

CITY OF FRANKLIN, TENNESSEE

Columbia Avenue

Widening & Improvements Project

Public Meeting | May 16, 2017



BWSC | BARGE
WAGGONER
SUMNER &
CANNON, INC.

Agenda

6:00 – 6:30

Formal Presentation

6:30 – 8:00

Town Hall Forum



Project Location

Project Timeline

Planning



Project Timeline

Planning, continued

Preliminary Design

**September
2015**

TDOT Notice to Proceed for Preliminary Engineering (Environmental) Phase

**May
2016**

Public Meeting #1: Corridor Visioning

**January
2017**

Public Meeting #2: Concept Layout

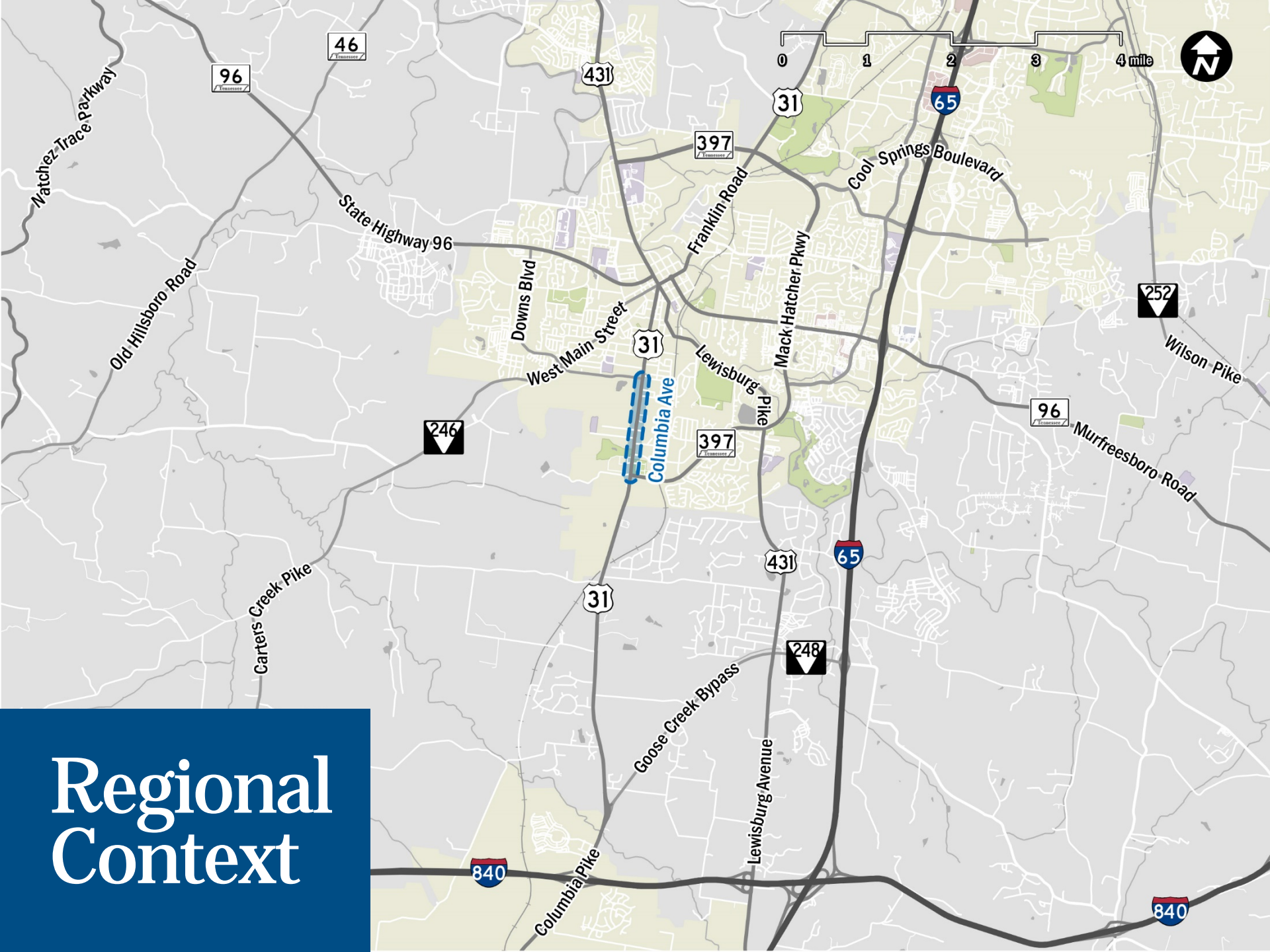
**May
2017**

Public Meeting #3: Concept Analysis (today!) Plus meetings with BOMA and property owners

