



Lower King Street Multimodal Feasibility Study

Public Meeting

May 29, 2014

Meeting Agenda

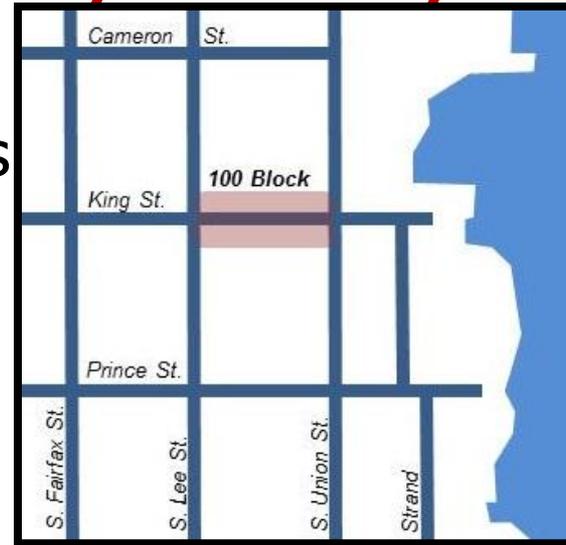
- Project Overview, Goals, Challenges
- King Street Today
- Options & Goals/Values
 - Transportation Analysis
 - Trolley Routing Options
- Concepts
- Next Steps



Project Overview:

This is a Feasibility Study

- Civic Engagement
- Existing Conditions Analysis
 - Field Assessments
 - Traffic Counts (all modes!)
 - Capacity analysis at 15 intersections
- Future Conditions Analysis
 - Future land uses
 - Capacity analysis at 15 intersections
 - Impacts & solutions for the closure of King St
- Recommendations of alternatives to enhance the way the street currently works



Project Goals and Challenges

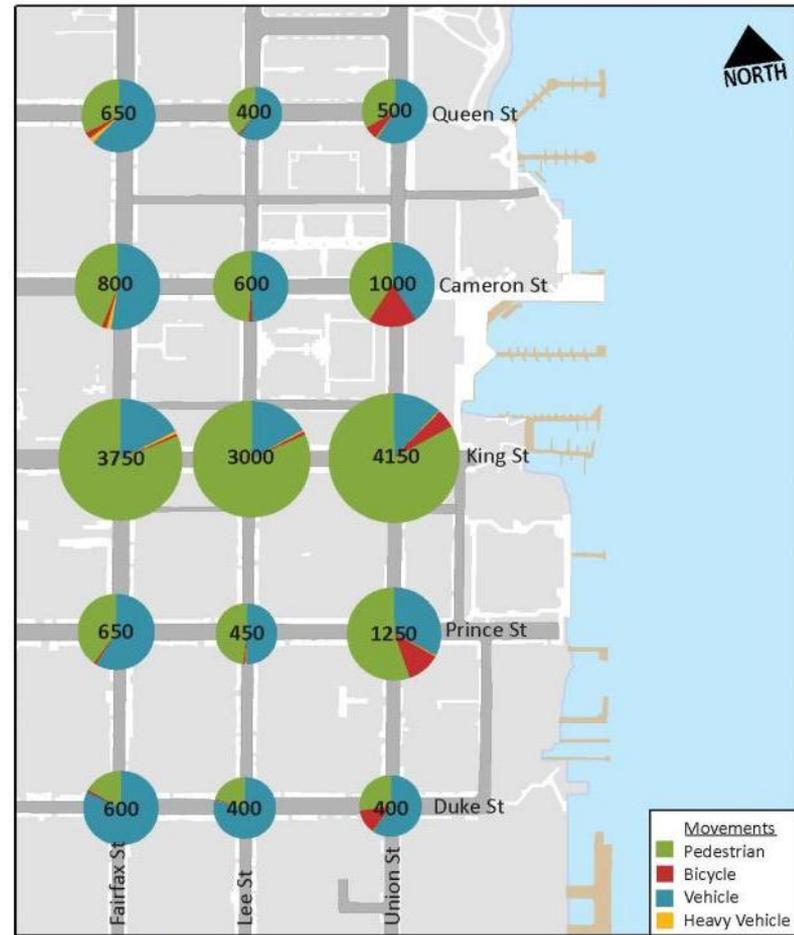
- **Balance the needs** of this dynamic, multi-modal street
- Transform the 100 block of King Street to a **gateway** to Old Town and the **Waterfront**
- Current design doesn't **match the demand**



King Street Today: Existing Multi-modal Volumes

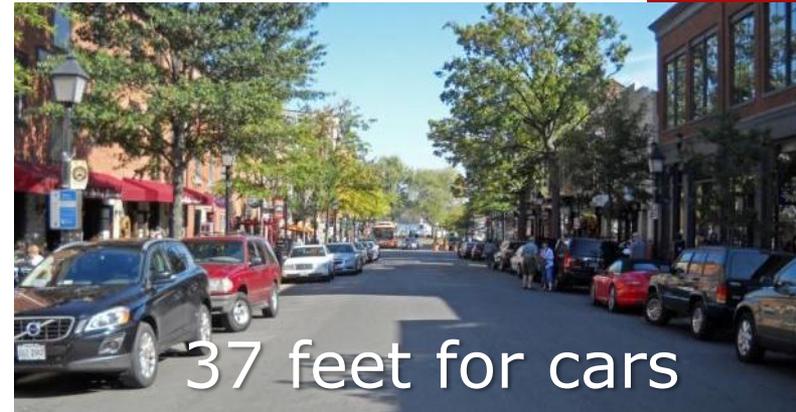


Friday Midday (12PM-1PM)



