

BRIDGE STREET DISTRICT

STREETScape CHARACTER

APRIL 07, 2014



AGENDA

- 1** COMMON FEATURES OF GREAT URBAN STREETS AND DISTRICTS
- 2** IDENTIFYING SIGNATURE STREETS IN THE DUBLIN BSD
- 3** PRINCIPLES & TOOLS FOR CREATING SIGNATURE STREETS
- 4** STREETScape MATERIALS INTRODUCTION & COST ANALYSIS
- 5** NEXT STEPS AND SCHEDULE

COMMON FEATURES OF
GREAT URBAN STREETS

transportation
& infrastructure

economic
development

energy &
environment

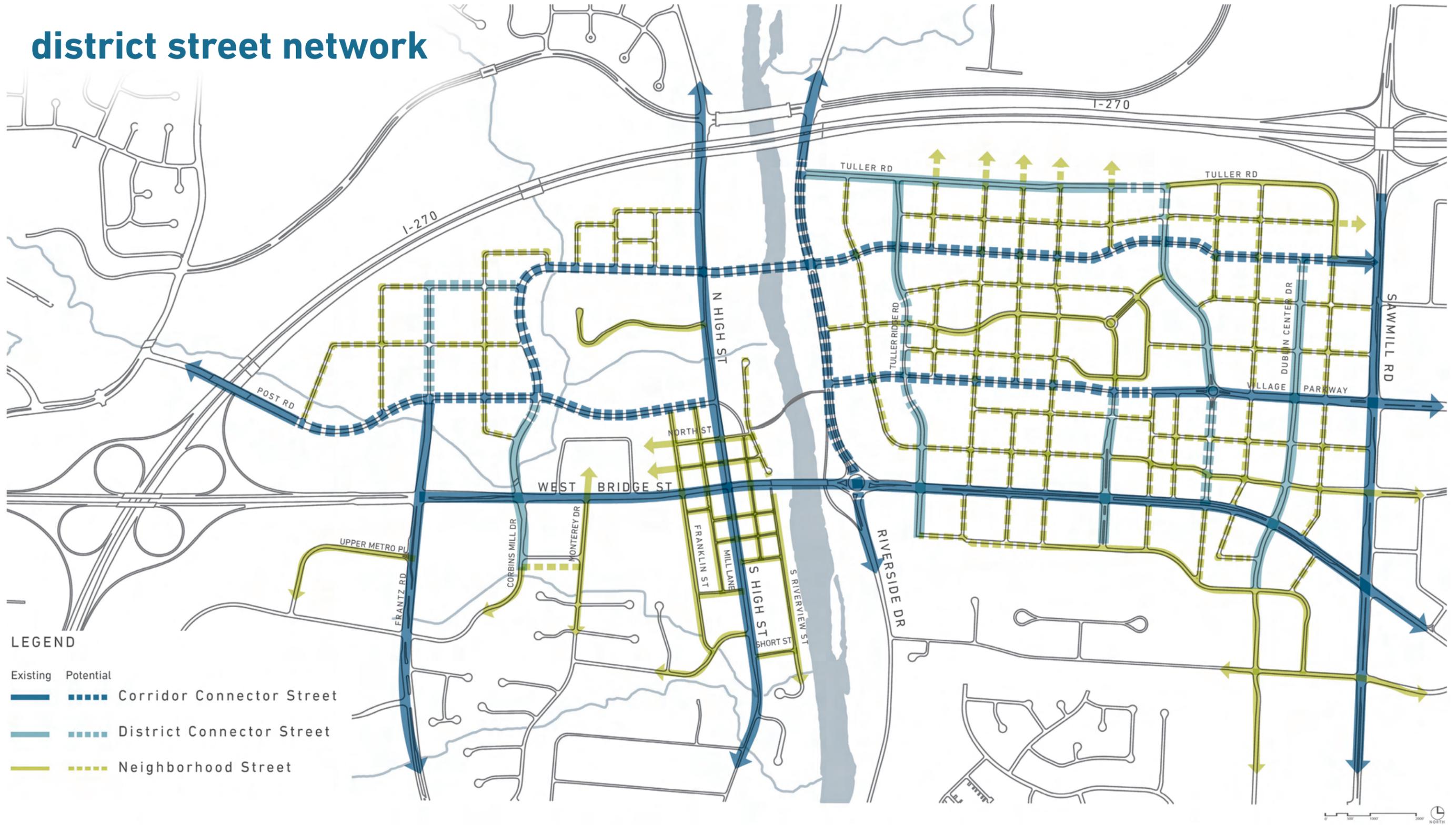
health
& social

image
& brand



IDENTIFYING DISTRICT SIGNATURE STREETS
BSD STREETScape CHARACTER

district street network



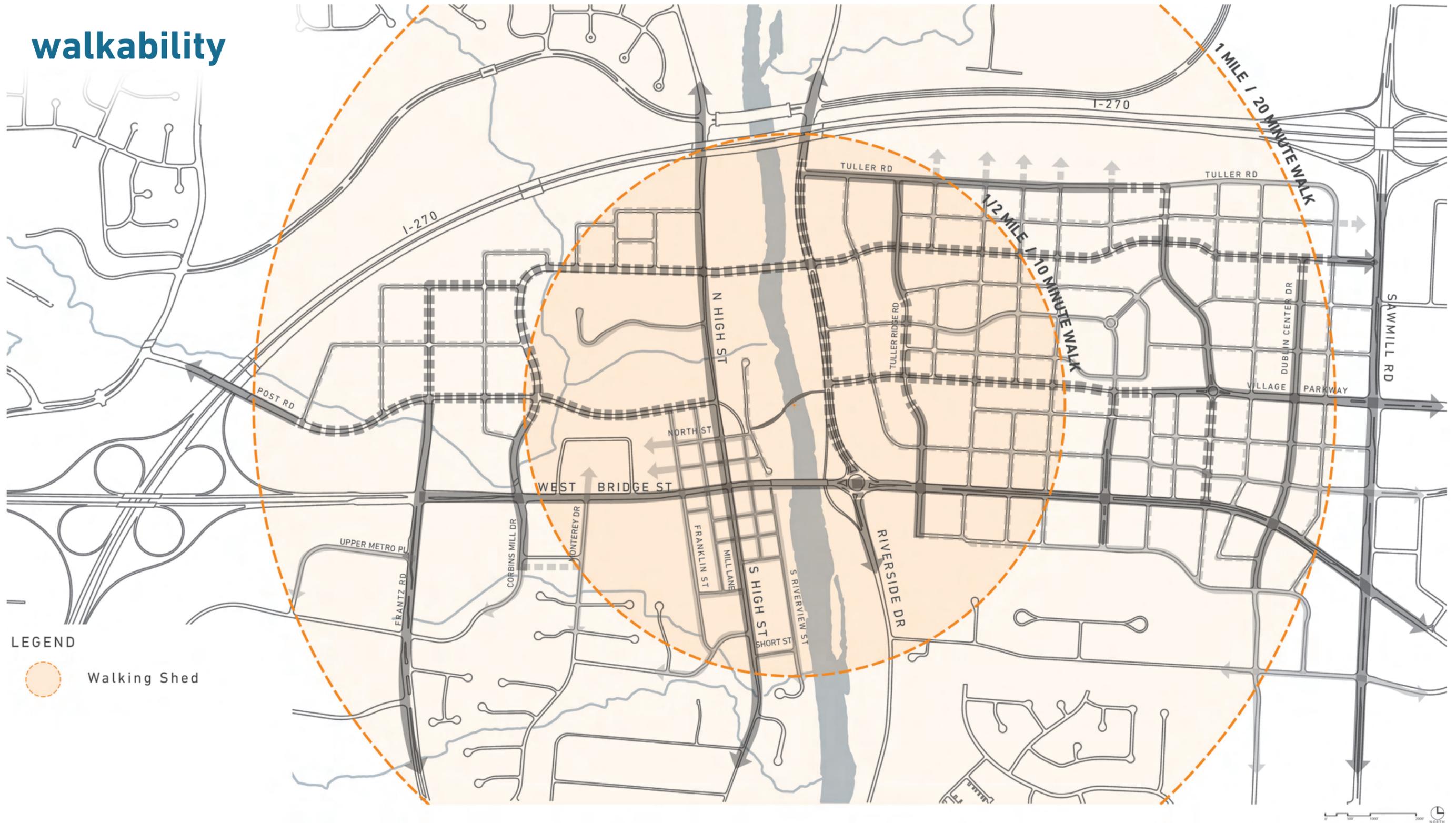
district signature streets



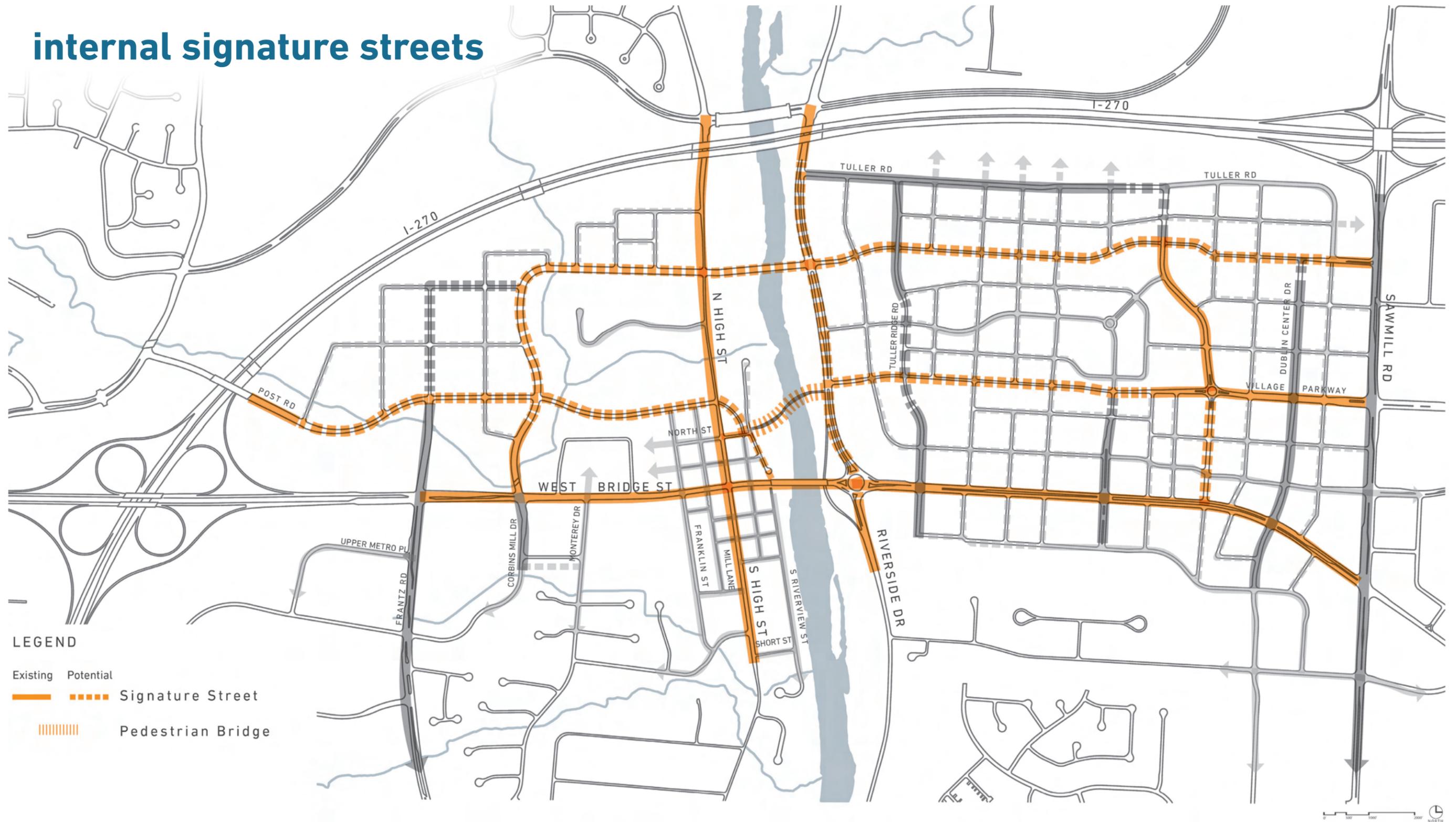
district thresholds



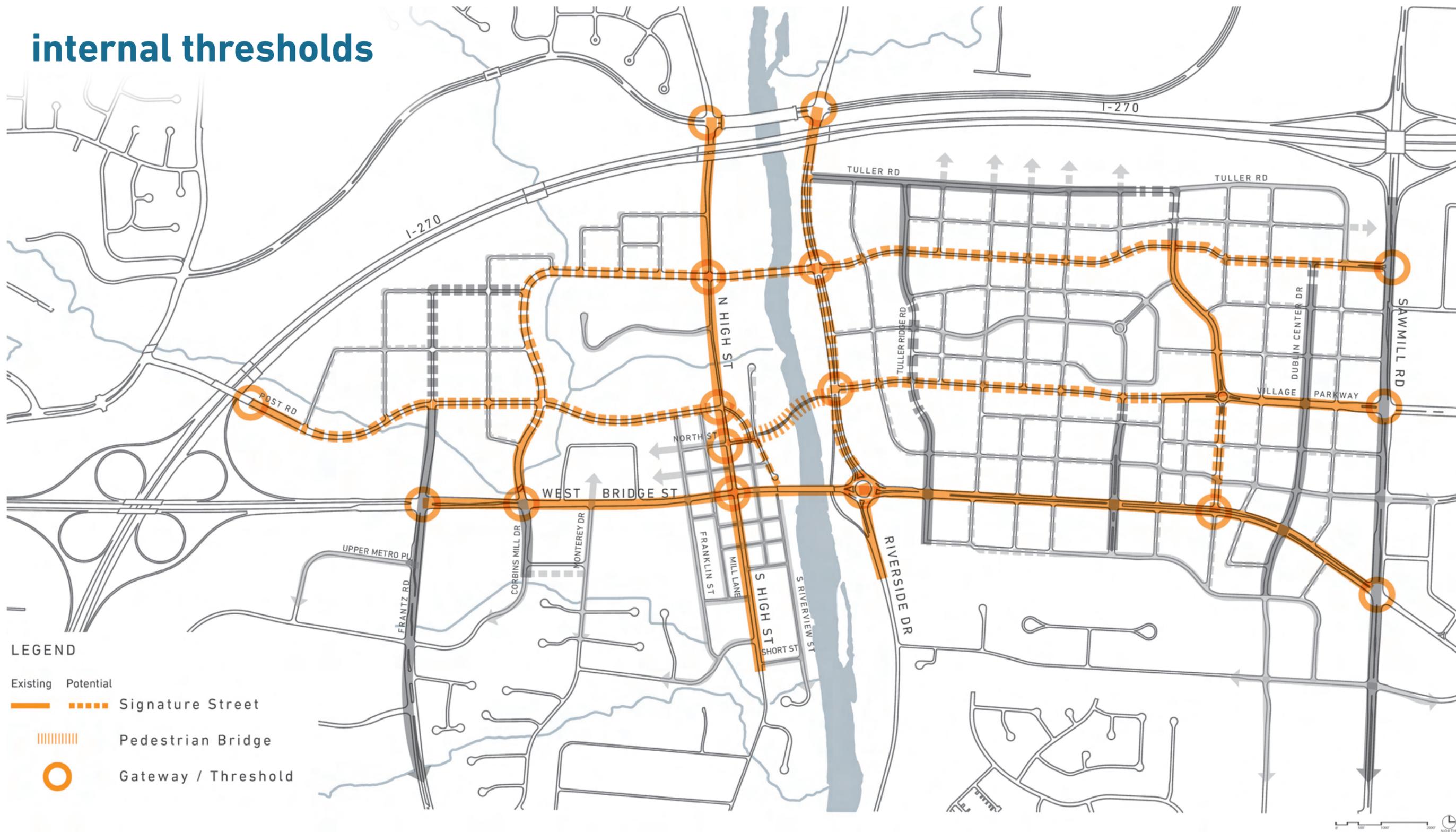