**Next
Step:**

BOMA selects preferred concept to bring forward to detailed design

Regional Context

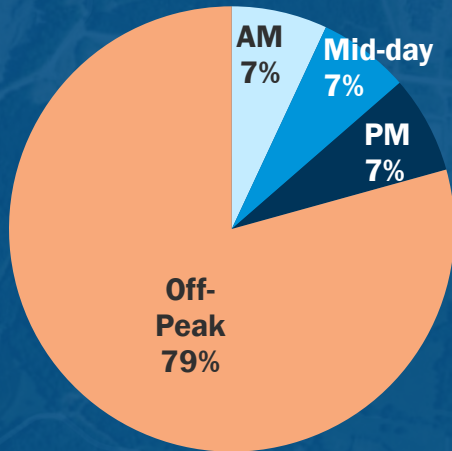


May 2016

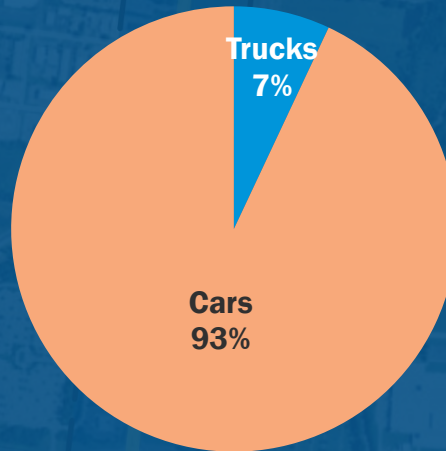
18,900

vehicles/day

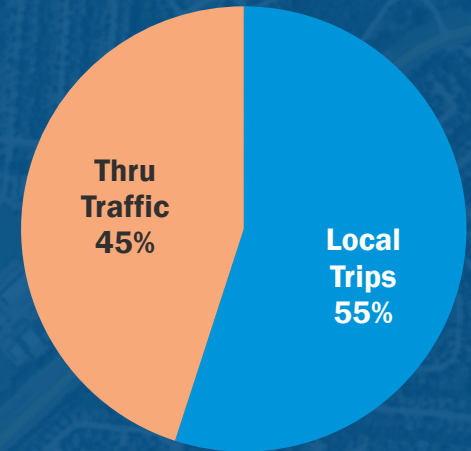
DAILY TRAFFIC



TRAFFIC COMPOSITION



TRAFFIC TYPE



11% Peak

April 2016 travel time

from Battle Avenue to
Winstead Elementary School,
in minutes.