Saturday Afternoon
(4PM-5PM)

King Street Today: Not enough space for pedestrians

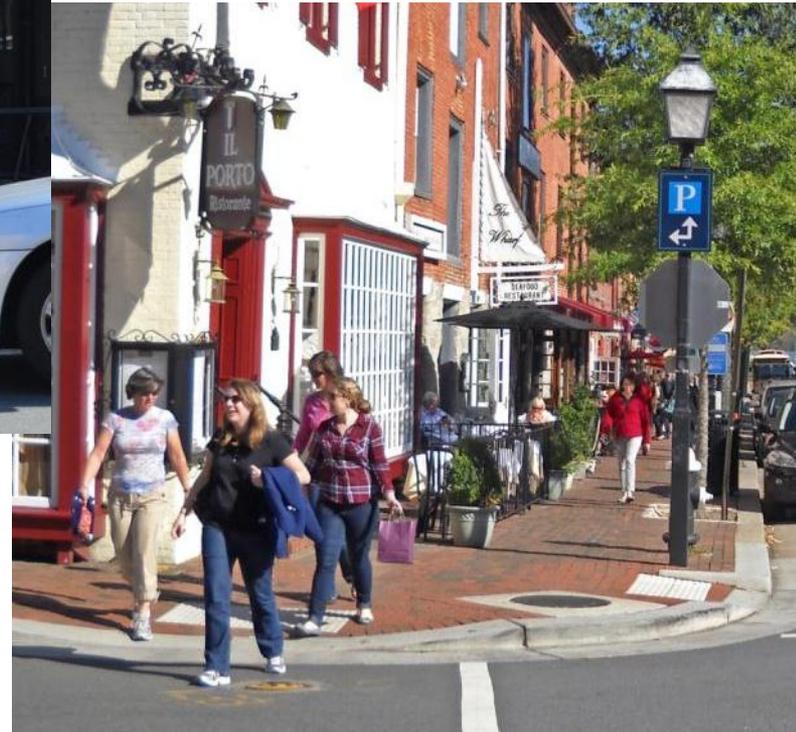


Crowded sidewalks →

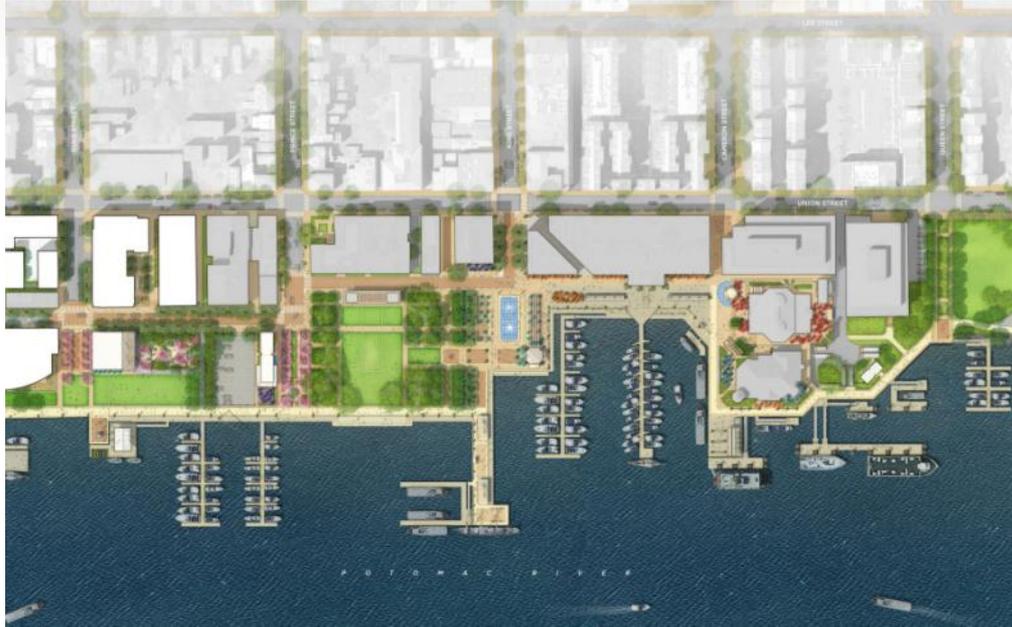
King Street Today: Loading and deliveries can be challenging



King Street Today: Users feel uncomfortable at intersections



King Street Today: Opportunities



- Historic character
- Successful businesses
- Future development and waterfront plans
- Ability to build upon the street's assets

What we heard from stakeholders

- Stakeholders are generally in support of making Lower King Street **more walkable and pedestrian-friendly** and understand that there are **trade-offs (i.e. parking removal is likely)**.
- **Management of deliveries** is critical; current loading zones are not sufficient. **Alleys are an underutilized asset.**
- Need to carefully determine best approach to maintain or adjust **motorcoach and trolley access**. Consider **impacts to resident streets, businesses, walkability and sight lines**.
- Design solution needs to be **flexible** to match the dynamic nature of the street.
- The design solution needs to be **sustainable** – need to define who will **manage and maintain**.