walkability



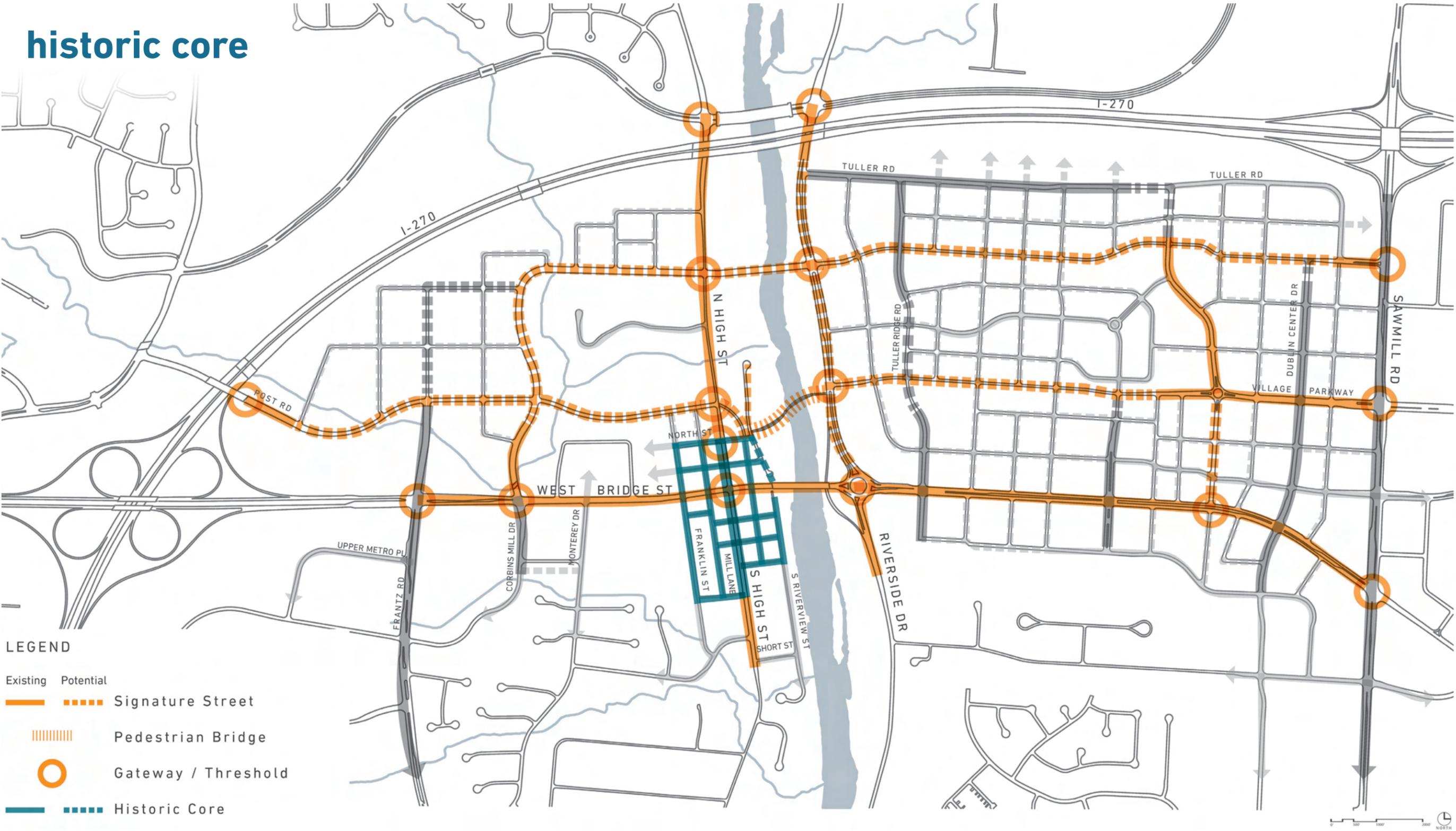
internal signature streets



internal thresholds



historic core

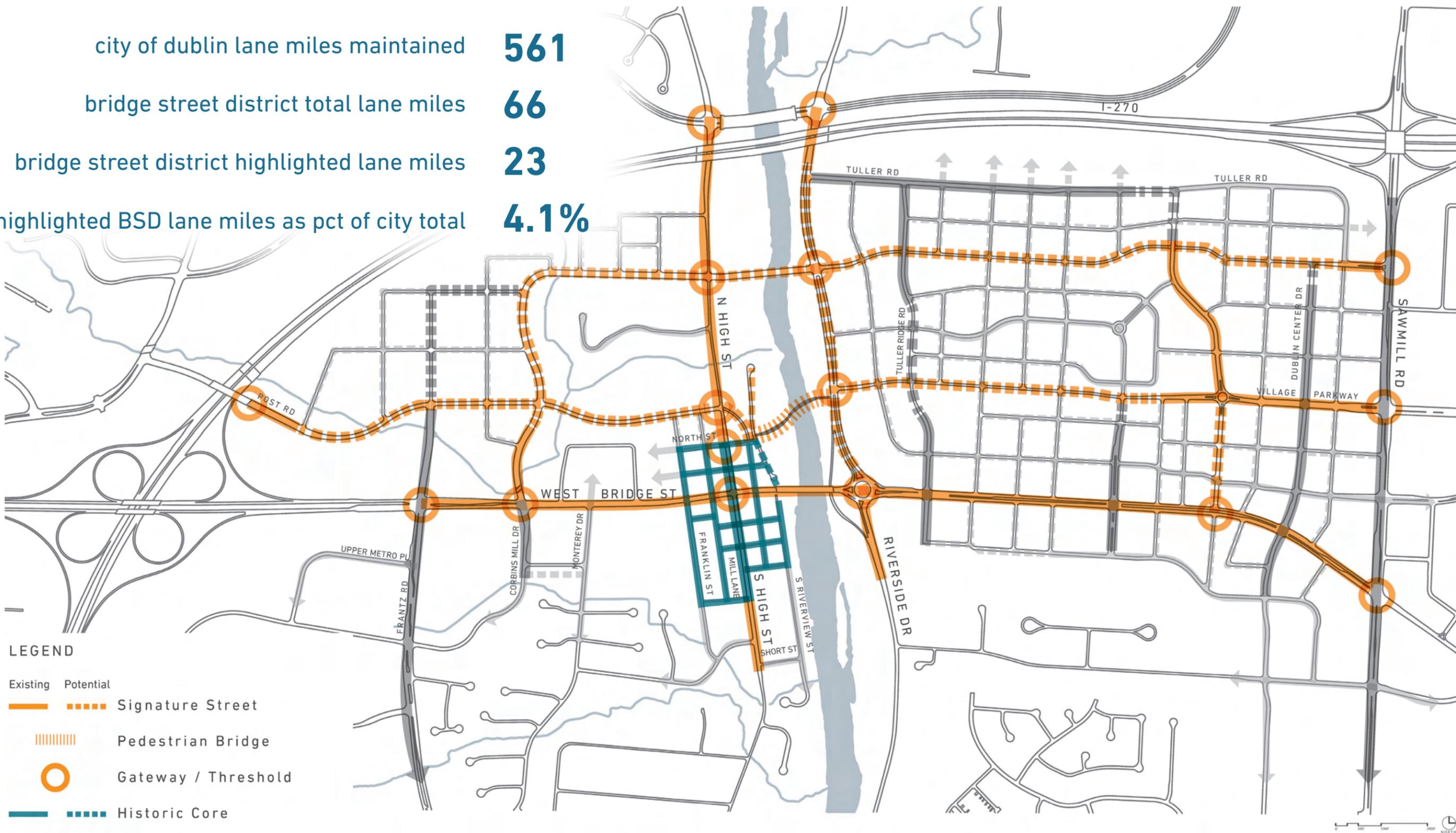


city of dublin lane miles maintained **561**

bridge street district total lane miles **66**

bridge street district highlighted lane miles **23**

highlighted BSD lane miles as pct of city total **4.1%**



PRINCIPLES FOR CREATING SIGNATURE STREETS
