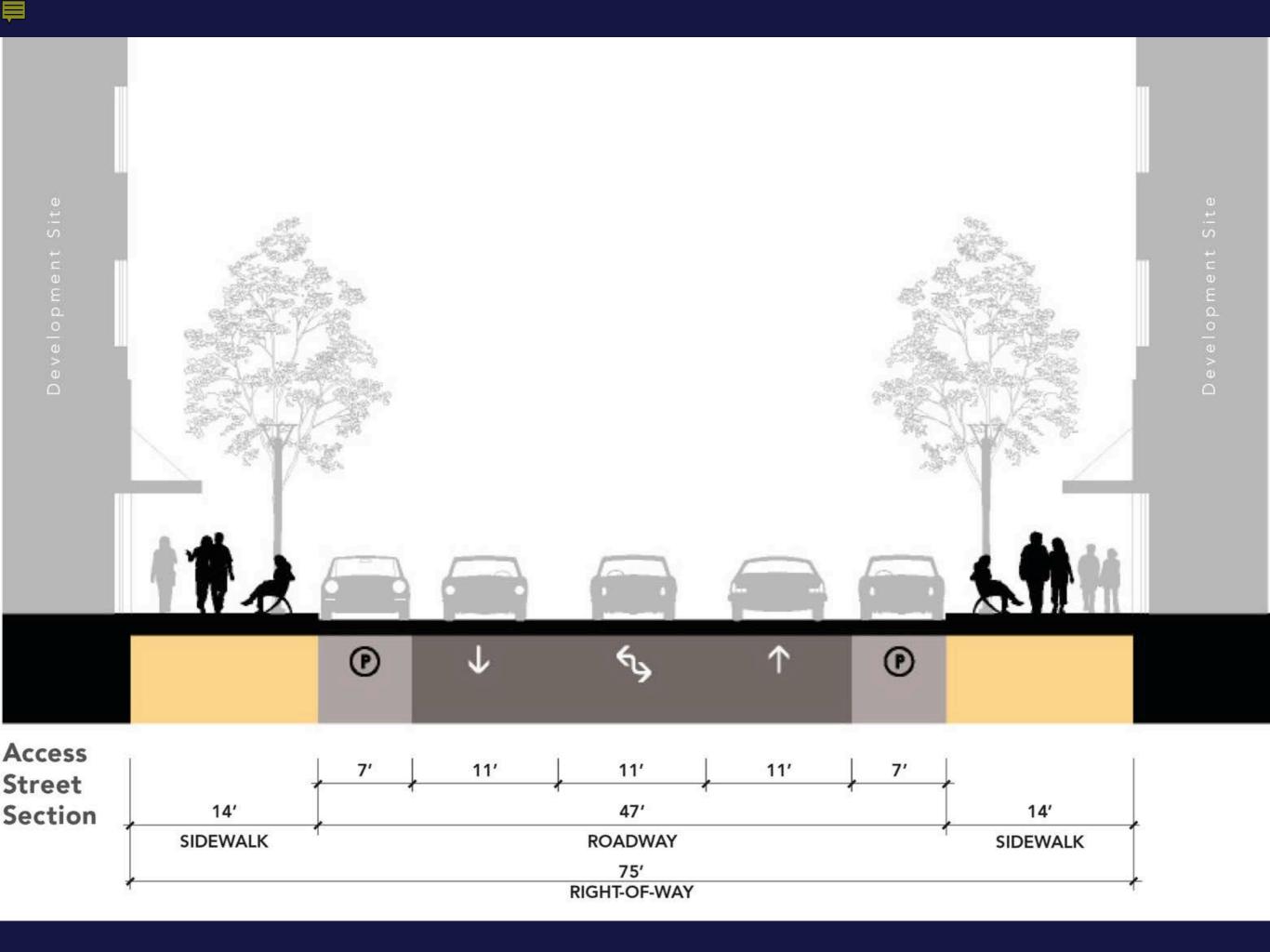
Collateral
Diagrams
Plans

TYPICAL SECTION

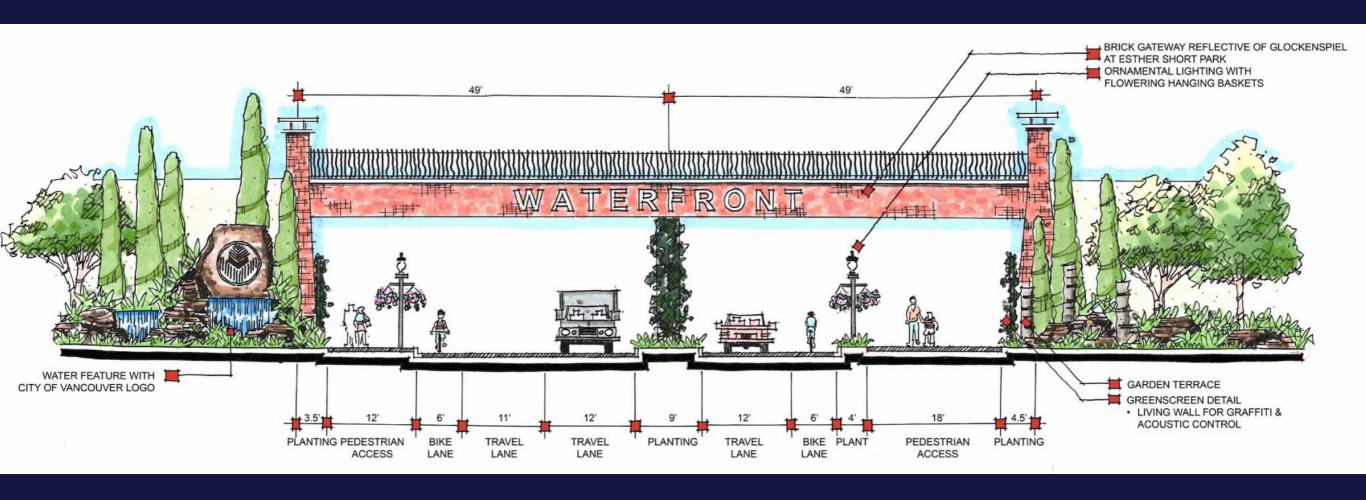
A ST from W 2nd to E 2nd ST



# Section A - A





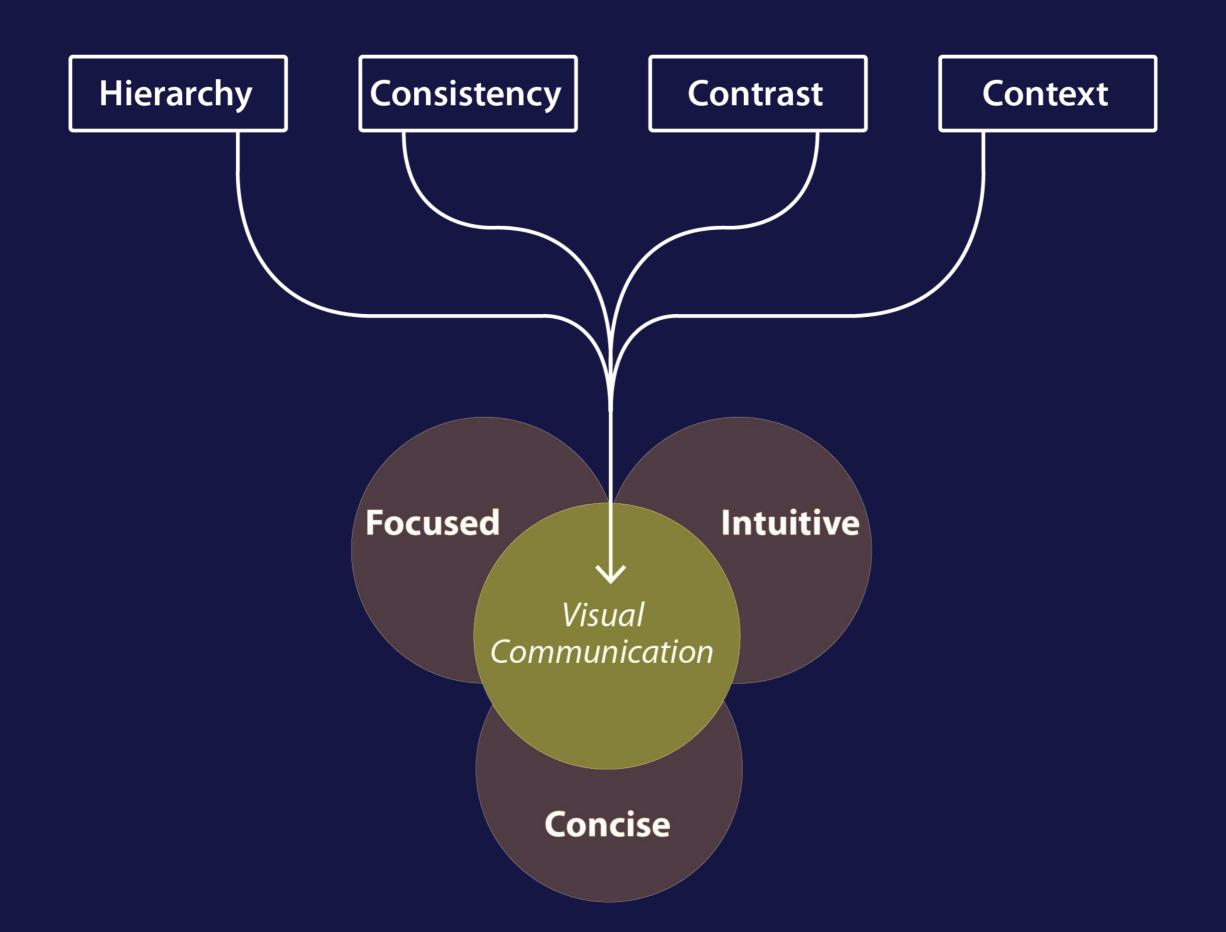








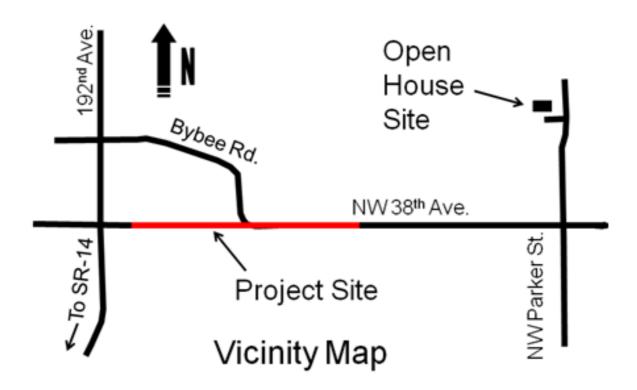




# Let's try this!

# You are invited to an Open House ...

The City of Camas will be hosting an Open House on Phase 1 of the NW 38th Avenue /SE 20th Street Extension Roadway Improvements Project on Thursday, April 26, from 5:30 p.m.-7:30 p.m. at Camas Fire Station 42 located at 4321 NW Parker Street; Camas, WA 98607.



