

Crime Prevention Through Environmental Design Assessment

South Henderson
&
Martin Luther King Jr Way South

July 3, 2014



Seattle Neighborhood Group

*The mission of Seattle Neighborhood Group is to prevent crime and build
community through partnerships with residents, businesses, law
enforcement and other organizations.*





Site Visits

Location:

8800 & 9000 blocks of Martin Luther King Jr. Way S

4200 & 4300 blocks of S Henderson Street

Seattle, Washington

CPTED Practitioners

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Date of Visit/Time of Day

Wednesday, March 19, 2014	10:30 am
Tuesday, April 22, 2014	9:00 pm
Thursday, April 24, 2014	12:30 pm
Monday, May 5, 2014	5:00 – 7:00 pm
Thursday, July 3, 2014	12:30 – 1:30 pm

Report Author

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CPTED Method

Each CPTED Assessment presents unique challenges in understanding complex problems that are tied to physical characteristics of specific places.

By using CPTED principles grounded in proven crime prevention practices, and specific local information about a site, it is possible to analyze problems generated by place features and make recommendations toward correcting crime and disorder problems.

Several site visits are usually necessary to observe the activity patterns and physical features on site. Collecting data about the site is also important in creating a picture of the types of activities on a site. Interacting with site users and asking basic questions about what draws them to the site and how they feel when they are on site can be informative in guiding observations.

CPTED recommendations are based in practical and theoretical knowledge primarily from the fields of criminology, sociology, psychology, and studies in the built environment. A robust CPTED approach involves interdisciplinary work from all of these areas.

Concepts that guide our CPTED work include: Activity Patterns & Conflict of Use, Quality of the Sensory Environment, Guardianship, and Historical Use & Cultural Patterns of a place. Accompanying these concepts, we use 5 basic physical assessment tools to analyze sites: Natural Surveillance, Territorial Definition, Access Control, Image & Reputation, and Community Activation.

The focus of this assessment is to make recommendations specific to this site, with the goal of changing use patterns that lead to conflict and negative behaviors, and hopefully reducing the opportunities for crime.

Disclaimer

The recommendations and strategies suggested here are intended to reduce opportunities for crime, improve quality of life and provide for a safer environment. Seattle Neighborhood Group does not guarantee that any specific crime will be prevented if these recommendations are implemented.



The intersection of Martin Luther King Jr. Way S & S Henderson Street.

General Site Description

This site is primarily a transit node with a handful of businesses on two corners of the intersections. There is a Light Rail station in the intersection, heavy traffic on Martin Luther King Jr. Way S. going both directions, and several bus routes.

A brief inventory of structures at this hotspot site:

- Two small grocery/restaurants stores, a furrier, and a retail furniture rental location
- Three parking lots associated with the retail sites
- Sound Transit Light Rail station
- Three King County Metro Bus Stops serving 4 major bus lines
- Seattle City Light Transmission Line Corridor
- A regional bicycle/pedestrian trail – the Chief Sealth Trail, situated among burms and fields, along the high power transmission lines.
- A Fraternal Organization
- A Church and parking lot on the east edge of the site
- Single family homes and some light industrial on adjacent streets and property parcels
- High volume arterial roads bisect the site.

People on site include local and regional commuters (by foot/bike/car/transit), travelers using Light Rail to get to SeaTac Airport, downtown Seattle, or other neighborhoods, students attending one of the many neighborhood schools, visitors to Rainier Beach.

Sound Transit opened the Rainier Beach Light Rail Station in mid 2009 as part of the Central Link Light Rail line. This station has only slightly lower ridership than other similarly situated stations such as Columbia City Station, and Othello Station.

Why CPTED here?

This CPTED Assessment focuses on a crime ‘hotspot’ in the Rainier Beach neighborhood. This site, Rainier Beach Light Rail, is one of five small youth crime “hotspots” in Rainier Beach, a neighborhood in Seattle's south end. It is part of a community-led project focusing on reducing youth crime at all five hotspot sites. The project is called *Rainier Beach: A Beautiful, Safe Place for Youth*, and is funded through a Department of Justice Byrne Grant.

The site is spacious, and relatively unpopulated. There are people on the street throughout the day, but sometimes the site seems very empty. The retail located here has little “connection to the street”, and the nature of the transit plaza, the empty lots, and the high speed traffic zooming through the site combine to create a fragile environment for community safety.

With relatively low numbers of 911 calls for response and few police incidents, the neighborhood lacks a clear picture of what is really happening on the street here. The police reports available indicate some of the incidents are severe, including drive-by shootings and strong arm robbery, however the numbers reported are low considering the availability of “suitable targets” to use a phrase from *situational crime prevention theory* – a common lens used to address crime problems.

Information Sources

For this assessment we used 911 incident response information from City of Seattle's public datasets, Seattle Police Department data generated for the Byrne Grant task force, a Community Appearance Survey from Seattle Neighborhood Group, CPTED practitioner site observations, and information generated by the Byrne Grant Light Rail Taskforce.

The publicly available dataset we work with from SPD has variations in data coding, notably spelling variants for street names and intersections, so may not be a perfect reflection of all of the 911 responses to this site.

The Link Light Rail data was made available to a regional transit blog.

911 Calls

June 1, 2012 – June 1, 2014

Row Labels	42XX BLOCK OF S HENDERSON ST	43XX BLOCK OF S HENDERSON ST	88XX BLOCK OF MARTIN LUTHER KING JR WAY S	90XX BLOCK OF MARTIN LUTHER KING JR WAY S	MARTIN LUTHER KING JR ST / WY S / S	S HENDERSON LUTHER KING JR WY S	Grand Total
ACCIDENT INVESTIGATION	5	2		1	9	1	18
ALARMS - COMMERCIAL BURGLARY (FALSE)		4	1	3			8
ASSAULTS, FIREARM INVOLVED					2		2
ASSAULTS, OTHER	1			1	2		4
AUTO RECOVERY		1				1	2
AUTO THEFT				1			1
AUTO THEFT AND RECOVERY	1	1					2
BLOCKING VEHICLE	1				4		5
BURGLARY - COMMERCIAL				2			2
BURGLARY - COMMERCIAL		2		2			4
CASUALTY (NON CRIMINAL/TRAFFIC) - MAN DOWN, SICK PERSONS, INJURED, DOA)			1				1
DISTURBANCE, OTHER	3		3	1	6	5	18
DRIVE BY SHOOTING (NO INJURIES)	3						3
DRIVING WHILE UNDER INFLUENCE (DUI)					6	1	7
FELONY WARRANT SERVICE					2		2
FIGHT DISTURBANCE	1						1
GANG GRAFFITI		1					1
HAZARDS	1				3		4
LIQUOR VIOLATION - ADULT					1		1
LIQUOR VIOLATION - INTOXICATED PERSON						1	1
LIQUOR VIOLATION - MINOR	1						1
MENTAL COMPLAINT	2				3		5
MISCHIEF, NUISANCE COMPLAINTS			1		1	2	4
MISDEMEANOR WARRANT SERVICE	1						1
MOTORIST ASSIST	1		1		6		8
NARCOTICS, OTHER				1			1
NOISE DISTURBANCE	1						1
NULL							
PARKING VIOLATION (EXCEPT ABANDONED VEHICLES)	1	1					2
PEDESTRIAN VIOLATION					1		1
PERSON WITH A GUN						1	1
PROPERTY - FOUND (FOLLOW UP TO SPD CASE)		1					1
PROPERTY DESTRUCTION		1		1			2
SHOPLIFT				1			1
STRONG ARM ROBBERY					3		3
STRONG ARM ROBBERY			1	2			3
SUSPICIOUS PERSON	2	3		4	7	2	18
SUSPICIOUS VEHICLE	4	5			12	3	24
THEFT - MISCELLANEOUS	1		1	2	2		6
TRAFFIC (MOVING) VIOLATION	8	9	3	2	20	6	48
TRESPASS		1					1
Grand Total	38	32	12	24	90	23	219