Public Meeting Attendees Vision for King Street





Functional Options for King Street

- Existing/No Build (open to all users)
- Open to Traffic
- Pedestrian Only
- Pedestrian and Trolley Only

*options can be applied at different times of day,
day of week, or season

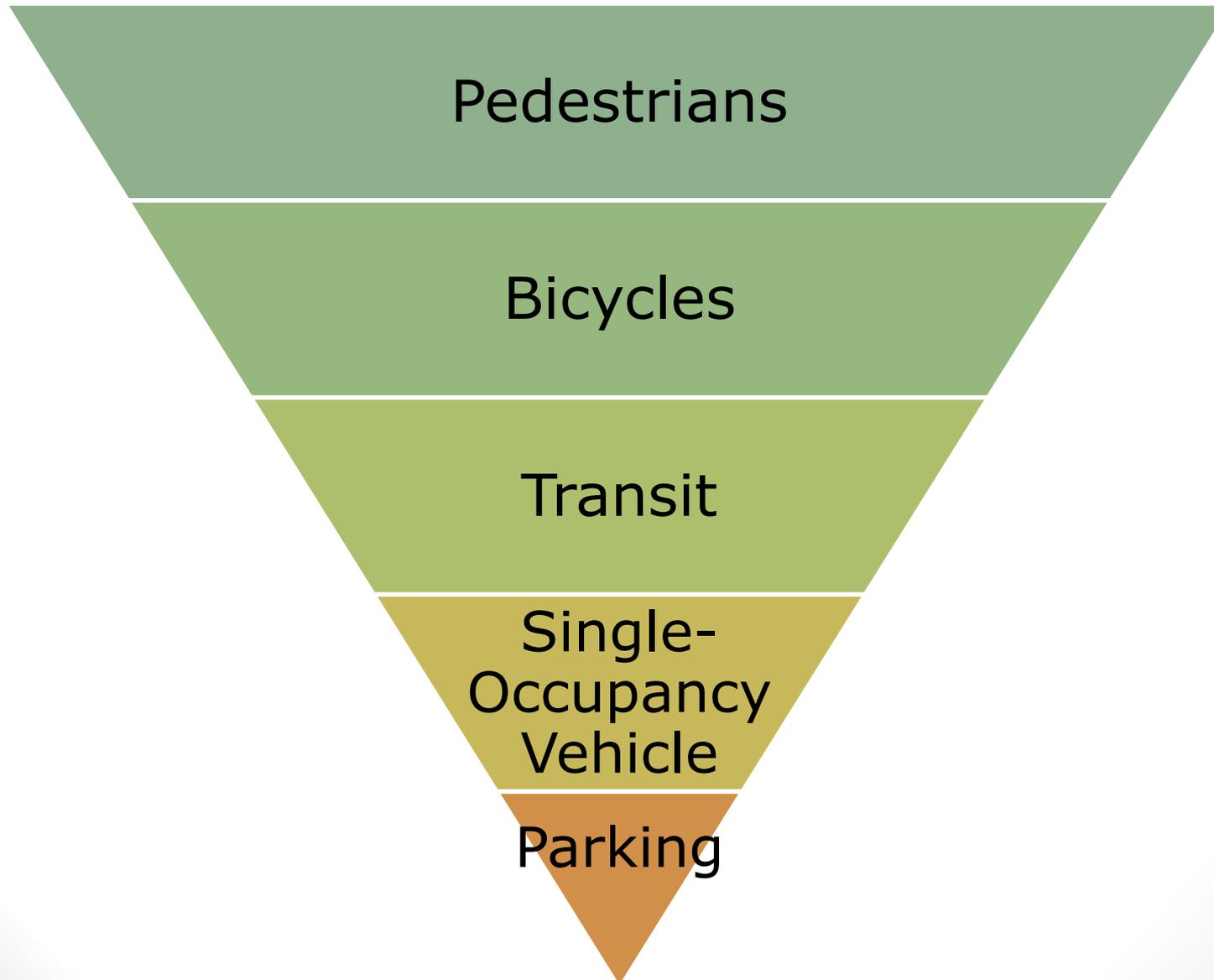
Givens for Each Option

- Maintain **access for emergency vehicles**
- Allow on-street **delivery access** during designated times and improve management of alleys for deliveries
- Design must be **flexible** enough to allow closure when needed
- Must have an **attractive and functional** design
- Coordinate with Waterfront Plan to have joint governance to **share maintenance**
- Continued **management of parking resources** in Old Town