3:10

with no traffic

5:10

average day

10:20

longest recorded

Future Growth

2016

EXISTING
CONDITIONS

based on data from City and
TDOT count stations

18,900

vehicles/day

2021

BUILD
YEAR

forecast conditions at
project completion

19,800

vehicles/day

2041

DESIGN
YEAR

improvements are designed to
accommodate 20 years of growth

25,400

vehicles/day

3

components of
comparison

Operations

Safety

Physical
Impact

Corridor Concepts

Example: Columbia Avenue at Southeast Parkway



Four-Lane Median Divided Concept

with center median
and left-turn lanes



Five-Lane Signalized Concept

with continuous
two-way, left-turn lane

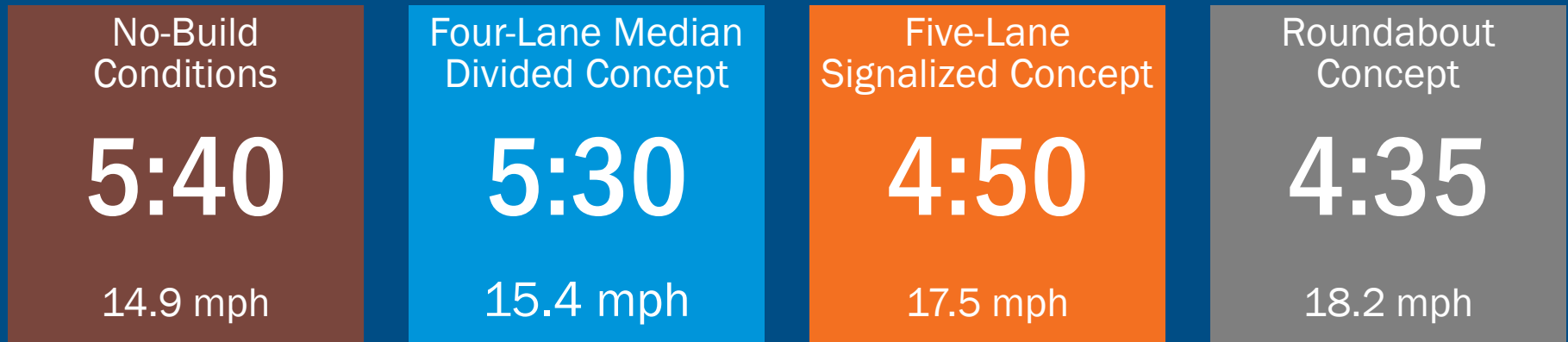


Roundabout Concept

with 4-foot
center median

Operations

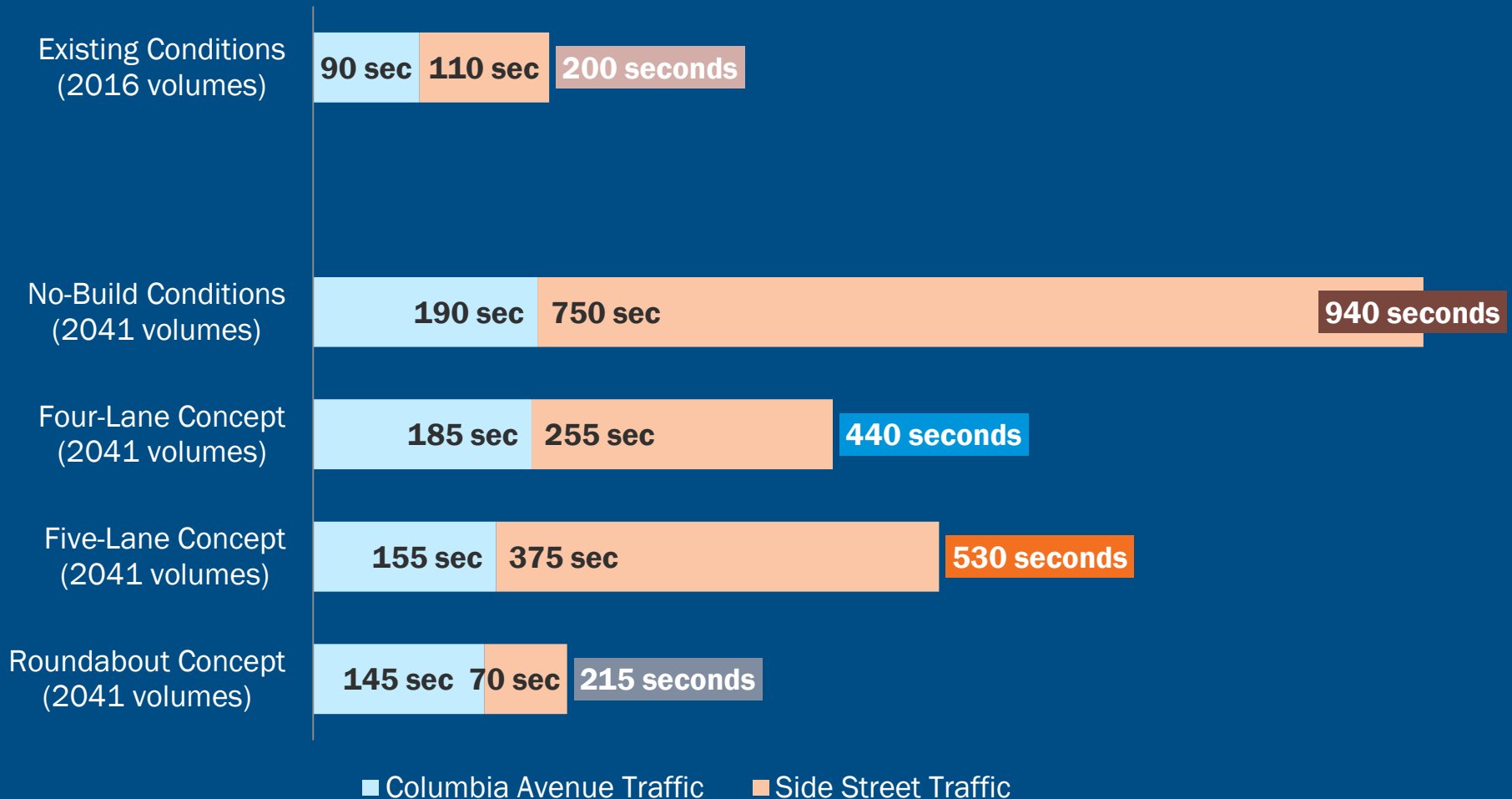
Anticipated Travel Time and Average Speed, 2041 Volumes (Columbia Avenue)



Average of 35,000+ simulated vehicles between Fairground Street and Winstead Hill Park