SPD Police Reports Filed June 1, 2012 – June 1, 2014

SPD Police Reports
June 1, 2012 - June 1, 2014

Offense Type	4200 block S Henderson St	4300 block S Henderson St	8800 block MLK S	9000 block MLK S	MLK S & S Henderson	Total
ASSLT-AGG-GUN					1	1
ASSLT-NONAGG				1	1	2
BURGLARY-FORCE- NONRES		1				1
DISTURBANCE-OTH				1	1	2
FRAUD-IDENTITY THEFT				1		1
PROPERTY DAMAGE - GRAFFITI		1				1
PROPERTY DAMAGE- NON RESIDENTIA				1		1
PROPERTY LOST	1					1
ROBBERY-STREET- BODYFORCE		3			3	6
ROBBERY-STREET- WEAPON		2				2
THEFT OF SERVICES					1	1
THEFT-LICENSE PLATE				1		1
THEFT-OTH			1		1	2
TRAFFIC				1		1
VEH-RCVD-FOR OTHER AGENCY		2				2
VEH-THEFT-AUTO				1		1
WARRARR-FELONY					1	1
Total	1	9	1	7	9	27

accessed June 25, 2014
data.seattle.gov

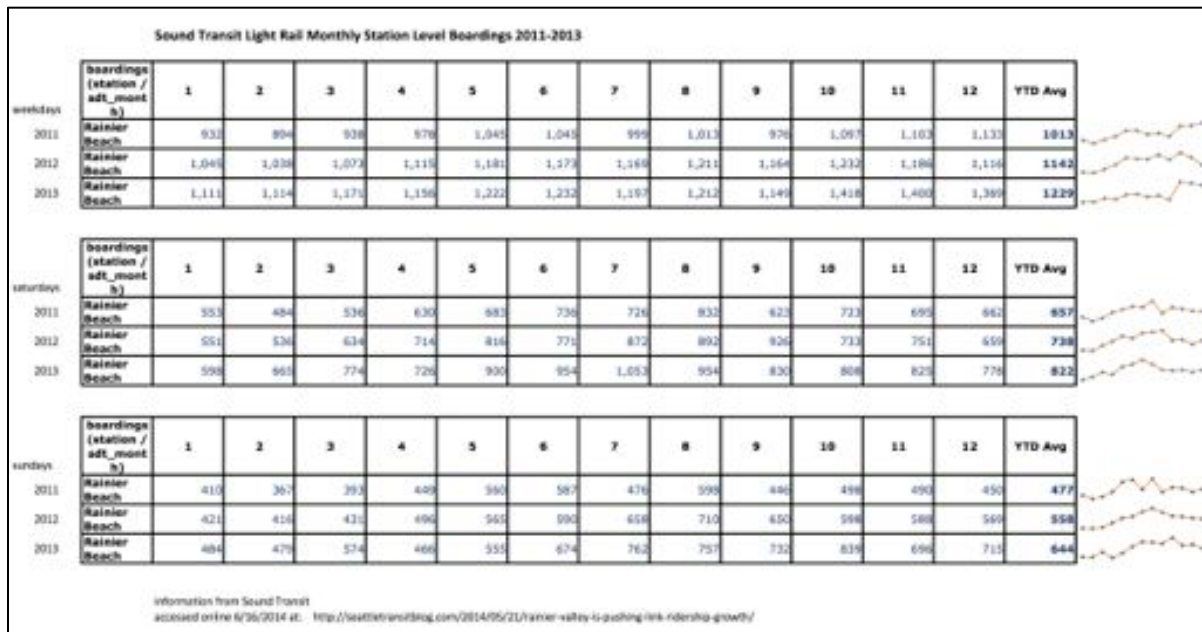
Sound Transit Rainier Beach Light Rail Platform Crime 2013

King Co. Metro data, Rainier Beach Light Rail station only, 2013

Broad Type	Broad Number	Specific Type	Specific Number	Percent		
Person	1	Robbery	1	4.5		
Property	3	Theft	3	13.6		
		Disturbance	1	4.5		
		Fare evasion	2	9.1		
		Indecent exposure	1	4.5		
		Liquor violation	1	4.5		
		Mental health assist	1	4.5		
		Suspicious	1	4.5		
		Trespass	5	22.7		
		Disorder	13	Vandalism	1	4.5
				Warrant	4	18.2
Other	5	Violation of court order	1	4.5		
Total	22	Total	22	100.0		

This information was provided to the Byrne Grant Community Task Force by George Mason University.

Sound Transit Light Rail Ridership Numbers 2011 - 2013



Site-wide Activity Patterns

The main activities on this site are transportation-related. Martin Luther King Jr. Way S. (MLK) is a busy 4 lane arterial running through the site north/south. The Light Rail station, (situated between the north and south lanes of MLK), attracts many riders from the neighborhood who use rail to commute to work and school, or travel between neighborhood nodes for other activities. Three bus stops on site serve 4 bus lines, and generate much of the foot traffic on the site's sidewalks. The walking/bicycle path that cuts across the site was observed to have light use.

This site's pedestrian pattern shows periods of extremely sparse use overlaid by periods of moderate activity. A busy stream of traffic cuts through the site north/south on MLK S., and moderate arterial traffic flows east/west along S. Henderson. The highest foot traffic use is during commute hours, with a midday bump of kids who are on site at the end of the school day. The after-school activity seems to shift from day to day, and can sometimes be fairly early in the afternoon. As the commute ends, the site seems to 'drain', and many fewer people are sprinkled throughout. Most of the pedestrians use the crosswalks, however we did observe jaywalking across MLK and the light rail tracks north of the intersection, the goal being the Vegetable Bin store.

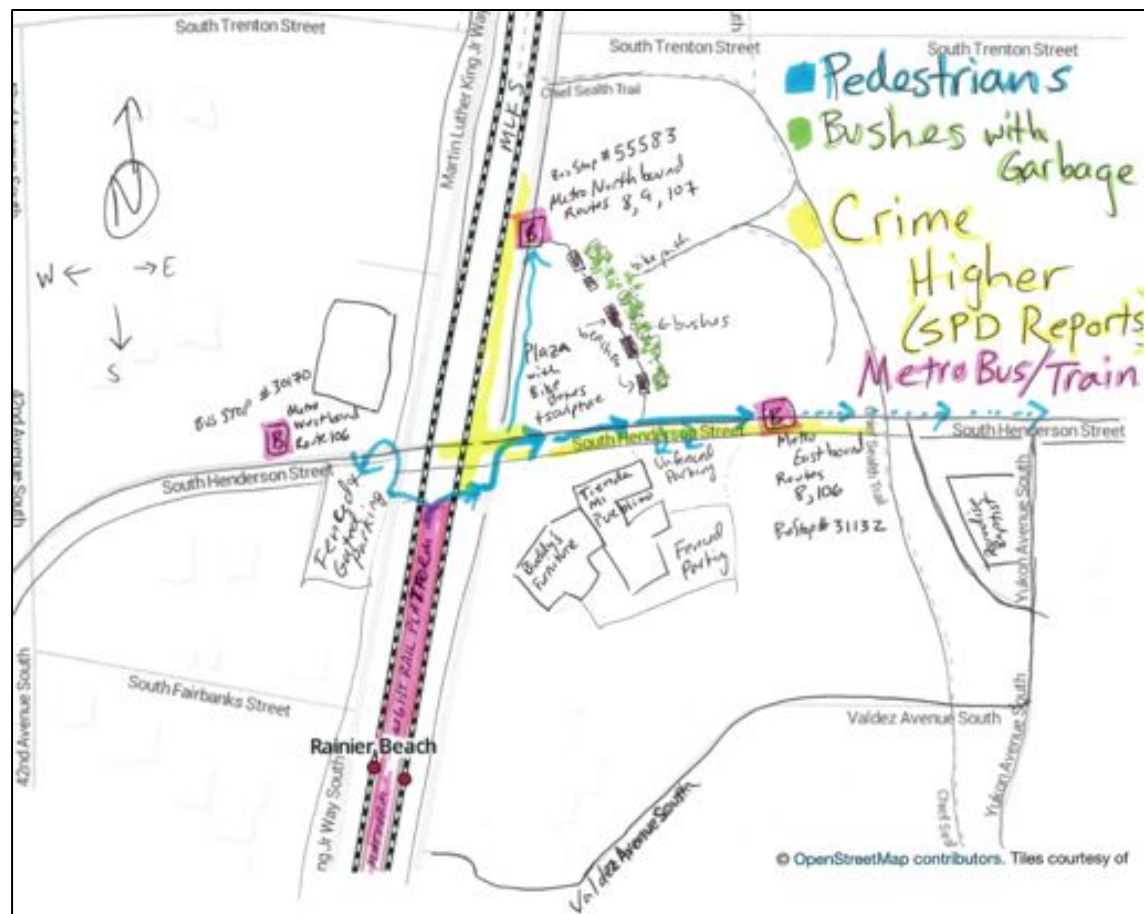
A common pattern observed on this site revolves around the transition between using the light rail and using other modes of transportation, whether by car, foot, bicycle, or bus.