BSD STREETScape CHARACTER



**streets must be more than
public works: they must be
great public spaces**

public works



storage
maintenance
fleet
utility
infrastructure

utilitarian
functional
low maintenance
low risk
standardized

public works



parks
community center
public art
community pools
memorials

utilitarian
functional
low maintenance
low risk
standardized

public works

parks
community center
public art
community pools
memorials

memorable
comfortable
place-making
unique
designed

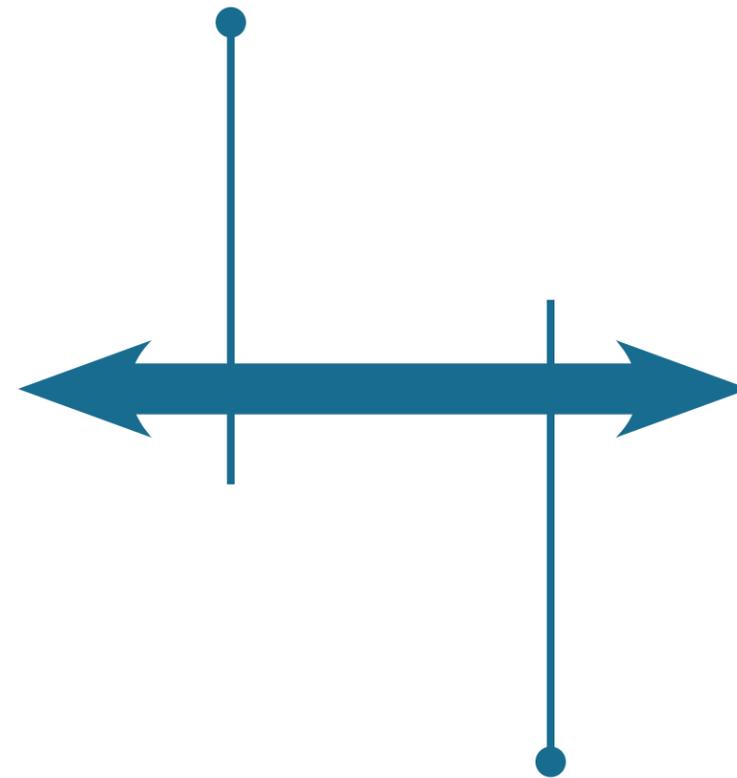


public works

streets?



utilitarian
functional
low maintenance
low risk
standardized



memorable
beautiful
place-making
unique
designed



streets?



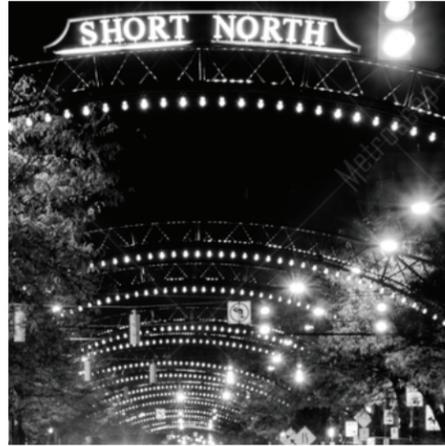
**signature streets should
define the district**



