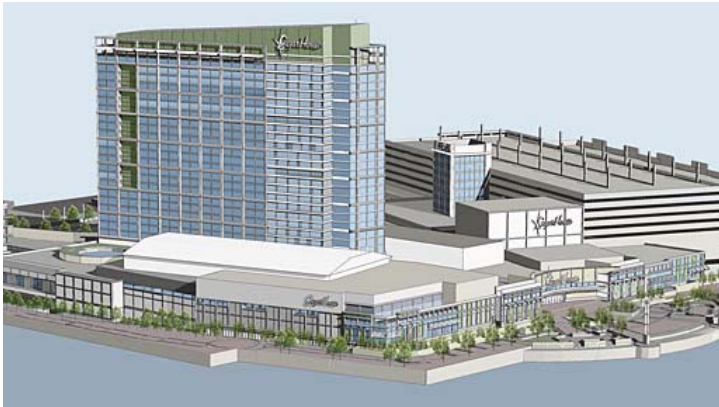


# Casino Site Plan Review

Report to:

Mayor Michael A. Nutter

City of Philadelphia





# Casino Site Plan Review

Report to: Mayor Michael A. Nutter, City of Philadelphia

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# Executive Summary

- This report was prepared at the request of Philadelphia Mayor Michael A. Nutter. It is the product of a casino site plan review workshop convened by PennPraxis from July 29 through July 31, 2008.
- PennPraxis was charged by Mayor Nutter to evaluate the site plans for two 5000-slot machine casino projects currently proposed for the central Delaware riverfront – Foxwoods and SugarHouse – and determine if they are compatible with the 2007 *Civic Vision for the Central Delaware*. If they are not compatible, under what conditions could they be considered contributing members of the waterfront community?
- To accomplish this charge, PennPraxis invited national experts in traffic, transportation, urban design, ecology and sustainability to aid the review and analysis of the current site plans and determine under what conditions the two casino developments could be considered contributing members of the waterfront community. It is important to note that this study focused on casino site plan design relative to the goals of the civic vision and not on the social or economic impacts or benefits of casinos. PennPraxis and the team of national experts concluded that the casino site plans as currently designed are not compatible with the civic vision.
- The experts and PennPraxis determined that it is feasible to improve the casino site plans to make them more compatible with the civic vision. This includes creating new streets to access the property; reducing by ½ the amount of parking on site; improving connections to public transit; reducing the scale of the project by dispersing building program across multiple parcels and reducing building footprints; create vertical gaming floors; providing a mix of uses at the outset to disguise the super-block-scaled gaming floor and parking decks; and using sustainable and ecologically responsible building and planning standards. These suggested improvements are based on maintaining the current width of Delaware Avenue/Columbus Boulevard and not widening the roadway in accordance with some of the casino traffic mitigation recommendations.
- The experts and PennPraxis were unable to develop a site plan that is fully compatible with the civic vision. This is due to several factors relating to the business-model requirements of a 5000-slot machine casino parlor, including: the resultant scale of the building footprints (similar to the scale of the U.S. Mint at 4<sup>th</sup> and Arch Streets or the Gallery shopping mall at Market East); the amount of parking even in a reduced capacity (equal to ¼ the amount of parking for all 7 terminals at Philadelphia International Airport at each site); and the fact that the likelihood of a significant mix of uses in early phases that would draw a vibrant non-casino street life is low.
- In order to develop a waterfront that meets the goals of the civic vision, the city, state and development community must work cooperatively to establish frameworks for future growth. This is especially important because the vision seeks to transform the character of the central Delaware from a suburban-scaled landscape to an urban one. This can only be achieved through adherence to an agreed-upon plan. It is important to note that the goals of the vision dovetail both with the city's stated goal of creating a pedestrian-friendly environment and the commonwealth's stated goal of investing in sustainable infrastructure.

# Overview and Charge

This report was prepared by PennPraxis at the request of Philadelphia Mayor Michael A. Nutter.

It is an analysis of the two casino site plans proposed for the central Delaware riverfront relative to achieving the goals of the *Civic Vision for the Central Delaware*. The casino proposals call for two, phased 5000-slot machine parlors with 4556 cars in Phase I at Foxwoods at Reed and Tasker Streets and 4011 cars in Phase I at SugarHouse at Frankford Avenue. This analysis and its recommendations were informed by a group of national experts in traffic, transportation, urban design, ecology and sustainability convened by PennPraxis from July 29 through July 31, 2008.