Goals & Values

- Increase walking space
- Increase outdoor dining and retail
- Provide direct and efficient trolley service
- Minimize impacts to residential streets
- Improve user comfort at intersections

Modal Priority



Options and Goals/Values



		GOALS & VALUES				
		Increase Walking Space	Increase Outdoor Dining and Retail	Provide Direct and Efficient Trolley Service	Minimize Impacts to Residential Streets	Improve User Comfort and Safety at Intersections
OPTIONS	Existing/No Build (open to all users)			✓	✓	
	Open to Traffic (wider sidewalks or flush)	✓	✓	✓	✓	✓
	Pedestrian Only	✓	✓			✓
	Pedestrian & Trolley Only	✓	✓	✓		✓



Increase Walking Space

OPTIONS	Existing/No Build (open to all users)		Constrained sidewalk space
	Open to Traffic (wider sidewalks or flush)	✓	Additional 7.5 feet of sidewalk on each side
	Pedestrian Only	✓	Entire street available for walking
	Pedestrian & Trolley Only	✓	Entire street available for walking (except when trolley present)

Increase Outdoor Dining and Retail

OPTIONS	Existing/No Build (open to all users)		One row of dining available
	Open to Traffic (wider sidewalks or flush)	✓	Double rows of dining possible
	Pedestrian Only	✓	Double rows of dining possible
	Pedestrian & Trolley Only	✓	Double rows of dining possible

Provide Direct and Efficient Trolley Service

OPTIONS	Existing/No Build (open to all users)	✓	Access to/from Unit Block of King Street
	Open to Traffic (wider sidewalks or flush)	✓	Access to/from Unit Block of King Street, Reduce conflicts with parked cars
	Pedestrian Only		Trolley is re-routed
	Pedestrian & Trolley Only	✓	Access to/from Unit Block of King Street, Reduce conflict with parked cars

Minimize Impacts to Residential Streets

OPTIONS	Existing/No Build (open to all users)	✓	Existing traffic patterns maintained
	Open to Traffic (wider sidewalks or flush)	✓	Existing traffic patterns maintained
	Pedestrian Only		Traffic diverted away from 100 block of King Street
	Pedestrian & Trolley Only		Traffic (except trolley) diverted away from 100 block of King Street