Riders who disembark from the train often walk to nearby parking lots to get picked up (or the reverse happens – they are dropped off and walk to the train).

Only about a third of the transit riders disembarking the train were observed walking beyond the

bus stops and parking lots to go to other areas in the neighborhood. Almost all of the pedestrians who disembarked the train use the south side of S. Henderson St. to travel eastbound into the neighborhood on foot. (Blue arrows on the map inset.)

A few cross Henderson to reach the northbound buses on MLK S. that leave from the transit plaza. Very few pedestrians cross Henderson or MLK to walk into the neighborhood going west or south. There is a passenger load zone on the north side of the 4300 block of S. Henderson, and an un-zoned place where cars park on the south side of the same street, just in front of Mi Tienda Pueblito.



During our site visits we saw few people use the Chief Sealth Trail, by foot or bicycle. Based on the activities we watched, bicycle traffic seems very light on the site overall. This conclusion seems bolstered by the fact that while there are many lockers at the transit plaza on the northeast corner of the site, only one seemed to be used.

The businesses on this site generate a small amount of activity with customers parking, exiting vehicles, and visiting the businesses. It is difficult to know how much activity the two grocery/restaurants contribute to the site overall — during the site visits we saw a few people going into them. The parking lots on the east side of MLK were observed to generate traffic mostly *not* associated with the business they were attached to, such as picking up transit riders. The furniture rental business sits below the street grade and has a driveway that connects MLK with Henderson across the southeast corner.

This site has some persistent ‘day use’ patterns. On most of our site visits we observed a person at the very small traffic island holding a sign and soliciting donations from passing cars and pedestrians. We observed people using the transit plaza bench behind the bike boxes to shelter for long periods of time while drinking, or having brief social interactions.



Two site ‘guardians’ are pictured here.
Both were on site for over an hour.

During nighttime hours, the activities on site seem limited – it feels empty. We observed a few transit users and, as always, many vehicles passing through the site. It is worth pointing out that the vehicle traffic travelling north/south (the bulk of the arterial traffic) can move at 35 miles per hour, and routinely moves faster than that.

The collected effect of all these conditions creates a generally ‘unreadable’ space for visitors. It is difficult to know what (or who) is nearby, sightlines are often blocked, physical features of the building do not point clearly to a recognizable use. (“What *is* this building?” was heard on one site visit.) From across the intersection this part of the street is hard to see into, and looks confusing – this does not attract or hold visual attention. That means fewer people will watch the space and report or intervene if problems occur. It can also mean there is privacy to be had in an otherwise fully public space (*territorial definition*)

Natural Surveillance

Humans feel safe when important physiological and psychological needs are met. Our senses tell us whether we can relax and enjoy ourselves or whether we need to be on our guard. Natural surveillance¹ addresses those needs - specifically, whether a site affords people the ability to see, hear, and sense if they are safe.

Public places should afford plenty of opportunities to see and be seen throughout - satisfying our need to see if a place is safe. If these basic needs for safety are not met, site users experience anxiety and fear and will avoid the place, depriving it of potentially positive users.

Perceptions of being seen or watched can have an impact on whether people violate laws or norms. Generally, the higher the chance of being observed, the less likely² a potential offender will do the activity in question.

Landscaping in areas with safety concerns must work with natural surveillance principles to afford the opportunity for site users to have clear visual access. Limb trees up to 6 or 7 feet, keep plantings on the ground below 3' tall.

Supporting human vision appropriately in dark environments is critical. There is often a strong tendency to flood an unsafe area with high light levels in attempts at creating a 'safe' night-time environment. Bright lighting can create a worse set of problems that can impede human vision and render people vulnerable.

At 5 vertical feet, or roughly 'face height', light should be even, color-correct, and have roughly 4:1 contrast with its background. The number of footcandles used will depend on ambient light levels.

A person 30 feet away should be easy to identify, and there should be no stray light in the environment that hinders dark adaptation, or glare that produces disability, discomfort or distraction.

Provide an even quality of light. Ensure the lights do not shine directly into people's eyes (glare) and that they are not too bright – high contrast between light levels as night can inhibit appropriate dark adaptation, putting people in danger of not being able to see what is in a nearby area that is darker.

Make sure any fixtures that are easy to reach are impervious to vandalism (use shatterproof lenses, strong wall attachments).

Working with LC certified lighting designers when planning lighting applications for public space will enhance the chances that lighting applications will be appropriate to the task at hand.



An example of excellent lighting in a public plaza in South Carolina. It helps define the space.

¹ Natural Surveillance is called 'natural' because it requires nothing other than the senses. Other kinds of surveillance include 'mechanical surveillance' - the use of mechanical means to see into or out of a place (CCTV, etc.), and 'formal surveillance' - people organized purposely to watch a place, such as security guards.

²Conditions that create a sense of anonymity can contravene this behavioral tendency, as can the routine absence of consequences for misbehavior.



Natural Surveillance – Daytime hours

Sightlines seem generally good throughout this site during the daytime. There are a few exceptions, though. The retail establishments on site all have challenges involving sightlines, as well as parts of the Chief Sealth Trail and Metro Transit plaza on the northeast corner of the site. The light rail station has excellent sightlines, it is easy to see what is happening on the platform, and people can even see one another across the four lanes of traffic in good daylight conditions.

Assets

Sidewalks and intersections are generally open and easy to see through.

The furniture rental business has excellent surveillance of most of the intersection, workstations face the street and door, and staff call 911 when they see problems.

Some of the bus shelters have no decorative glass, and are very easy to see into. It is easier to identify situations that may be dangerous, or present unwanted contact around these shelters.

Challenges

Some businesses here have poor natural surveillance to the street, including to their parking lots. Staff and customers must walk to the store entrance to see their surroundings. It is difficult, or impossible, to tell what is happening inside the store from the street. If there were



problems inside, nobody on the sidewalk would be able to see the problem and call for help. When customers exit, they cannot always assess the level of safety on the sidewalks. The site visit team could not tell that Tienda Mi Pueblito was more than a grocery store - it is a restaurant - because there was no way to see inside.

The Transit Plaza has mixed sightlines and some of its features such as bike boxes, trees, bushes, the opaque decorative glass in the northbound bus shelter on MLK S. block surveillance.

The bushes in the median along MLK S. (north of Henderson in the 8800 block) are beyond the upper limit of CPTED recommended height for good surveillance. This poses a challenge to people who may be scanning from the train or the platform to decide on their path as they leave the rail station. It is also difficult for those on one side of MLK S to see across the street to the other side.

Train riders may not be able to visually scan the environment well enough from inside their train, as it moves too quickly to identify any potential threats near the station. Exiting the train in a group might make a good visual scan difficult as well, until the group disperses along the sidewalk.

The area below the transmission lines on the northeast corner of the site has infrastructure associated with the power lines. This infrastructure blocks the view to the transit plaza as you approach from downtown Rainier Beach. Combined with the tall weeds in the field under the transmission lines, and the landscaping behind the transit plaza, these structures make surveillance through this part of the site really difficult.

The Chief Sealth Trail meanders through berms and past vegetation that overhangs the path in places. Where the vegetation encroaches the path it is difficult to see ahead and to the side. The berms are generous enough that it is usually possible to see ahead, however they do keep some parts of the trail hidden from nearby sidewalks.