Operations

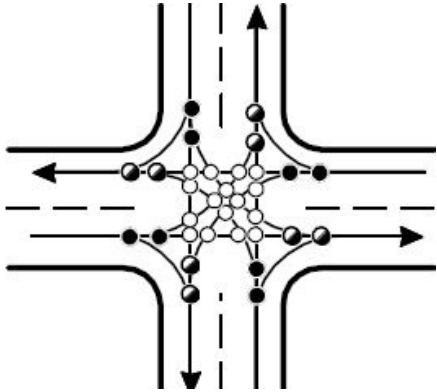
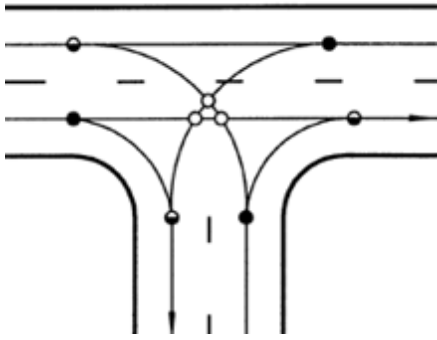
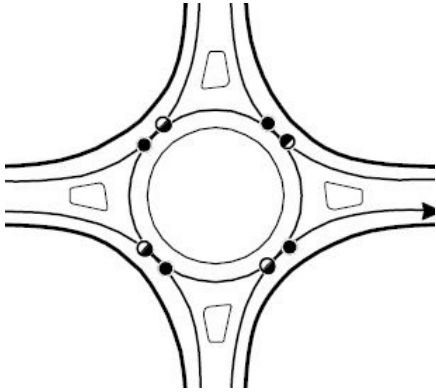
Corridor Delay



Safety

Vehicle Conflict Points (Potential for Collision)

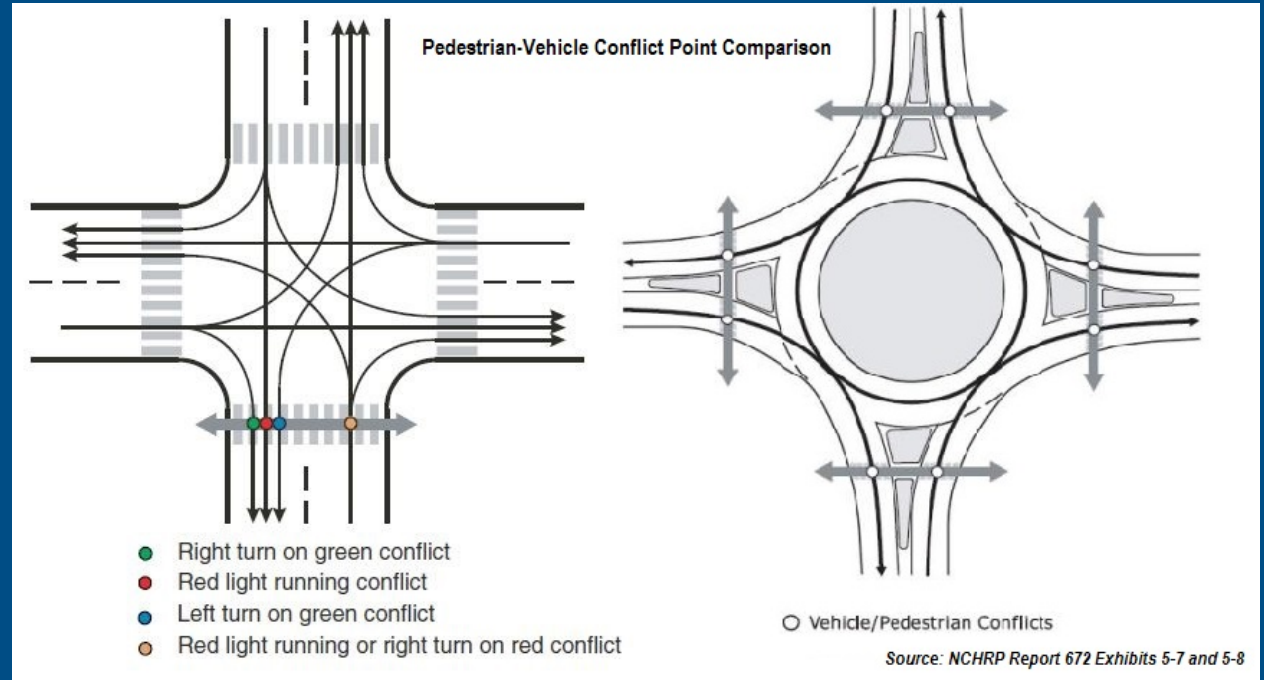
Source: FHWA

<ul style="list-style-type: none"> ● Diverging ● Merging ○ Crossing 			
Conflict Type	Signal	Driveway (full access)	Roundabout
Diverging	8	3	4
Merging	8	3	4
Crossing	16	3	0
Total Vehicle Conflicts	32	9	8

Safety

Pedestrian-Vehicle Conflict Points (Potential for Collision)