Trolley Routing Options

Turnaround before Union Street

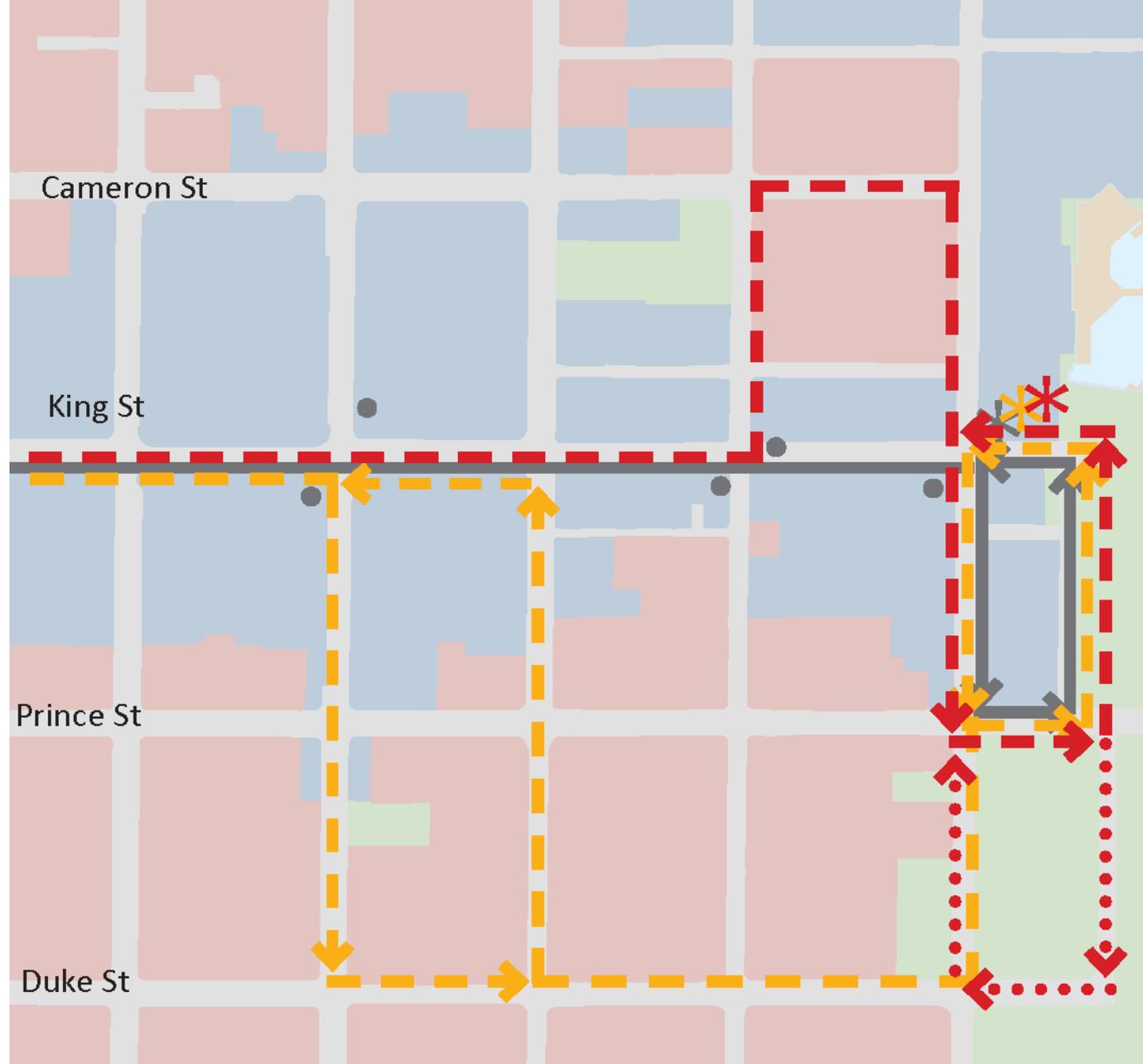


- Existing Route
- to Lee St
- to City Hall

Trolley Routing Options

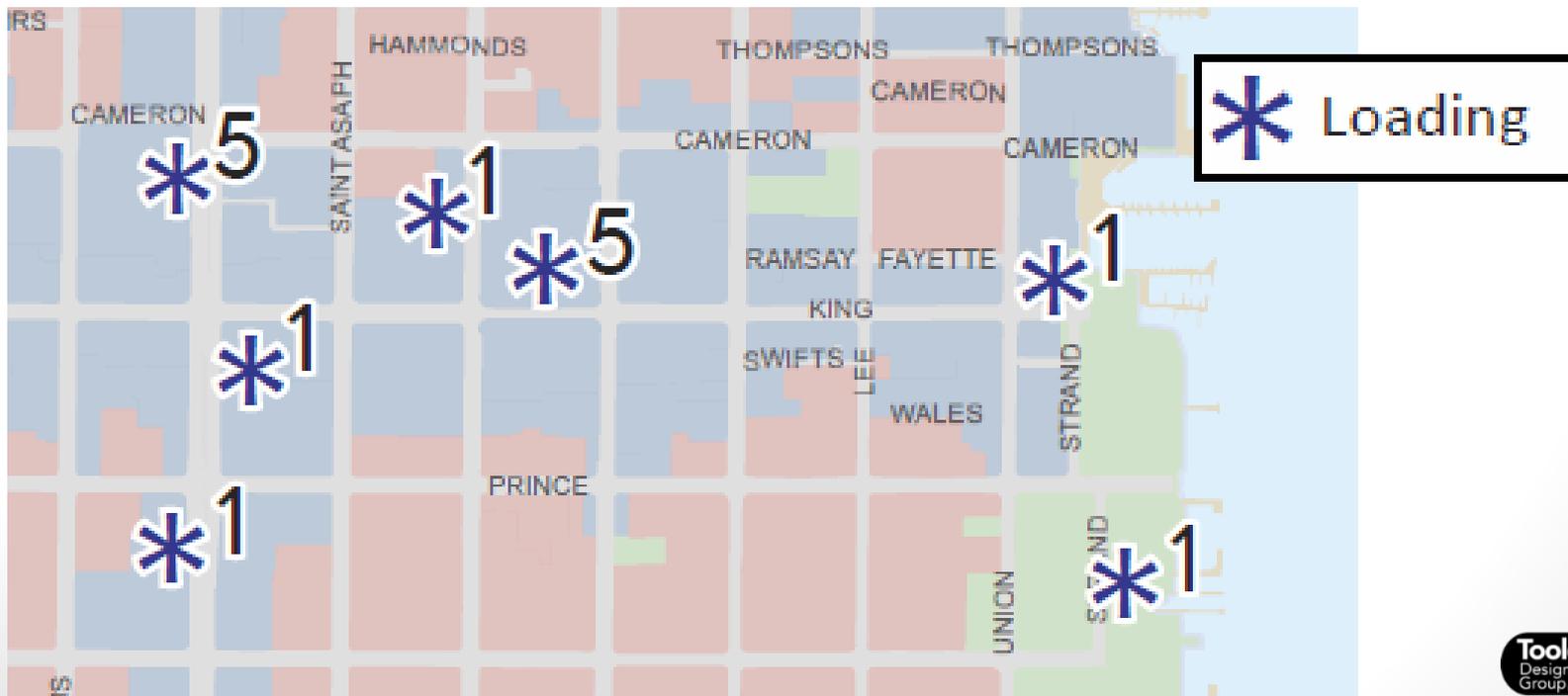
“Rails to Waterfront”