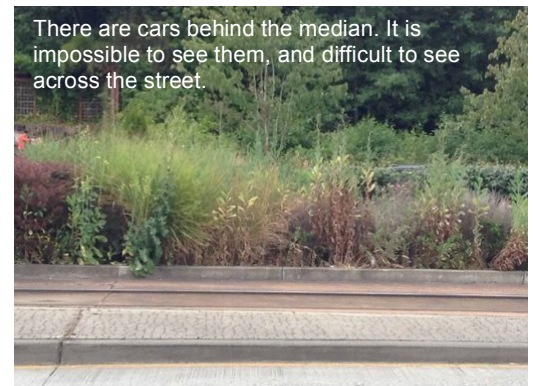
Recommendations

Businesses with blocked sightlines can try to shift boxes or remove posters/papers that block their windows. This can help people on the sidewalk see if there is trouble inside, and help staff and customers see what is happening on the sidewalk before they leave the store. It will also give the perception that someone is watching the sidewalk and street.

Move the ‘Weeping Alaska Cedar’ trees to a more suitable place. These trees will be 30 feet tall and 12 feet wide, with a strongly ‘pyramidal’ growth habit. These trees in their juvenile state block the view tremendously. As they mature,



There is a person in this bus shelter. It is difficult to see them, and to see what they are doing, even in full daylight at midday. This person was smoking marijuana, it was a weekday around lunch time.



There are cars behind the median. It is impossible to see them, and difficult to see across the street.



“Weeping Cedar” trees are a poor choice here, especially coupled with these shrubs. The bike boxes and sculpture on the plaza block the view of the benches from the street/sidewalk, and the bushes screen activity on the benches from the other side. Especially in the dark, this place is nearly private. Evidence is in the bushes

they will provide excellent camping sites. Replace them with more suitable trees. From a CPTED perspective for highly public, low access-controlled areas, that means a tree with a growth habit that allows for good visual access under the canopy, up to 7 feet.

Use ground cover instead of mounding bushes behind the permanent benches. Ground cover can inhibit access, while allowing good surveillance of the area from the bike path, S. Henderson, and some of the nearby buildings. These bushes are hiding a treasure trove of recyclable aluminum and glass, in the form of alcohol bottles and cans.

Move the bike boxes to a location that minimizes view-blocking, yet *does not isolate those who use them*. Experiment with where the best, most socially inclusive spot might be. Keep Access Control principles in mind when siting any infrastructure (p. 21).



The Chief Sealth Trail looking north from the entry at S. Henderson.

When any fences, gates, or other barriers are installed they must not block sightlines or create places people will shelter or hide from view. Use materials like chain link, hardware cloth, rock screen, or other open-patterned, decorative metal that can be seen through easily in daylight and dark conditions. In areas with crime or nuisance problems use landscaping that doesn't hide people who are sitting, crouching, or lying down.

Mow the field regularly below transmission lines on both sides of S Henderson and trim the vegetation well away from the Chief Sealth Trail.

The Median of MLK S should be trimmed down so pedestrians can see clearly across the street. CPTED friendly plantings are trimmed down to a maximum of 3 feet, and limbed up to 7 feet, however this might be an excellent candidate for even lower vegetation, as it is essentially in a raised bed type of planting situation that places the bushes above grade.



Natural Surveillance – Twilight and Dark hours

Natural Surveillance at dusk and dark is extremely challenging here. *Contrast between the various light levels on site can be too high*, especially when combined with rain or water on the paved surfaces. This is an undesirable situation – for example, walking toward the oncoming traffic along MLK S at night in the rain presents a person with essentially two light levels they must reconcile: extreme bright from the oncoming headlights, and dark backgrounds throughout the rest of the scene. The human eye will adapt for the bright light coming toward it, and essentially remain night blind for elements in the darker fields.

People on this site during poor light conditions (dusk, dark, during rain, and other low light times such as overcast winter days) deal with challenges identifying important elements of the environment. *A low contrast situation*, such as a person in dark clothes in a dark environment, *requires more attention* to assess than the same scene in better light conditions.

The impact for many of the site's users is felt especially strongly because Seattle's weather and latitude together make commuting a dusk/dark experience from roughly October to March, our rainiest months. Less light is available during rain where people need it the most; between the ground, at about 5.5 vertical feet

Paved surfaces pose special problems to how light behaves in an environment, and this site has a lot of paved surfaces. With all of these challenges – visual acuity, attention, and behavior in rain & poor light conditions – careful thought about supporting human use of this site is necessary.

Assets

There are some lights throughout the environment, on the street, in one of the bus shelters, and in the bike rack shelter on the transit plaza.

Challenges

Many of the lights on site have negative side effects such as producing discomfort or disability glare for those nearby.

Lots of traffic headlights on arterials here at night creates a high contrast environment that diminishes dark adaptation.

Recommendations

Where the light **contrast ratio is higher than 1 to 4**, install extra pedestrian-level lighting that will increase **reflected** light levels – the goal being to bring the high dark/light contrast down.

Where the light contrast is too low and it is impossible to distinguish what is happening in the surroundings, explore increasing reflected light levels in areas that won't easily support illegal or disruptive activities. (Do not light an area without good Natural Surveillance – it is possible to create perfect conditions for illegal and disruptive behavior like gambling, prostitution, or drug dealing and use.)

Direct bus/bike shelter lights upward toward a reflecting surface to scatter direct beams and give a more even coverage. Currently, the lights are pointed down and produce discomfort glare, potentially disability glare, for people under the shelter.

Explore using paving surfaces where more reflected light is needed from the ground.



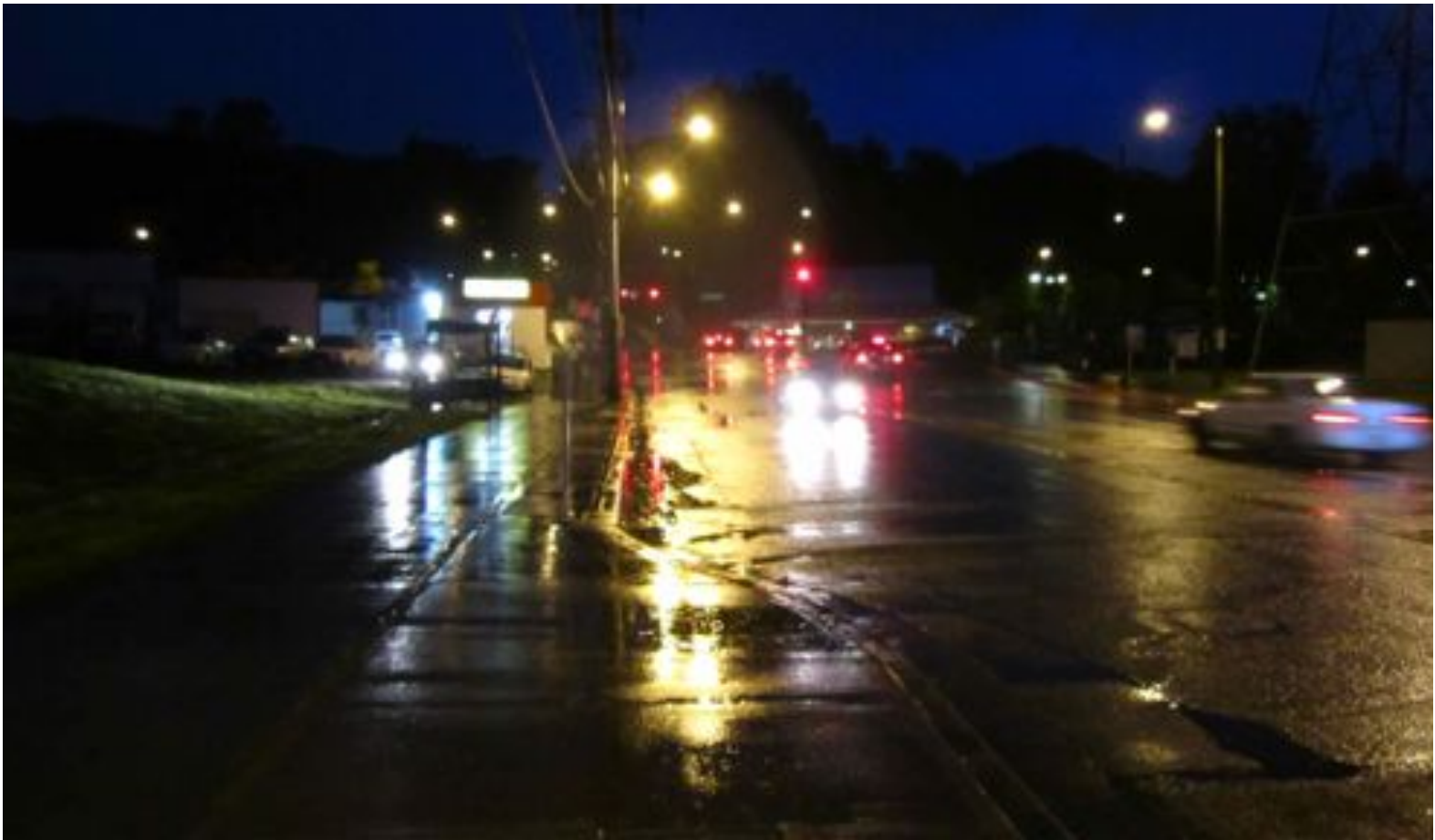
It's very bright up there, but not enough of the right kind of light makes it down to where people need it.