creative campus, columbus



alys beach, florida



short north, columbus



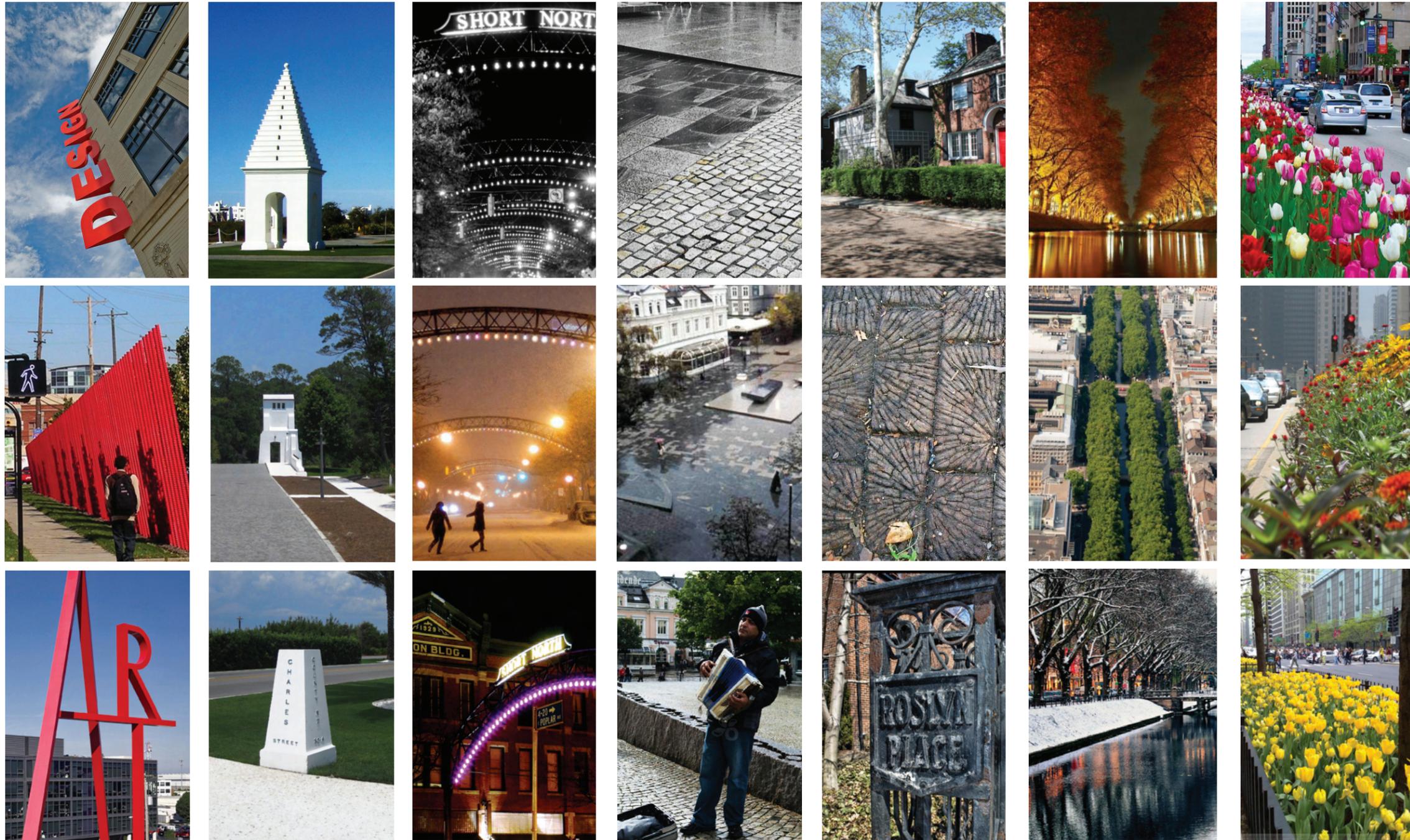
ole bulls plass, bergen



roslyn place, pittsburgh



königsallee, dusseldorf



michigan avenue, chicago



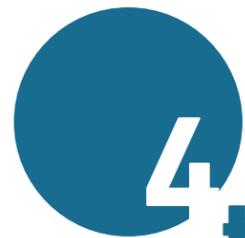
**internal streets should
blend district elements
with private development
brand**



MKSK

DUBLIN BSD STREETScape CHARACTER
CITY OF DUBLIN

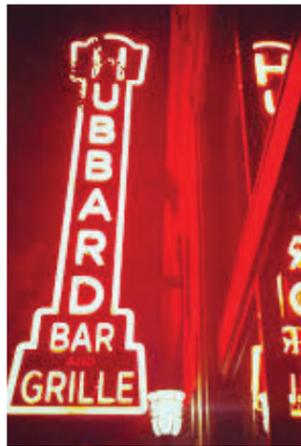
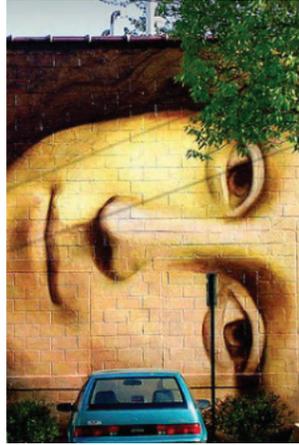
Date April 07, 2014