- Existing Route
- to Waterfront via Duke
- to Waterfront via Cameron



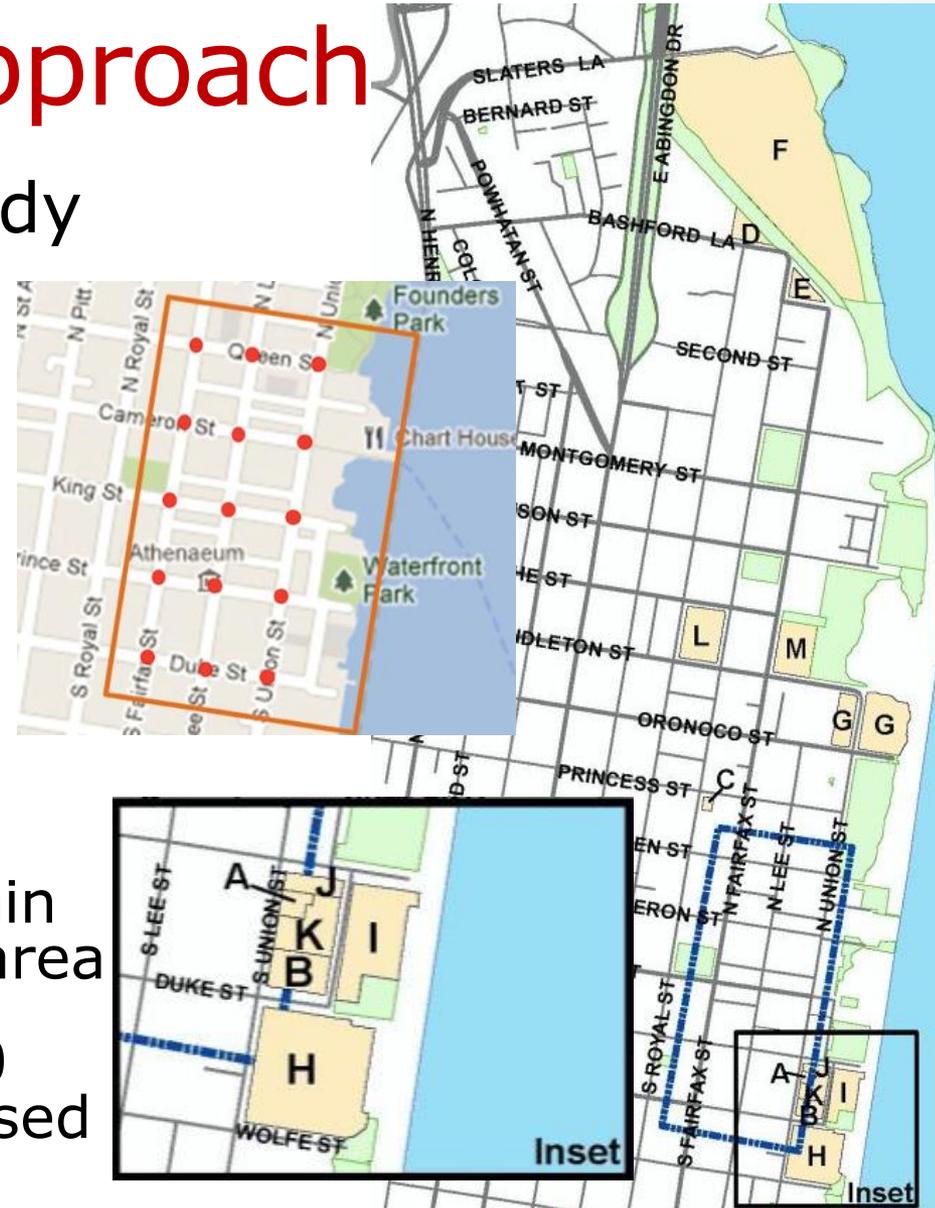
Motorcoach

- Recommendations will not preclude motorcoaches
- New loading locations will be recommended