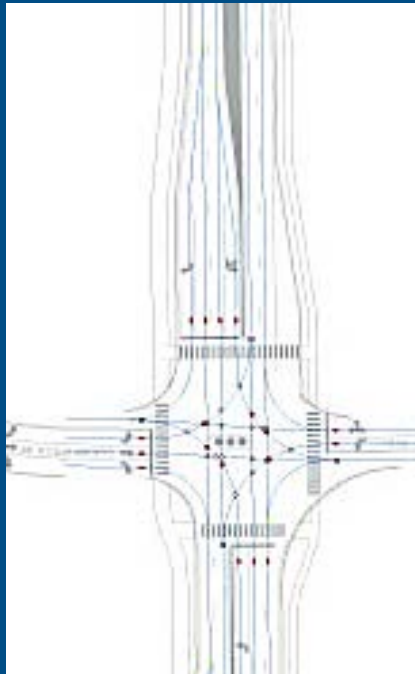
Source: FHWA



	Signal	Roundabout
Total Ped/Bike Conflicts	16	8

Safety

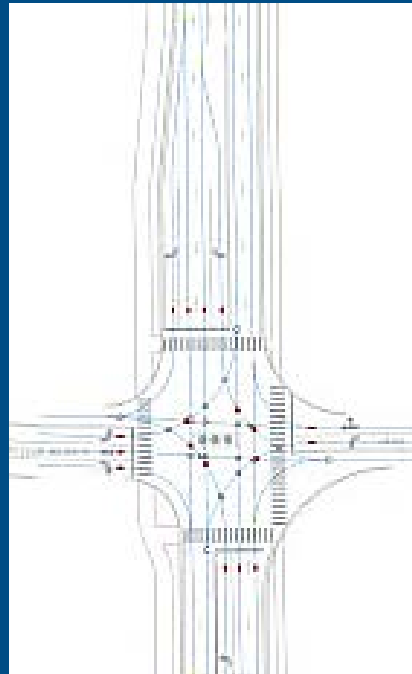
Columbia Avenue Conflict Points



Four-Lane Median
Divided Concept

340

conflict points

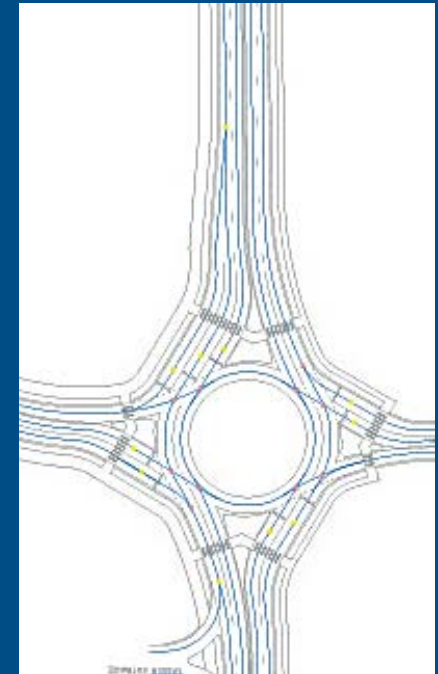


Five-Lane
Signalized Concept

583

conflict points

(377 with access mgmt)