**the public realm should
provide visual cohesion.
the private realm should
provide visual variety**





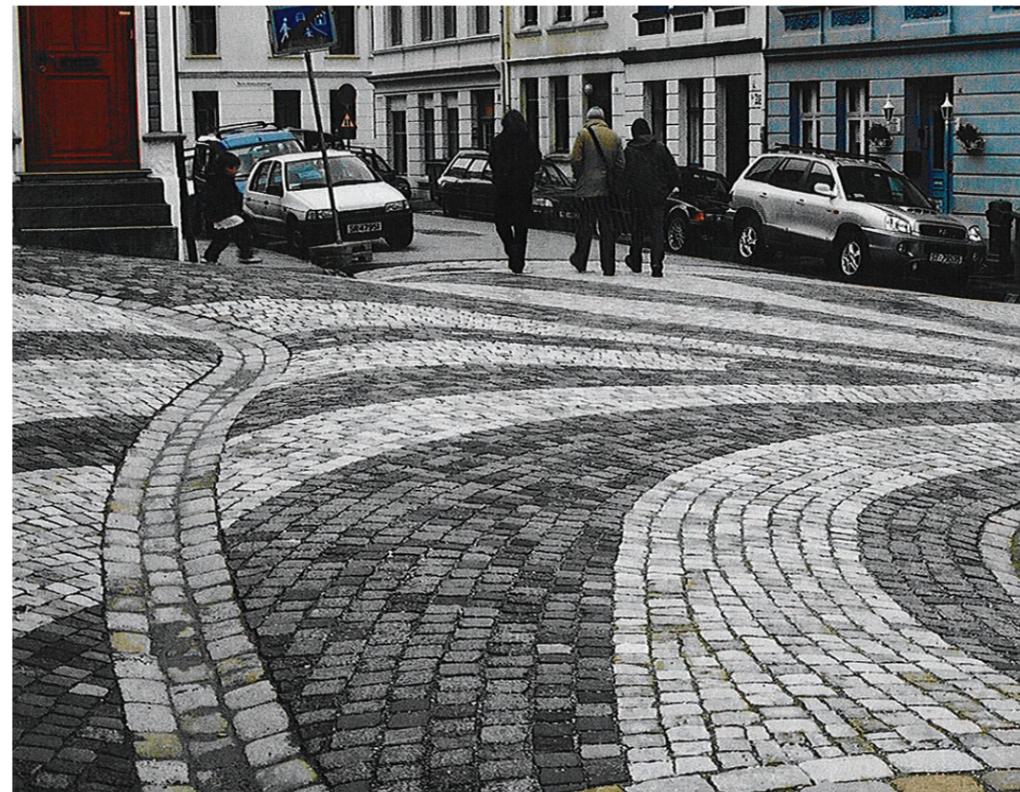


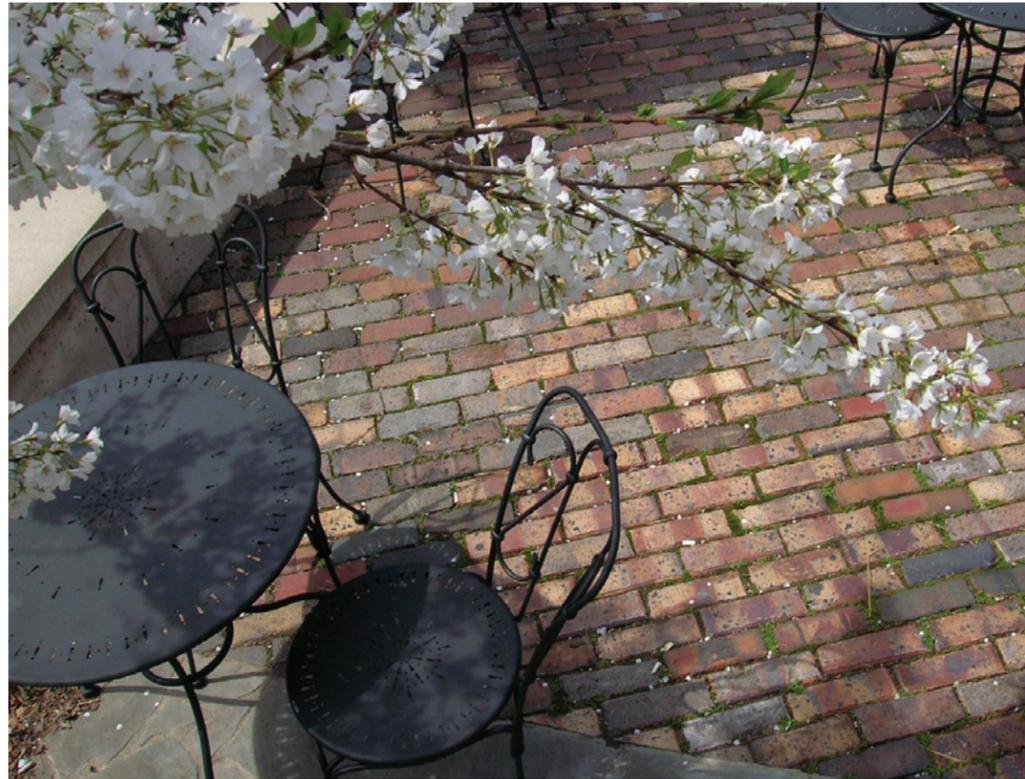
MATERIALS PRIMER SIGNATURE STREETS
BSD STREETScape CHARACTER

















nationwide boulevard

planned repairs 2014

pct total	qty	repair
100 %	80,000 sf	powerwash & re-sand joints
2.4 %	1,930 sf	repair street brick
0.07 %	65 sf	replace damaged sidewalk brick
0.3 %	8 lf	replace damaged curb
		address drainage at Marconi intersection
		repair initial construction flaws

nationwide boulevard

constructed 1999

brick paver	pine hall ironspot
granite curb	caledonia by polycor
street area	80,000sf
sidewalk area	88,000sf
curb length	3,200lf

	Install Cost	NPV 50 yrs, 2%
Granite Curb	\$65.00/lf	\$65.00/lf
Concrete Curb	\$27.75/lf	\$58.41/lf

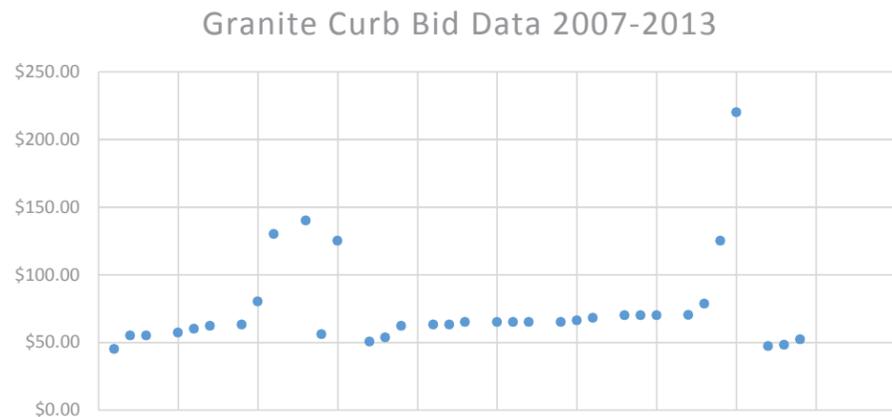
Input	
Granite Initial Cost	\$65.00 per linear foot
Granite Removal & Reset Cost	\$0.00 per linear foot
Granite Replacement Rate	Assume 50 Years*
Concrete Initial Cost	\$27.75 per linear foot
Concrete Removal & Disposal Cost	\$3.50 per linear foot
Concrete Replacement Rate	Assume 25 Years