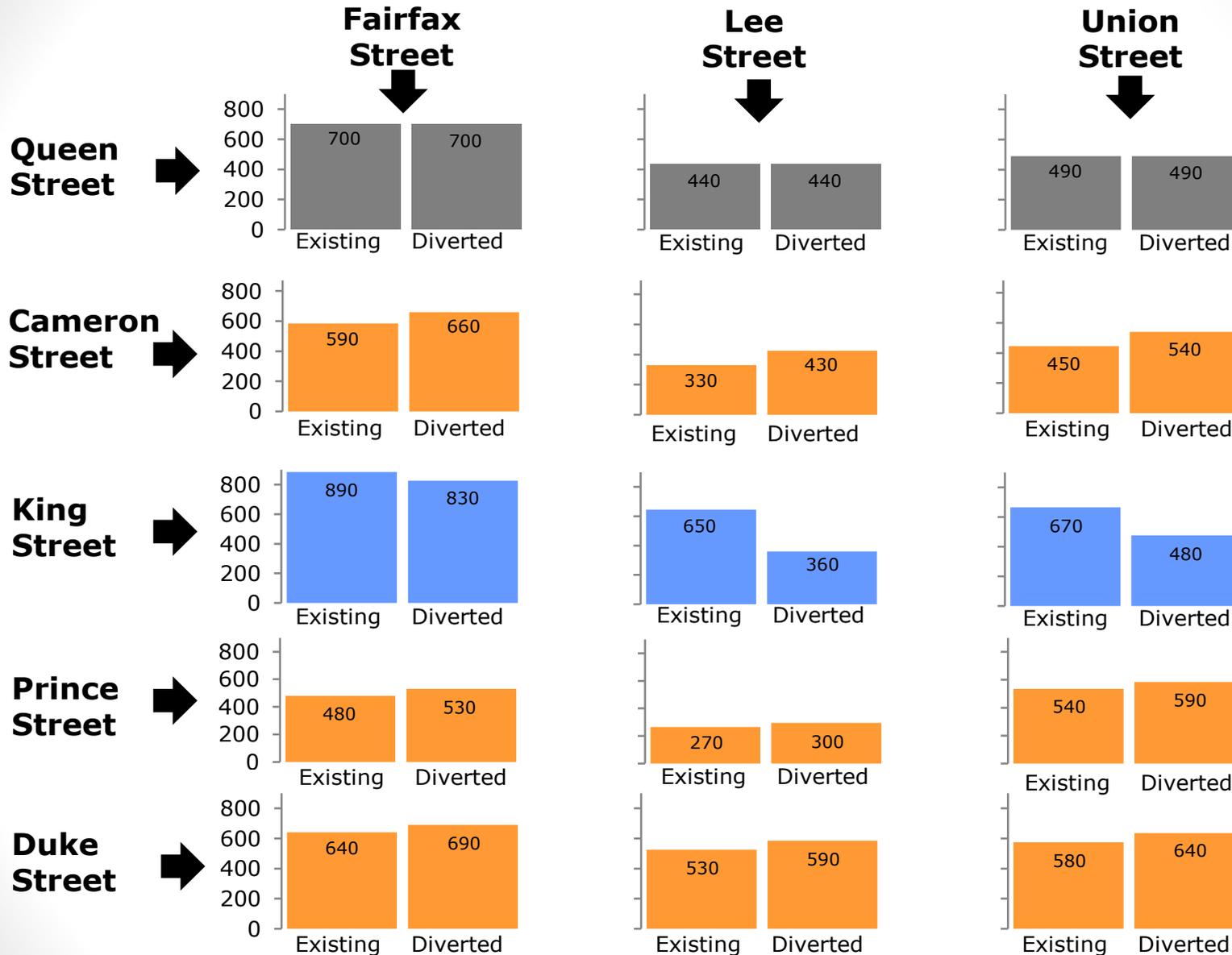


Transportation Analysis Approach

- Analysis at 15 study intersections
- Evaluated current traffic operations
- Evaluated future traffic conditions
 - Background, or regional growth
 - Developments within and nearby study area
 - Two scenarios: 100 block open and closed



Potential Traffic Diversion



LEGEND

- No change (Grey bar)
- Increase (Orange bar)
- Decrease (Blue bar)

NOTE: The volumes on the bar charts above are total entering traffic at each intersection

Future Transportation Analysis Results

- With the closure of the 100 block of King Street:
 - Vehicles would be less likely to use King Street
 - Cameron and Duke Street would carry more east-west traffic
 - Union, Lee and Fairfax Street would carry more north-south traffic
 - Reduced conflicts at King/Lee Street and King/Union Street
- Roadway network can accommodate additional and diverted traffic



Improve user comfort at intersections

OPTIONS	Existing/No Build (open to all users)		Conflicts and congestion at intersections
	Open to Traffic (wider sidewalks or flush)	✓	Wider sidewalks allow pedestrians to cross in larger groups, shorter crossing distance
	Pedestrian Only	✓	Pedestrians can cross in larger groups, shorter crossing distance, intersection operations simplified
	Pedestrian & Trolley Only	✓	Pedestrians can cross in larger groups, shorter crossing distance, intersection operations simplified

Existing Conditions



14' Sidewalk

37' Curb to Curb

14' Sidewalk



Existing Conditions



5' Dining

5' Sidewalk

**4' Planting/
Furnishing**

37' Curb to Curb

**4' Planting/
Furnishing**

5' Sidewalk

5' Dining

Existing Conditions

- Not enough room for pedestrians
- Outdoor dining is constrained
- Parallel parking is problematic for trolley and vehicular travel down King Street