This light is under the bus shelter on the northbound side of MLK S, in the 8800 block. It glares directly into the eyes.

Some of the problems here are far beyond the scope of this assessment to address.

This site would benefit from further attention on the part of extremely experienced lighting professionals. If public space lighting experts are brought in for further assessment, ensure they visit this *during all kinds of conditions, especially in the dark during rain and wet conditions*. Any lighting professionals should have *ample* experience working in transit environments, and be familiar with all of the *standards* that may benefit in this situation (Federal, State). This site is so challenging, and the available options for bringing safe and human-friendly light in are extraordinarily complex.



Access Control

Guiding people on a site through the use of features such as gates, fences, hedges, or railings, is effective access control. It is important to use proper levels of access control as site users transition through various zones - from public to private. Successful access control is sometimes best achieved through symbolic means - short hedges, simple railings, a series of bollards. These appeal to the psychological need for guidance and indicators on site to tell users what to do and where to go. When people transition from semi-private to fully private space, access control involves locked doors or gates accompanied by the appropriate policies and procedures for everyone who is granted access.

When using fencing, gates, or doors to control access, make sure it supports *Natural Surveillance* requirements – it should be made to be seen through, or kept low enough to see over and not hide a person behind (whether standing, crouched, or lying down). *All* doors into and out of a building should have a large peephole or window to allow those inside to see clearly who is outside, and what is happening on the street in front of their entrance/exit.



Martin Luther King Jr. S. & S. Henderson

Most of this site is open to the public, and is accessible at all hours. Any property nearby that could contribute to crime or disorder are the parking lots associated with retail/wholesale business on site. We observed litter in the lot east of Tienda Mi Pueblito that indicated after hours use, including alcohol containers, cigar wrappers, and fast food.

Cars using the site's parking lots for illegal activities might look the same as cars using the lots in an appropriate way. It is also possible that illegal use occurs at hours when the activities go unnoticed. Car-based crime is fairly straightforward to control through limiting access to parking.

Assets

Polynesian Deli's north lot is gated at night, and locked. It is easy to see into the lot even when it is locked.

Part of the parking lot behind the buildings on the southeast corner of the intersection is fenced, gated, and locked at night.

The small garden at Paradise Baptist Church near the Chief Sealth Trail is fenced with a small fence that keeps foot traffic out.

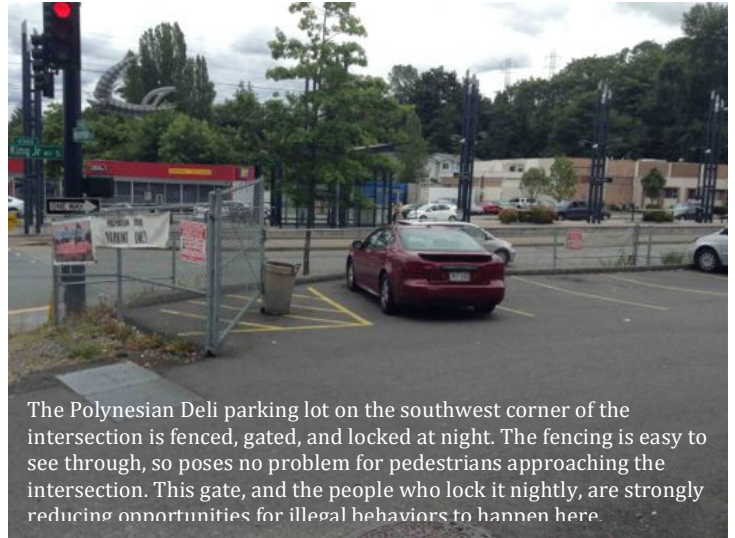
Challenges

There is a pathway that rings the southeast part of this site along MLK S to S Henderson, and behind this small block along Valdez Ave. South. Parking lots nearby offer a waiting area for people in vehicles, and there are a few options for quick "getaways" from those parking lots and into the neighborhood.

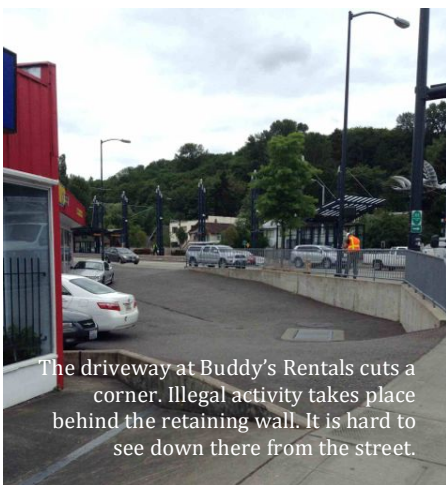
Recommendations

All parking lots should be fenced, gated, and locked when the host business closes, especially those on the southeast part of this site, Paradise Baptist Church and Tienda Mi Pueblito. The fence should run from the corner of the building to the south-most edge of the property, then run south to join with existing fence that encloses the lot for Buddy Rentals. Fencing should comply with CPTED guidelines for Natural Surveillance, and should only be high enough to keep most nuisance uses under control. A 4-foot tall fence, sometime even shorter is enough.

The driveway for "Buddy's Rentals should be gated and locked after business hours.



The Polynesian Deli parking lot on the southwest corner of the intersection is fenced, gated, and locked at night. The fencing is easy to see through, so poses no problem for pedestrians approaching the intersection. This gate, and the people who lock it nightly, are strongly reducing opportunities for illegal behaviors to happen here.



The driveway at Buddy's Rentals cuts a corner. Illegal activity takes place behind the retaining wall. It is hard to see down there from the street.



Territorial Definition

How a site declares itself, and how site users attach to the place and even become 'positive guardians' is at the heart of this CPTED principle. These two ideas work together in a mutually powerful way - the more clarity a space has, the easier it is for people to understand how to use it in a socially appropriate and positive way.

A well-designed place has forms, patterns, and shapes that have cultural meanings that correspond to certain uses. If the forms agree with the purpose of a space, then the whole space will have a sort of integrity in its design. The space will "say" what it is for, and what kinds of things are possible in it.

When a space 'reads' correctly, it is easier for people to connect to a site and to exert influence there - even if they don't intend to do so. This phenomenon is called guardianship. Guardians are people on a site who essentially control the place, or parts of the place. Anybody in a place can be considered a 'guardian' of some sort. Guardians can be positive; sometimes even actively intervening to keep the space safe. They can also be negative, doing unsafe things and creating a sense of discomfort that drives positive guardians away while attracting other negative site users.

As changes are made to this site, it is important to make them deliberately, asking "what is the purpose of this part of the site, how is this change going to support or undermine that designated purpose?" Be clear going forward - help the space speak for itself, and attract the appropriate uses.

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Parts of this site are extremely well designated in their use; the light rail station, the street infrastructure, the small transit plaza on the northeast corner. These are all designed to reflect the nature of their intended functions.