The work of the experts was guided by the following charge:

*PennPraxis has been asked to prepare an analysis of the current casino site plans relative to the Civic Vision for the Central Delaware and the Action for the Central Delaware: 2008 to 2018. PennPraxis will analyze the plans in accordance with the civic values, principles and design guidelines upon which the vision is based and put forth an objective analysis of the current plans. If the current site plans do not meet the guidelines, PennPraxis will put forward recommendations for how the casinos, or any large development, could meet the guidelines of the civic vision and be contributing members of the waterfront community. To accomplish this work, PennPraxis will assemble a team of national experts in transportation, traffic, ecology, urban design and sustainability. PennPraxis will issue a report with recommendations within the 60 day time frame that the mayor set forth on June 26, 2008 at the Independence Seaport Museum at Penn's Landing.*

## The Central Delaware Planning Process

The *Civic Vision for the Central Delaware* was commissioned in October 2006 by executive order of former Philadelphia Mayor John F. Street with the support of Philadelphia First District Councilman Frank DiCicco. Generous funding for the project was provided by the William Penn Foundation, the Knight Foundation and the Pennsylvania Department of Community and Economic Development.

The 13-month public visioning project was led by PennPraxis, the non-profit consulting arm of the School of Design of the University of Pennsylvania. The extensive civic engagement and public planning process was aided by the Penn Project for Civic Engagement and drew more than 4000 people to over 200 public and stakeholder meetings during the course of the project. A 46-member mayoral-appointed advisory group provided project oversight. More than 1500 people attended the public presentation of the vision in November 2007 at the Pennsylvania Convention Center. The Civic Vision received the *2008 National Charter Award* from the Congress for the New Urbanism.

The following civic design principles are the foundation of the civic vision:

- Reconnect the city to the river's edge
- Honor the river
- Design with nature
- Strike the right balance
- Take the long view
- Protect the public good
- Make it real, Philadelphia

The *Civic Vision for the Central Delaware* called for the extension of Philadelphia's signature street grid, public park system and mixed-use, walkable urban scale to the central Delaware – an 1146-acre, largely post-industrial area stretching from Allegheny Avenue to Oregon Avenue and the river to I-95. 15 civic and community associations from local river ward neighborhoods participated in the original advisory group and later formed the Central Delaware Advocacy Group (CDAG) to ensure that the goals of the vision were met. Along with PennPraxis, CDAG prepared the *Action Plan for the Central Delaware: 2008 to 2018* and publicly launched the action plan on June 26, 2008 at which time Mayor Nutter publicly embraced the goals of the vision and the action plan.

Achieving the goals of the civic vision and the action plan is a long-term process that requires cooperation on many levels – civic, city, state and federal. As Philadelphia begins the process of rewriting its outdated zoning code and remapping the city for 21<sup>st</sup> century growth, the civic vision and the action plan provide a template for sound city building. **If we are to reach the goals of the civic vision – a dense, walkable, urban extension of Philadelphia to the river's edge - we must start now.** Every project developed along the river will either support or hinder our ultimate goal of attaining the implementation of the civic vision.

## The Casino Site Plan Design Study

This report details the standards that the casino proposals (and all developments along the riverfront), must meet in order to ensure that growth and development along the central Delaware riverfront is consistent with the urban design, ecological and civic principles of the *Civic Vision for the Central Delaware*. These standards will enable Philadelphia to achieve sound, well-planned and thoughtful urban development that balances public good with private investment and protects and maintains public access to the river. A network of roads, parks, trails, a pedestrian-scaled boulevard and public transportation, along with a well coordinated policy and regulation framework is a sound investment in Philadelphia's future. This is the type of quality-of-life that will position Philadelphia as a city of choice in the 21<sup>st</sup> century.



It is important to note that the two casino site plans were conceived in a planning vacuum. When selected as sites by the state for a casino license, the city did not have a plan for the central Delaware and the state selected the sites without significant input or coordination from the city. Indeed, previous city administrations treated planning and urban design along the Delaware riverfront on an ad-hoc basis, resulting in a dearth of public amenities and the lack of a coordinated public policy framework for sensible urban planning decision making. Perhaps because of this, the two proposed casino site plans are large-scale, suburban-style gaming superblocks that are inconsistent with the goals and values of the *Civic Vision for the Central Delaware*

To achieve the goals of the civic vision requires that the city and the state must work together, not at odds, to create a riverfront that is a legacy for future generations. To accomplish this requires coordinated land-use, transportation and development policy along with physical investment in infrastructure. It challenges the city and state to adopt complementary standards that enable the city, region and state to provide a comprehensive, holistic and sustainable atmosphere for development that complies with the civic vision. These include:

- Creating a pedestrian-friendly environment with multiple transportation and transit options. This requires a fundamental shift from a suburban, automobile-dependent development model to a multiple transit mode urban model along the riverfront.
- Connecting Philadelphia's existing urban fabric (street grid, block size and sense of place) to the riverfront with active uses along all public streets.
- Creating dense, urban-scaled development that is connected to parks, trails and public streets.