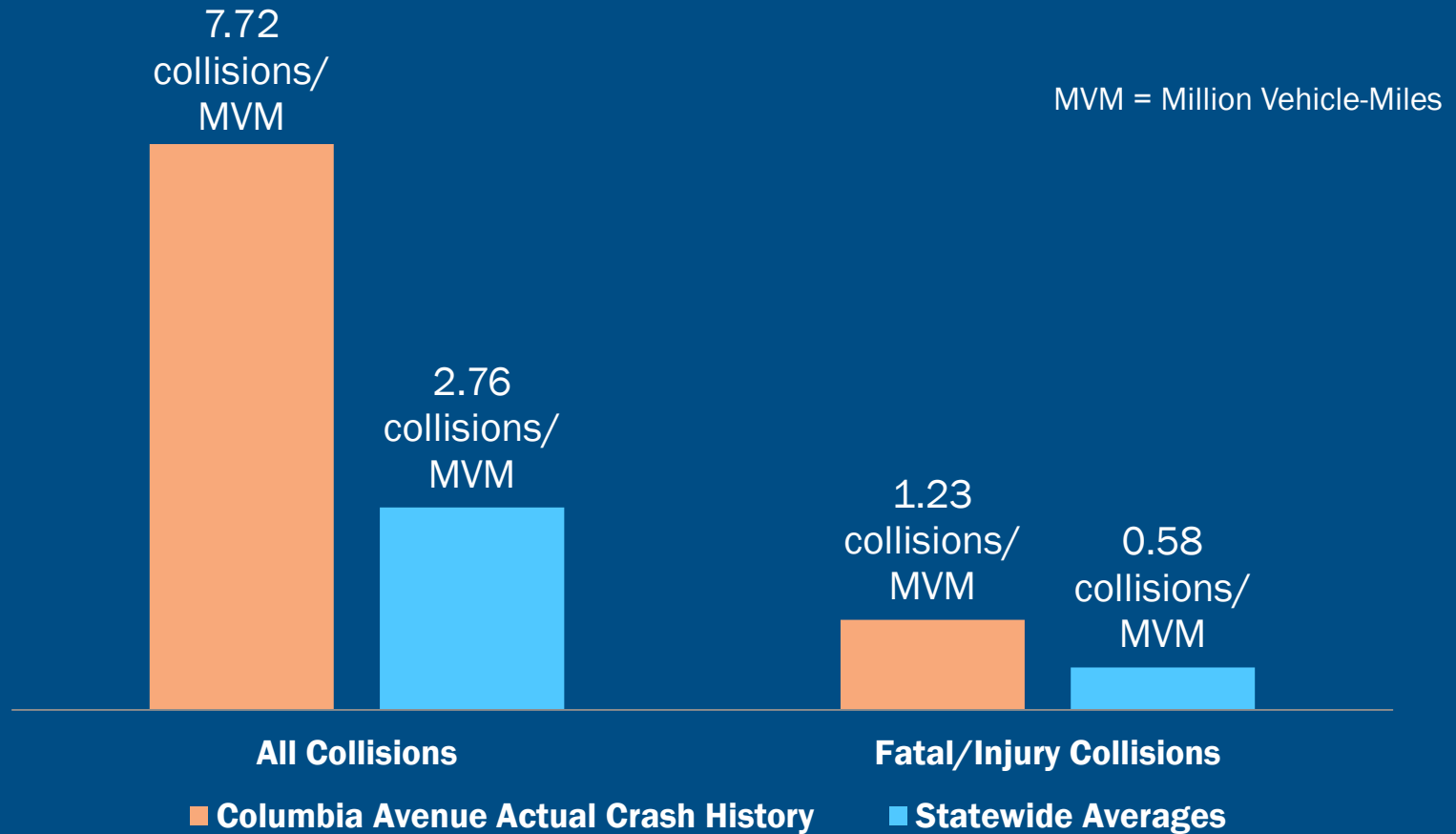
Roundabout
Concept

243

conflict points

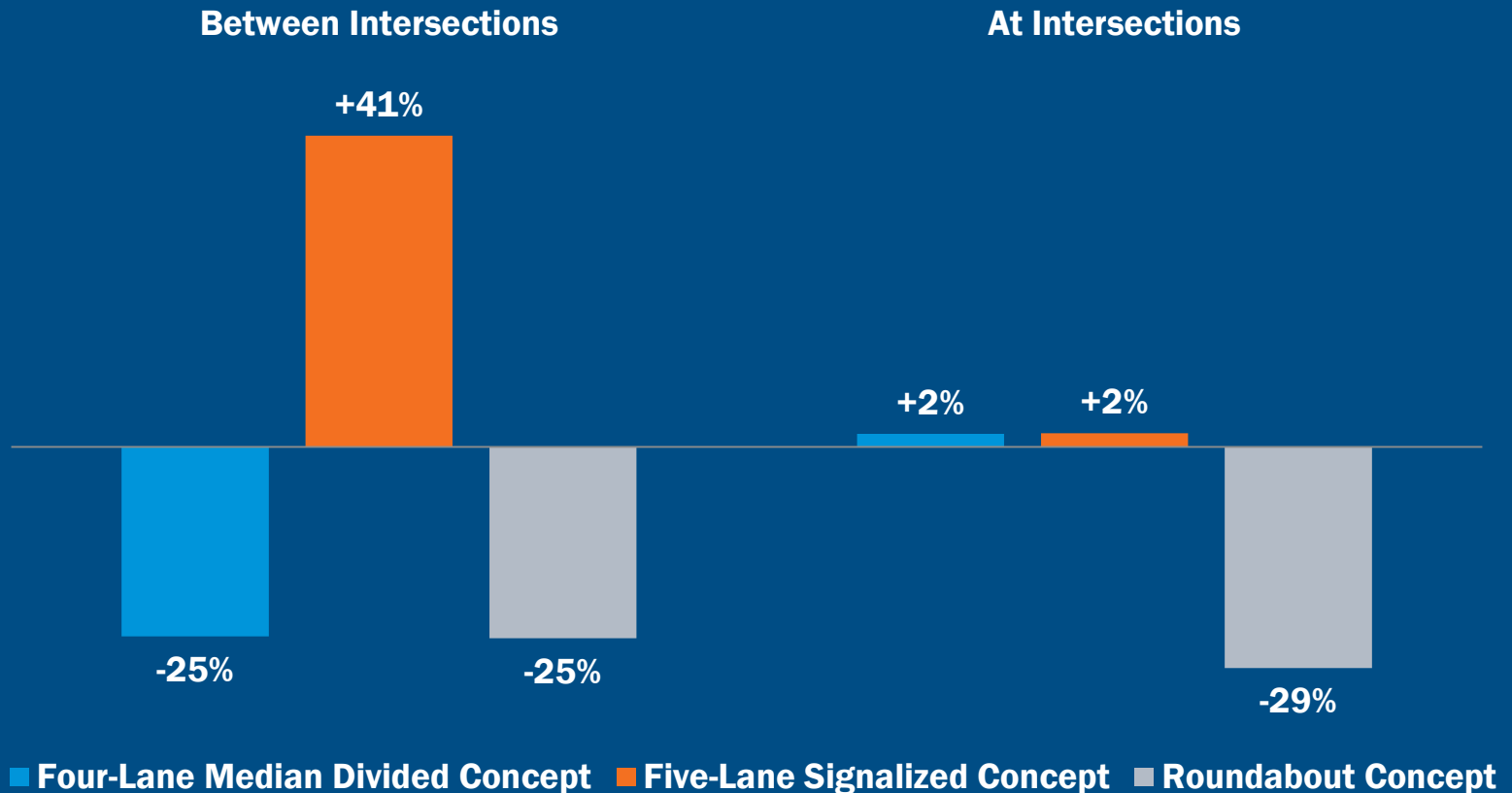
Safety

Collision Data (2013–2016)