Overall, though, the site is a jumble of parts that say “big intersection – nobody looking!” There is a lot of visual clutter that is from important infrastructure associated with four types of transit – rail, bus, car, foot. All the bits and pieces of these systems must be present here, and the result is a bit overpowering in terms of a complex-looking stew of poles, paint, and lines cutting through the space. This complexity hides some little places that are really in need of close scrutiny, though. For this assessment, we will call these “micro-places”, and they are usually no larger than a few paces wide and deep, if even that large.

A variety of *informal guardians* are on site even if the site seems to have low guardianship overall. Some of the informal guardians on site include; transit riders, business owners & patrons, youth who are on site daily, nearby residents, and bus drivers during layovers.

Formal guardians (those whose role is specifically taking care of a place) here include Sound Transit security & fare enforcement officials, King County Sheriff Metro police, and Seattle Police Department.

Assets

There are some information signs, and other ‘wayfinders’ at the light rail station. The station is clearly designated as the Rainier Beach Station, and various elements work together to differentiate it from the surrounding space – there is a rise in elevation that signals a change in use, also the ground surface textures and colors are different from the neighboring ground surfaces. Other elements that set the station apart include appropriately used lighting, uniformly applied signage, and clearly posted rules (“payment required beyond this point”).

Two of the retail sites are well designated and easy to locate because of distinctive signage.

Several parts of the site are clearly designated for public.

Challenges

There is little sense that a vibrant neighborhood node is nearby when on this site. There is a Welcome to Rainier Beach sign, but it is on the opposite side of the street from the general direction of travel into the neighborhood, and it’s also behind bus wires, and is a little too high up to be within an easy field of view. It requires a lot of attention to see it, and then to read it, as the sign may have faded over time.

The transition from sidewalk to the bus stop just east of the Tienda Mi Pueblito parking lot is unclear, and messy. This little space serves a lot of purposes, and bus riders jockey with pedestrians, cars come and go to the parking lot close by. It is easy for people to seem like they are part of the bus rider group here, even if they have no intention of riding the bus



The **seating at the transit plaza** on the northeast corner of the site indicates that the area is a place to wait for things other than transit, yet no other types of activities are supported, or clearly articulated as happening in that space.

Benches at the back of the plaza present excellent conditions for lingering away from the street, yet in a public place. On several site visits we observed drinking and what seemed to be drug transactions taking place at the benches along the back edge of the plaza. We did not observe any transit riders sitting on the benches to wait for their buses. The benches seem to be a bit far away from the stop to be able to see buses coming easily, or to run for a bus you couldn't see soon enough. This physical arrangement, coupled with the Natural Surveillance challenges noted on page 18 **redefine this space as a great place to drink, use drugs, sell drugs, or hang around unobserved.**



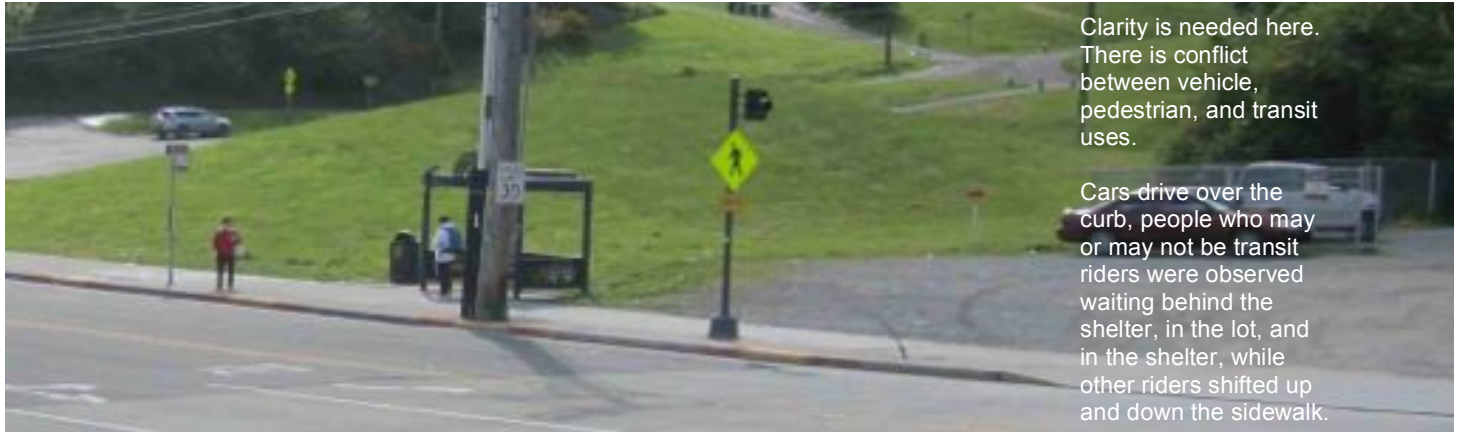
The transition between the parking lot at Tienda Mi Pueblito, The bus shelter, and the Chief Sealth Trail and adjoining fields is messy, and does not indicate clearly what is expected of people using this space. The sidewalk becomes crowded with those waiting for the bus who don't want to use the shelter. Often those not under the shelter are avoiding unwanted contact with others who are there for long periods of time.

Recommendations

Install easy to read, simple, appropriately located wayfinding for transit users that directs them to nearby community features, such as the local library branch, schools, community centers, parks, business district, and other transit nodes. Locate the signage in a safe place that is close enough to the transit node to be useful, and is where the bulk of the foot traffic from transit will pass observe the high use pathways – put it there! Be sure that the placement will not endanger other pedestrians on the site, block surveillance, creates a situation that increases the vulnerability of site users. Keep it in plain sight, and insure the information is not so complex that people must 'study' it for long periods. A successful wayfinding sign supports quick "visual foraging" encounters and keeps people moving in the direction to satisfy their quest.

Install a short fence along the boundary of the private property with the Tienda Mi Pueblito parking lot. This will help articulate the activity pattern, and use for this place.

Create a clear area for transit riders to wait at bus stop #31132 on the eastbound side of S Henderson that is off of the main sidewalk itself. Change the surface texture and color of the waiting area to designate it as a waiting area. This might be a good place to experiment with environmentally friendly pavers that allow short vegetation to grow through. Perhaps planting a sturdy ground cover with such a paving treatment (like Corsican Mint) might also enhance the area by releasing pleasant fragrances. This would be an excellent place to experiment with satisfying the psychological needs of transit users.



Clarity is needed here. There is conflict between vehicle, pedestrian, and transit uses.

Cars drive over the curb, people who may or may not be transit riders were observed waiting behind the shelter, in the lot, and in the shelter, while other riders shifted up and down the sidewalk.

Explore increasing guardianship by supporting more activities in under-used parts of this site. Where there is evidence of misuse, create an alternative type of use for the space. Be creative, reach out to the potential positive users for the space, consider scheduling activities outside of the expected daily timetable. (Farmer's Market on Friday Night, Exercise group after work on Tuesday, Walking Club on the trail during the middle of a weekday – the opportunities are really fantastic here because there is a lot of room!)

Celebrate the entrance to the Chief Sealth Trail at this wonderful transit node! Use flags or other gateway elements, CPTED-friendly plantings (vibrant, drought tolerant ground covers?), lighting strategies (downward light casting bollards that produce a small amount of reflected light), surface treatments, and a rigorous maintenance schedule to make this an attractive community feature. Consider locating play features, or physical conditioning features along the trail as it extends south and north of this node. Draw a mix of users onto the site who will linger with a positive purpose. Invite groups of people from nearby areas to use the site at lunchtime, after work, or on the weekends to get out and about in their neighborhood and also have a place to encounter each other in positive social ways. Be careful **when designing these spaces** that they fully **support the 5 CPTED principles!** (see Appendix p. 41)



This is a main entrance to the bike/foot path. It is overgrown, and difficult to distinguish. It's use is unclear, especially from a distance.



Image, Maintenance, Reputation

Site safety is directly related to a place's reputation and image, attracting 'positive' site users, or 'negative' site users. Positive user groups can become excellent guardians even if they are not doing anything other than using the space in a normal, 'pro-social' manner.

Three elements are critical to Image, Maintenance & Reputation: cleanliness, rule-setting, and building a positive site reputation.

First, establish clean, healthy environments that provide distinct contrast to anyone treating the site in a negligent way. Attracting capable guardians and positive site users will be much easier if the place is inviting.