# **NW Friberg Street and NE Goodwin Road Improvements**

**Open House** 

#### When:

Thursday, August 22nd 5:30 p.m. to 7:30 p.m. Drop in anytime. No formal presentation scheduled.

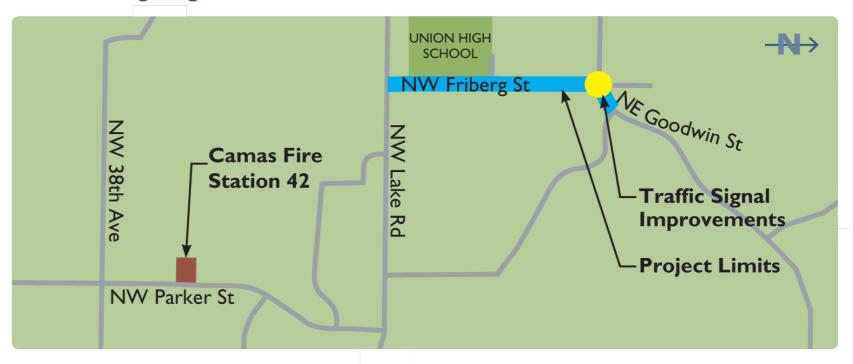
#### Where:

Camas Fire Station 42

– Community Room;
4321 NW Parker St.
Camas

Please join us for an Open House to learn about proposed improvements to these roads including:

- Widening both roads to two travel lanes with a center turn lane (3 lanes total)
- Improvements to the Friberg Street and Goodwin Road intersection
- Sidewalks and Bike Lanes
- Streetlighting





For questions or to request Assistive Listening and Other Services, please contact James "Curleigh" Carothers, City of Camas Engineering Manager, at 360-817-7230 or jcarothers@cityofcamas.us

# Resources

# The Non-Designer's Design Book

**Robin Williams** 

# Information is Beautiful

David McCandless

# Visualize This

Nathan Yau

# Universal Principles of Design

Lidwell, Holden, and Butler

Critique of NSA's "PRISM" PowerPoint slides (A web search will show many redesigned versions)

WTF Visualizations www.wtfviz.net