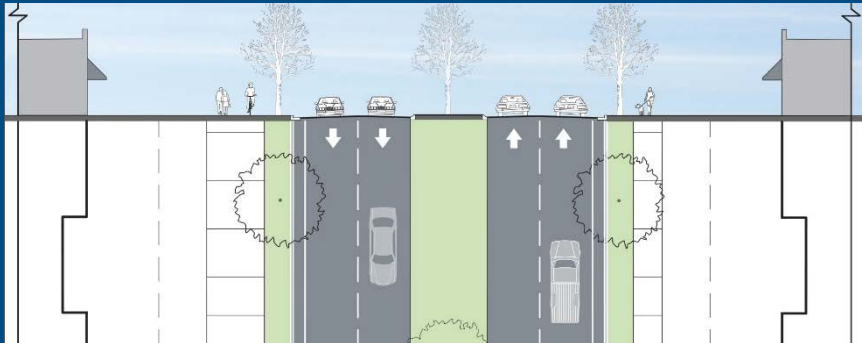
Safety

2041 Anticipated Change in Traffic Collisions

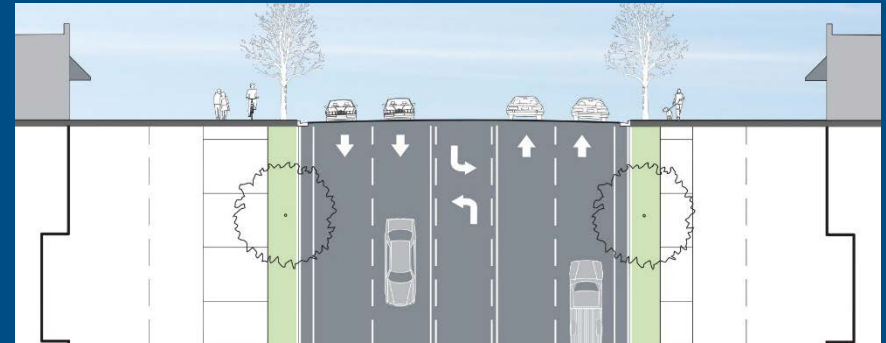


Physical Impact

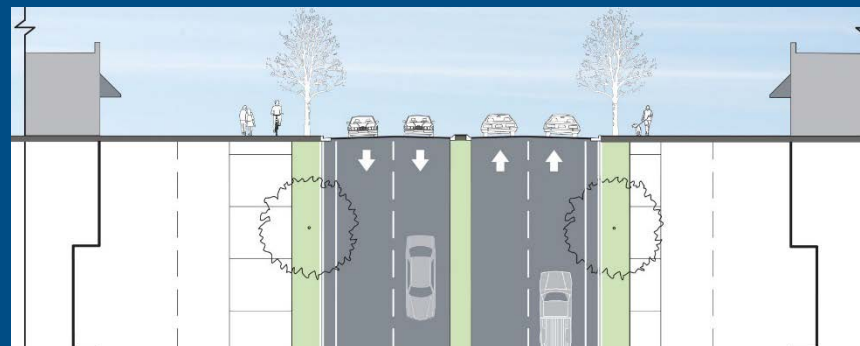
Typical Sections



Four-Lane Median Divided Concept
95' wide back of walk to back of walk



Five-Lane Signalized Concept
91' wide back of walk to back of walk



Roundabout Concept
83' wide back of walk to back of walk

Physical Impact



Four-Lane Median
Divided Concept



Five-Lane Signalized
Concept



Roundabout
Concept

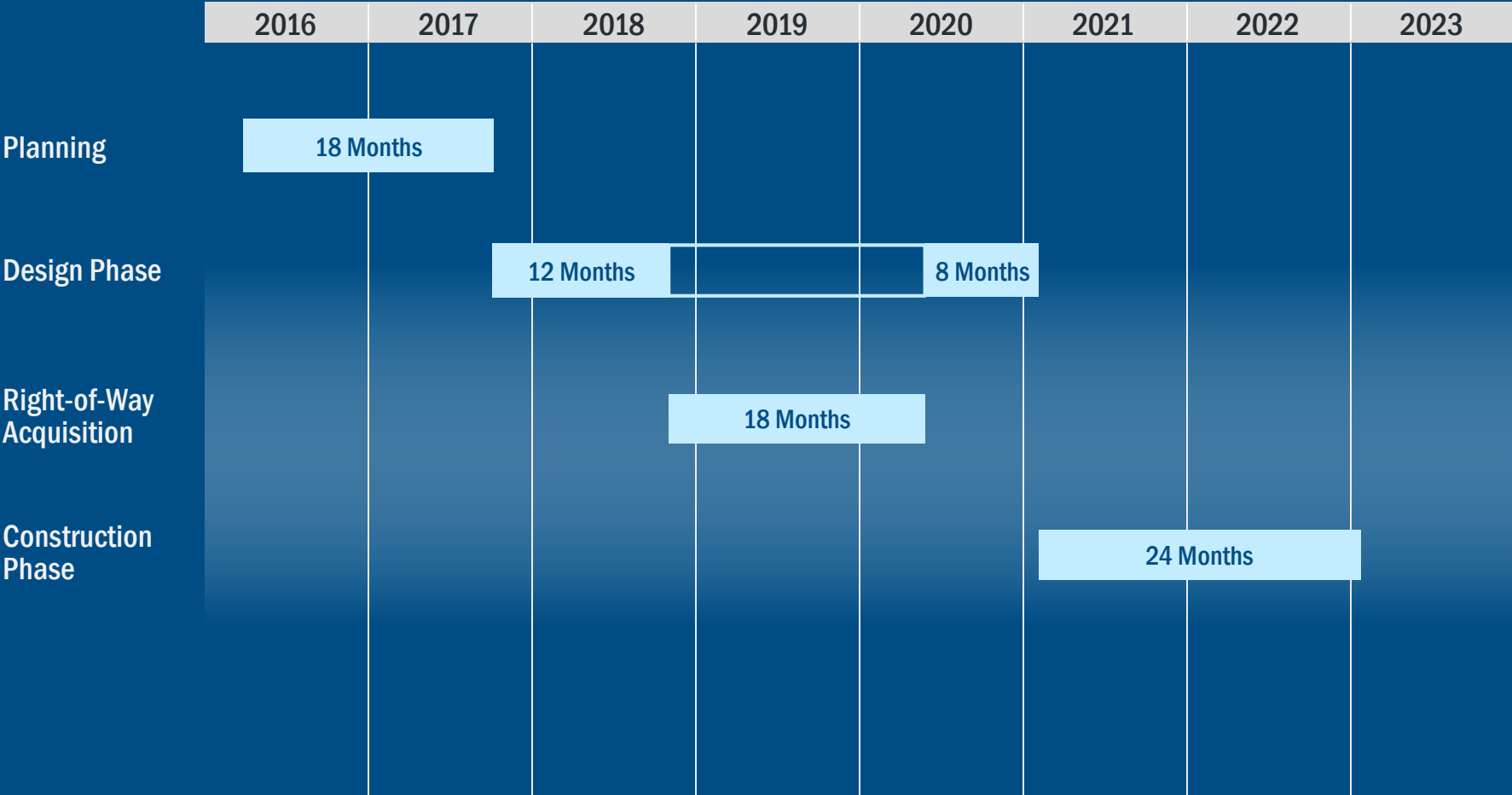
Data Summary

		Four-Lane Median Divided Concept	Five-Lane Signalized Concept	Roundabout Concept
Operational Performance	Thru Traffic Delay	185 sec/veh	155 sec/veh	145 sec/veh
	Side Street Delay	255 sec/veh	375 sec/veh	70 sec/veh
	Average Travel Time	5:30	4:50	4:35
Safety Performance	Between Intersections	-25% fewer collisions	+41% more collisions	-25% fewer collisions
	At Intersections	+2% more collisions	+2% more collisions	-29% fewer collisions
Physical Impact	Between Intersections	95' total width	91' total width	83' total width
	At Intersections	AVERAGE footprint	AVERAGE footprint	INCREASED footprint

next step

BOMA selects
preferred concept
to bring forward to
detailed design.

Schedule



Thank you for coming!

Please visit
the website

franklintn.gov/columbiaavenue

Questions?

Construction Concerns

What can be done to mitigate disruption to local businesses during construction?

- **INCENTIVE** – Offer incentive to contractor to complete construction early.
- **NIGHT WORK** – Perform as much work as possible at night (e.g. during off-peak traffic) to minimize disturbance to surrounding properties.
- **HOUSEKEEPING** – Include items such as frequent street sweeping in the construction contract to minimize dust and debris in the roadway during construction.
- **INFORMATION** – Develop and maintain dedicated website to provide *up-to-date* project information to the public and business owners (Example: www.cumberlandconnect.com)
- **PARTNERSHIP** – Partner with willing local businesses to reach-out to customers and promote area business (i.e. City-sponsored giveaways, etc.)

How can we focus on making this project a “win-win” for all involved?