Second, send clear messages through functional signage about what is & isn't allowed, and follow up on those messages consistently. This helps reinforce the image you set, and maintains a good reputation for the site going forward.

Third, a place's reputation can work against the best efforts in supporting positive uses of a site, it's important to carry out actions in a way consistent with the reputation desired for the place - reputation attracts users, both positive and negative.

The physical status of our environment sends psychological cues that are important in establishing baseline behaviors on a site. In functional public space, the range of social behavior that takes place is supported by positive users behaving within social norms and encouraging others to do the same.

If a relatively passive set of guardians isn't able to maintain positive social norms in a place, then guardianship must be encouraged more explicitly, by supporting Community Activation.

Further, if these active guardians are unable to establish and maintain positive use, it is up to formal guardians to help by steadily enforcing laws and the instructions posted on site, and working with stakeholders to solve underlying problems that do not flow from physical disorder. Formal guardians include people like park employees, city police, animal control, or other enforcement personnel.

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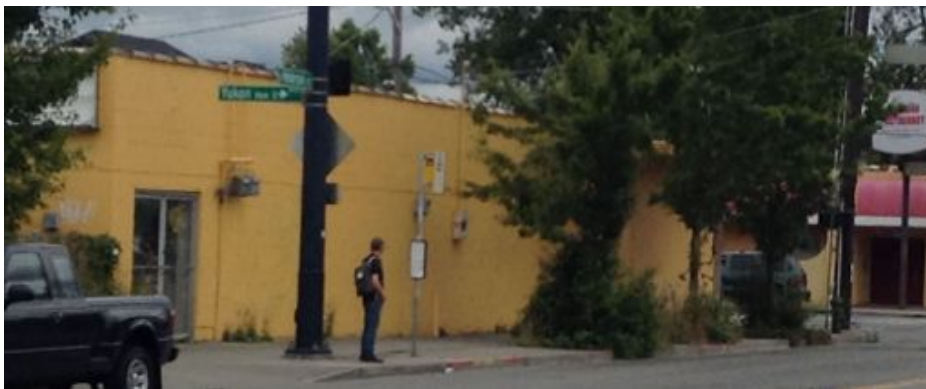
This area is light industrial, seems low residential (even though there are houses nearby), and is full of fast moving cars. These attributes contribute to what seems to be a low-pressure situation when it comes to site maintenance. The physical use of some parts of the infrastructure (particularly crosswalks) is tremendous.

Assets

The Light Rail station is clean and well maintained daily.

Challenges

The transit plaza has garbage throughout, indicating that the available garbage cans may be overwhelmed, or ignored. Cigarette butts litter the ground throughout this site, in the transit plaza, at bus stops, and on the sidewalks. Cigar wrappers (associated with marijuana use), alcohol bottles & cans, and snack food/fast food wrappers feature prominently in the types of garbage observed on site.



Vegetation is unruly throughout the site, especially planting strips and tree pits. Tree pits are neglected and dramatically overgrown along all avenues leading to the intersection. The overall appearance is one of neglect, disregard, and “anything goes!”

Transit signage is sometimes present, although not always clear to users without previous knowledge of how the various transit systems integrate on this site.

Some of the infrastructure is damaged, including bus shelters, bus stop signs, street signs, crosswalks, utility poles, and sidewalks. There is evidence of vehicle accidents on site.

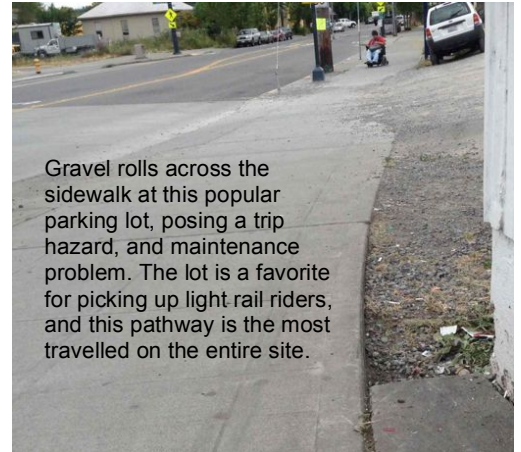
At one accident site in particular glass & orange cones were left behind for a few weeks – the accident predated our last site visit by three months, and shattered glass from the crash was still spread across the sidewalk (see image p. 29). The lingering message for the neighborhood is that nobody cares enough to cleanup. This can amplify an already fragile reputation for this site.

Some building facades are extremely run down and in disrepair on this site, lending an overall air of neglect.



Recommendations

Remove the slip/trip danger of gravel, pebbles and dirt on the sidewalk. The line between sidewalk and parking lot may need some kind of barrier or retainer to keep gravel and dirt in the lot and off the sidewalk. Only chip shaped gravel should be used, round pebble gravel will just roll onto the sidewalk. This might be a good place for a mix of sand and small chip gravel that could be compacted to form a tighter, less migratory surface. (A mix of sand and chip-shaped gravel should be compacted, this can be done by hand or with a machine.)



Gravel rolls across the sidewalk at this popular parking lot, posing a trip hazard, and maintenance problem. The lot is a favorite for picking up light rail riders, and this pathway is the most travelled on the entire site.

Graffiti and dumped garbage should be cleaned and removed. Several parts of the site host graffiti, and show patterns of dumping.

Post clear rules and consequences for use at the transit plaza, including rules about using alcohol, marijuana, or other drugs in public.

Follow-up on these rules with consistent enforcement.

Any premises or business that has **patterns of loitering** or the possibility of trespass should post and use **Conditions of Entry** signage.



Repair steps leading to transit plaza on northeast corner of site. The cement risers are breaking away from the treads.

Repair Crosswalks. Crosswalks throughout the site are faded, chipped, and disappearing. This site has fast moving traffic and much of the crosswalk use is in poor light conditions. Crosswalks should be rigorously maintained to support pedestrian safety.

Maintain tree pits and planting strips *throughout the year*, not just once or twice in the summer months. A proactive and thorough maintenance schedule will help this community feel more cared for.

Clean up thoroughly after vehicle accidents or any other damage to public walkways immediately, and thoroughly.

Private property owners on this site should clean, paint, and care for their structures and landscapes. Run down properties send messages of disrespect to the surrounding neighborhood, and to those who use the site.



This crosswalk gets a lot of use, however, it is fading. Many of the crosswalks on this site are in a similar condition.



Community Activation

While the first four principles of CPTED (*see appendix p. ii*) are powerful tools in addressing disorder and crime that is generated by physical features, none of them will succeed without strong support of this most important element – engaged people that use the place.

Establishing feelings of safety on a site means that normal behaviors exclude violence and unwanted intrusions. The site will have 'guardians' of some type who – whether they know it or not – enforce some kind of behavior norms. These guardians can be *negative*, setting norms that allow for uncomfortable or dangerous interactions. The guardians can also be *positive*, helping to establish norms that indicate neutral or positive control of the space.

If a place has norms that are negative, it will be important to build user groups that can establish positive behaviors at all times, and foster communication between them.

Designing a strategy that uses lots of different activities and approaches to getting positive users into the space is key in reclaiming a place. Ultimately, people using the place should get to know who is there, who can help, and what is normal and expected.

Community Conditions on your site

There is an active group of people on this site throughout the day, many of whom seem deeply connected to the neighborhood. On every site visit, except the nighttime one, we observed serendipitous meetings of acquaintances and friends on the sidewalks as people walked to or from the rail platform. Many of the interactions were between youth who were pausing to catch up with one another.

The site itself offers little in the way of places for these kinds of interactions, the largest public space is across the street from the most heavily used walking path. The result is that people just don't go over to the plaza to hang around and enjoy the place. They go there to grab the next bus north, to sit alone on the bench on the back of the plaza, or to grab a newspaper out of the boxes. Most the social effort is focused on the slimmest bit of sidewalk, the south side of the 8800 block of S. Henderson Street.

The site needs more physical space that is designed in a safe manner to *purposely support positive human interaction*, and to bring a broader range of activities throughout the day and evening.

Assets

There are energetic business people populate the site.

Transit riders are present throughout the day, many of them were observed to make eye contact and say hello. Helping behavior was also observed on the site when items were dropped, or people asked directions of one another.