**37' Curb to Curb
(7.5' Parking and 22' Cart Path)** **14' Sidewalk**



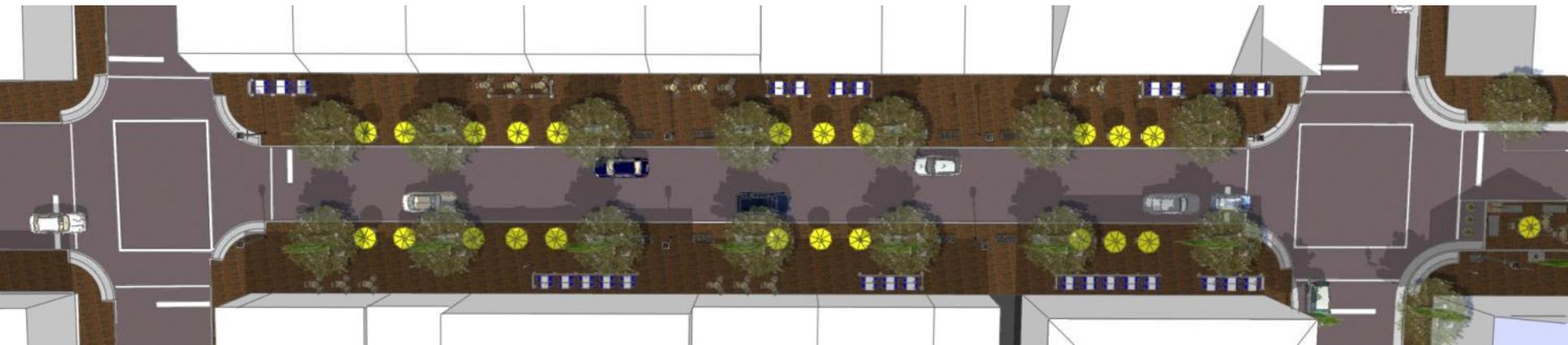
Moving Curbs



21.5' Sidewalk

22' Travelway

21.5' Sidewalk



Moving Curbs



7.5' Dining

8' Sidewalk

**6' Planting/
Furnishing**

22' Travelway

**6' Planting/
Furnishing**

8' Sidewalk

7.5' Dining

Moving Curbs

- Enough space for Dual Dining Zones
- 8' clear walkway between dining/furnishing zones
- Narrowed crossings at intersections



22' Travelway

6' Dining/Furnishing Zone

7.5' Dining/Retail Zone

8' Sidewalk

Flush Street



21.5' Sidewalk

22' Travelway

21.5' Sidewalk



Flush Street



7.5' Dining

8' Sidewalk

**6' Planting/
Furnishing**

22' Travelway

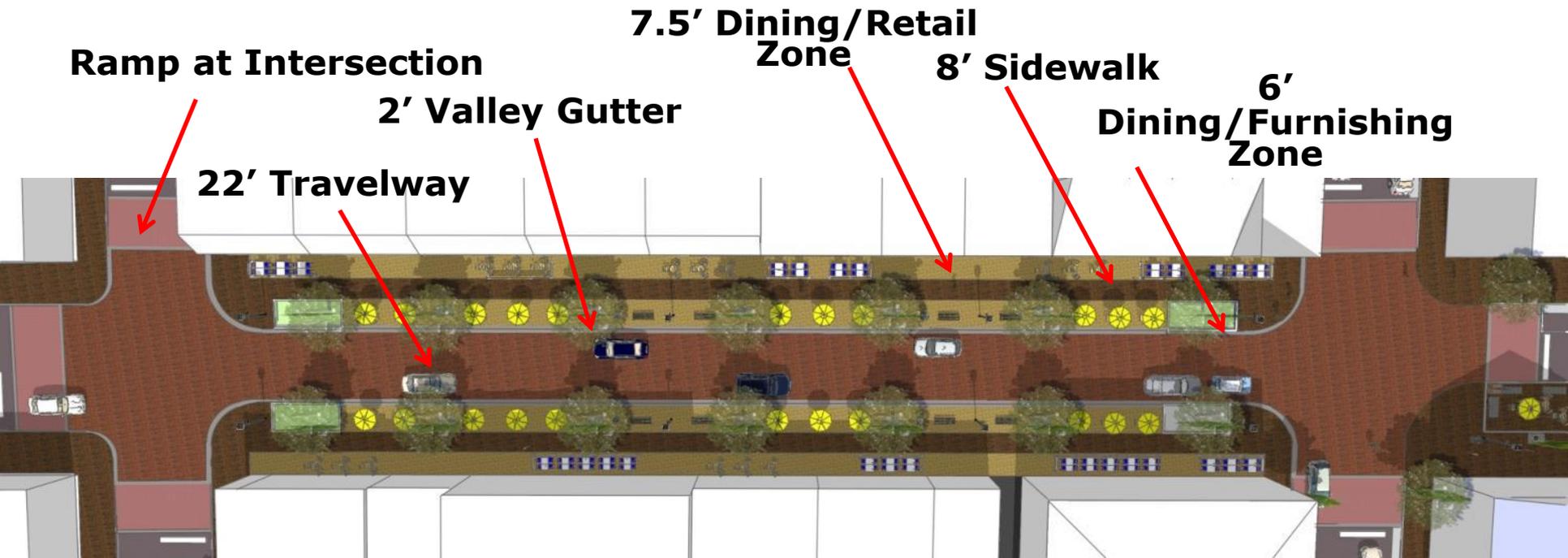
**6' Planting/
Furnishing**

8' Sidewalk

7.5' Dining

Flush Street

- Flush street design provides barrier free street that is flexible to use for special events and closure
- Enough space for Dual Dining Zones
- 8' clear walkway between dining/furnishing zones
- Narrowed crossings at intersections



Flush Street with Parking



21.5' Sidewalk

22' Cart Path

21.5' Sidewalk



Questions?