Discount Rates	25 Year PV	50 Year PV	75 Year PV
2.00%	0.6095	0.3715	0.2265
3.00%	0.4776	0.2281	0.1089
4.00%	0.3751	0.1407	0.0528
5.00%	0.2953	0.0872	0.0258

Real Treasury Interest Rate on a 30-year Treasury		
	Year	Ending Rate
3.70% 3/13/14 Spot Rate	2009	4.63%
	2010	4.34%
3.75% 5 yr average	2011	2.89%
	2012	2.95%
	2013	3.96%

Net Present Value Analysis

Discount Rate	Cost At Installation	NPV 25 Years	NPV 50 Years
2% Discount Rate			
Granite	\$65.00	\$65.00	\$65.00
Concrete	\$27.75	\$46.80	\$58.41
3% Discount Rate			
Granite	\$65.00	\$65.00	\$65.00
Concrete	\$27.75	\$42.68	\$49.80
4% Discount Rate			
Granite	\$65.00	\$65.00	\$65.00
Concrete	\$27.75	\$39.47	\$43.87
5% Discount Rate			
Granite	\$65.00	\$65.00	\$65.00
Concrete	\$27.75	\$36.98	\$39.70



Bid Data Summary	Granite	Concrete
Min	\$45.00	\$9.00
Max	\$220.00	\$44.00
Median	\$65.00	\$27.75
Mean	\$74.40	\$26.51
Total Bids	34	48

	Install Cost	NPV 60 yrs, 2%
Brick Walk	\$16.00/lf	\$16.00/lf
Concrete Walk	\$ 5.90/lf	\$11.68/lf

Input	
Brick Initial Cost	\$16.00 per linear foot
Brick Removal & Reset Cost	\$0.00 per linear foot
Brick Replacement Rate	Assume 60 Years
Concrete Initial Cost	\$5.83 per linear foot
Concrete Removal & Disposal Cost	\$1.00 per linear foot
Concrete Replacement Rate	Assume 30 Years

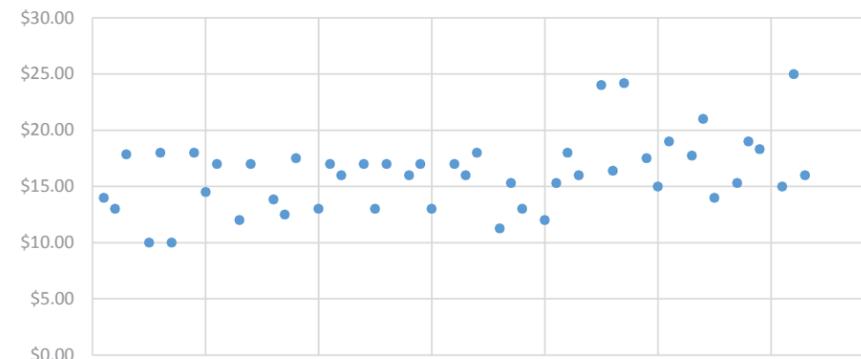
Discount Rates	30 Year PV	60 Year PV	90 Year PV
2.00%	0.5521	0.3048	0.1683
3.00%	0.4120	0.1697	0.0699
4.00%	0.3083	0.0951	0.0293
5.00%	0.2314	0.0535	0.0124

Real Treasury Interest Rate on a 30-year Treasury		
	Year	Ending Rate
3.70% 3/13/14 Spot Rate	2009	4.63%
	2010	4.34%
3.75% 5 yr average	2011	2.89%
	2012	2.95%
	2013	3.96%

Net Present Value Analysis

Discount Rate	Cost At Installation	NPV 30 Years	NPV 60 Years
2% Discount Rate			
Brick	\$16.00	\$16.00	\$16.00
Concrete	\$5.90	\$9.60	\$11.68
3% Discount Rate			
Brick	\$16.00	\$16.00	\$16.00
Concrete	\$6.90	\$8.64	\$9.80
4% Discount Rate			
Brick	\$16.00	\$16.00	\$16.00
Concrete	\$7.90	\$7.94	\$8.59
5% Discount Rate			
Brick	\$16.00	\$16.00	\$16.00
Concrete	\$8.90	\$7.41	\$7.78

Brick Bid Data 2007-2013



Bid Data Summary	Brick	Concrete
Min	\$10.00	\$2.95
Max	\$25.00	\$9.05
Median	\$16.00	\$5.83
Mean	\$16.11	\$5.69
Total Bids	48	48

SUMMARY AND NEXT STEPS

BSD STREETScape CHARACTER

1 streets must be more than public works: they must be great public spaces

2 signature streets should define the district

3 internal streets should blend district elements with private development brand

4 the public realm should provide visual cohesion. the private realm should provide visual variety



DECISION POINTS

BICYCLE FACILITIES, PEDESTRIAN WAY, AND STREET PARKING

STREET PAVEMENT, SIDEWALK PAVEMENT, AND CURB MATERIALS

STREET LIGHTING AND STREET FURNISHING SELECTIONS

JOHN SHIELDS PARKWAY - CONCEPTUAL GREEN DESIGN

STREET TREES AND LANDSCAPE

SIGNATURE FEATURES