The prevailing culture on the sidewalks during the daytime seems to be one of engagement, the site observation team had many positive and welcoming encounters with others on the street here. After the busiest times of day, the observation team had little contact with site visitors.

Dedicated and active community members, workers, and organizations are nearby, and residents and workers use this site as a passageway to and from work and home often, some daily.

Bus drivers on their route layovers use the north side of the 8800 block of S. Henderson, and were observed interacting with other site visitors.

Challenges

Some types of physical and social conditions can lead to illegal activity or unwanted contact, for example after the majority of the commute is over, commuters are more vulnerable as fewer people are on the street to help in case something goes wrong. Another situation when illegal activity can occur is after school hours during the school year – sometimes youth will gravitate to the site to fight, or even to steal from other youth who are going home.

Recommendations

Engage transit riders in safe behaviors through focused campaigns for this site, including:

- Watching out for each other
- Noticing unusual, suspicious, or disruptive behavior
- Using 911 to report suspicious activity, disruptive behavior, and crime as soon as possible
- Report any disorder on site proactively, such as reporting graffiti, vandalism, or non-emergency safety concerns
- Remain alert on the train, bus or street especially in poor weather or during distracting situations and circumstances.
- Stowing valuable 'target' items before they start their transit trip
- Not exposing these valuable items during transit trip



Transit riders here need extra help being safe while waiting for buses, and walking into the nearby neighborhood. The isolation from nearby businesses that observe the area, as well as the lower numbers of commuters at some times of day increase the need to look out for one another, and to call 9-1-1 if something seems suspicious or dangerous.

Experiment with developing/supporting a group of active transit riders who would engage other transit users on site in working together to promote site safety - including walking the pedestrian routes in groups during 'shoulder' times of the commute when the bulk of the commute has ended, but enough commuters trickle through when it is emptier.

Share basic crime prevention information with building owners & managers, residents, business owners and staff, especially regarding identifying suspicious activity, and how to use 9-1-1, and how to support each other in calling in problems. It may be a good idea to tailor any training for this community to the specific problems seen here. It may also be a good idea to share information on using interpretation with 9-1-1 calls.

Street level businesses should ***get to know the Community Police Team (CPT) officers assigned to the area*** so they have an avenue to work on any nuisance problems, or

ongoing crime problems they deal with. CPT officers are a great resource, and can be excellent support for the businesses at this intersection.

Discourage public alcohol and drug use. Encourage any informal guardian on site to call 9-1-1 immediately when open alcohol and drug use is observed. Eliminate any place on the street where someone can ‘shelter’ to drink alcohol or use drugs.

Explore hosting activities in various unused parts of this space. Work closely with people who are both affiliated with local organizations (community center, library, schools, businesses, other entities), as well as engaging those who are unaffiliated with any local organization. See *Territorial Definition*, p 28.

Activate the youth community that uses this site. Children, youth, and young adults use the Light Rail station at Rainier Beach, and we observed interactions of many types. Many of the youth on the site know each other, and will stop to chat on the rail platform, in the crosswalks, or on the sidewalks. Activation could take many forms. Engage the youth who use this site — encourage them to generate ideas and create outreach opportunities. Partner with area schools to provide an local ‘community service’ opportunity for those in local schools, and who live nearby.

Support the site’s informal guardians through ties to formal guardianship. This means law enforcement (Seattle Police Department & Metro Transit Security, as well as fare enforcement, and any other official person who comes on to the site with enforcement tools should communicate their presence and concerns to those on the site who are providing more informal, daily guardianship; such as business owners, transit riders, nearby community groups. Make sure the CPT officer for this site has strong connections to those anchor businesses here, and that they can reach each other to discuss ongoing safety or disturbance issues.



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Appendix

- i CPTED concepts
- ii CPTED site analysis tools
- iii Barrier plants for CPTED
- iv Lighting Resources (Pacific NW) for CPTED

Important Environmental Concepts

for CPTED Practice

Site Activity Patterns & Conflict of Use

Public places are often designed with specific activities in mind, or a range of similar activities. These may include places to walk, play, gather, eat, enjoy nature, catch the bus, drive a car. When dedicated activity zones collide, or are incompatible, ***competition for use can create disorderly patterns***. These zone transitions create confusion and disorder in recognizable patterns which in turn can allow crime or disturbance to become a built-in part of the environment.

Opportunistic Crime

Many crimes are unplanned results of ideal conditions that present low-risk opportunities to a potential offender. Some of these conditions we evaluate are ***crowding, perceptions of anonymity*** on a site, and the ***presence of vulnerable people***, especially in places with ***few capable guardians***.

Historical Use & Cultural Importance

Public places can be important to many people for different reasons. Some sites have ***culturally or historically important patterns of use associated with them***. Reputation of a space can resonate through time and affect how we use the site regardless of how the present use relates to the previous reputation. Considering these patterns may be a very important part in changing sites for increased safety.

Quality of the Sensory Environment

Our sensory environment includes vision, hearing, smell, texture and touch. Our senses are the way we gather information that leads us to feel safe or unsafe. The sensory features of our surroundings should not overwhelm, confuse, distract, or disable people.

The CPTED Principles – 5 site assessment tools

Natural Surveillance

Seeing into and out of a place is fundamental to safety. Natural surveillance is a way to describe characteristics of a site that afford site users the ability to see and be seen. 'Natural' indicates that this ability to see well is inherent in the environment itself and is a feature of the normal use of the space. Introduced features such as surveillance cameras, or formal site guardians, are not natural attributes of the space.

Access Control

Strategies that guide people through a space and clarify which parts of the space they are allowed to use. Access control must match the designation for the space. Some public places have little access control, where more private places demand strict control to keep users safe.

Territorial Definition

All space should declare clearly what it is designed to do. Defining space through recognizable patterns that reflect the desired use helps to reveal unwanted or abnormal uses of the place. Clear territorial definition includes orderly transition through use zones, well designated uses, appropriate signage, and empowering the 'capable' guardians of the site.

Image & Reputation

All places project a clear message about what is okay to do there. Sometimes the message indicates that nuisance or criminal behavior is acceptable. Sites also gain a reputation based on persistent image and historical use. Addressing image and reputation is fundamental to changing negative uses to positive uses and maintaining safe environments over time.

Community Activation

It takes an active and engaged community on site to achieve safe places. Connecting people to each other, to the place, and developing positive norms helps to increase safety.

Barrier Plants for CPTED

Barrier plants can be natural allies in your CPTED plan, giving you greater **access control** and **zone definition**.

Landscape planners call them "barrier plants" because they create a barrier to human activity – they are usually thorny or low, compact and dense.

Any plants can become detrimental to **natural surveillance**, so make sure you keep your barrier plants *limbed up 7 feet underneath, or trimmed down to 3 feet tall* – just like all landscape plants in CPTED practice.

In the Pacific Northwest, Oregon Grape and several species of native Rose are excellent barrier plant choices. Some commonly used barrier plants are considered *invasive* - English Holly, and some Barberry species are especially invasive.

Invasive species are species that spread aggressively and damage other plants, sometimes creating hazardous situations.

Please consider good horticulture practices when choosing barrier plants for CPTED applications. If you plan to use barrier plants, you can determine if they are invasive by checking with local extension agencies, or government departments that deal directly with parks and horticulture issues.

Exterior Lighting Resources for CPTED

Lighting Design Lab is a Pacific Northwest Utilities funded entity. They are in the industrial area south of downtown Seattle. They are helpful and knowledgeable, and will answer your questions!

<http://lightingdesignlab.com/>

The Lighting Design Lab has a good publications section, mostly focused on the mechanical applications and technical information about lighting; color rendering, occupancy sensors, lamp basics, etc.

<http://lightingdesignlab.com/publications>

IESNA is an international lighting standards and research organization – they have an excellent online tutorial on lighting basics.

<http://www.ies.org/lighting/index.cfm>

IESNA lighting basics – exterior applications: this is *especially good* for CPTED practices.

<http://www.ies.org/lighting/applications/exterior.cfm>

Here is a good, basic article on exterior lighting for safety:

<http://www.buildings.com/article-details/articleid/3084/title/exterior-lighting-for-safety-and-security.aspx>