- Ensuring that development treads lightly on the sensitive river's edge ecosystem.
- Linking neighborhoods to the river and along the river's edge with public streets and trails.

Accomplishing these goals within a regulatory and planning framework that is a work-in-progress—with no current regulations (zoning or otherwise) that ensure that the civic vision will be realized – is a challenge. It is vital to the city's future, however, that we take the long view and protect our ability to achieve the goals of the civic vision, and protect the public good while supporting sound development practices along the riverfront. These circumstances require leadership from both the mayor and the governor to ensure that the vision created by over 4000 Philadelphians and embraced by the current administration is realized.

### **The Process and Participants**

To accomplish Mayor Nutter's charge of analyzing the casino site plans relative to the goals and aspirations of the civic vision and determining under what conditions casinos, or other large-scale development, could be considered contributing members of the waterfront community, PennPraxis assembled the following national experts at Penn from July 29 through July 31, 2008:

**Jose Alminana**, landscape architecture and ecology, principal in Andropogon Associates in Philadelphia.

**Frank Jaskiewicz**, traffic and transportation, principal of JzTI Transport Planning in Philadelphia.

**Walter Kulash**, traffic and transportation, former principal of Glatting Jackson Kercher Anglin Lopez Rinehart in Orlando.



**Tim Magill**, urban design and casino design, principal in 5+Design in Hollywood, CA.

**Dan Plottner**, traffic and transportation, acting director of transportation at Sam Schwartz Engineers in New York.

**Peter Steinbrueck**, architecture and sustainability, former Seattle city council member and principal in Steinbrueck Urban Strategies, LLC in Seattle.

The workshop was organized to produce findings in the expedited timeframe requested by the mayor. Working with Praxis staff, the experts studied existing casino site plans, held discussions with local leaders in transportation, urban design, ecology and sustainability, and synthesized their recommendations over the course of the workshop. Each worked with PennPraxis staff subsequent to the workshop to shape the analysis contained in this report.

The workshop schedule<sup>1</sup> was as follows:

#### **Tuesday, 29 July**

Upper Gallery, Meyerson Hall  
School of Design  
University of Pennsylvania

- Overview of task and charge
- Presentation of framework from Vision and Action Plan
- Review of casinos sites and context
- Arrive at compliance/non-compliance consensus statement (*do the casinos as currently design comply with the goals, values and principles of the Civic Vision?*)

#### **Wednesday, 30 July**

Upper Gallery, Meyerson Hall

- Discussions with national and local experts and leaders (includes professional, political, and civic leaders) and presentation of compliance/non-compliance consensus
- Small group discussion
  - Define under what conditions casinos or other large developments would be considered contributing members of the waterfront community
  - Using the Civic Vision, the Action Plan and best practices, define “contributing” within the following subject areas: Traffic/transportation, Urban design, Ecology and Sustainability
- Facilitated discussion
  - Synthesize key factors identified during early group work to create a “contributing” framework for development
  - Develop a consensus statement for contributing development
- Design session with experts and PennPraxis
  - Group site planning and urban design exercise for SugarHouse and Foxwoods sites including a pin-up, critique and conversation

#### **Thursday, 31 July**

Upper Gallery, Meyerson Hall

- Synthesize conclusions and recommendations into report-ready product

<sup>1</sup> See Appendix for list of workshop attendees. It should be noted that casino representatives were invited to the workshop but declined to attend.

# Analysis

In creating this report, PennPraxis is responding to Mayor Michael A. Nutter's request for information as to why the casinos, as currently designed, do not meet the goals of the Civic Vision for the Central Delaware. Released in November 2007, the Civic Vision states:

*"The current designs for SugarHouse and Foxwoods do not meet many of the design standards established in the central Delaware planning process."*

This incompatibility was confirmed by the team of national experts in transportation, urban design, ecology and sustainability who participated in a casino review workshop convened from July 29-31 at the University of Pennsylvania School of Design.

The matrix below shows the compatibility of the current casino designs relative to the recommendations created in the Civic Vision and Action Plan for the Central Delaware. PennPraxis and the convened team of experts used this matrix as a framework for its design review, and as a foundation for the casino design workshop.

Identifying design elements which met or did not meet the recommendations of the civic vision and the action plan informed the work for the workshop which led to the illustrative casino designs later in this report.

Some elements of the casino designs appear in the matrix with marks in two categories, as both meeting and not meeting the guidelines of the civic vision. This indicates that certain aspects of the plan meet them, while others do not (or do not comply in all areas of the site plan).

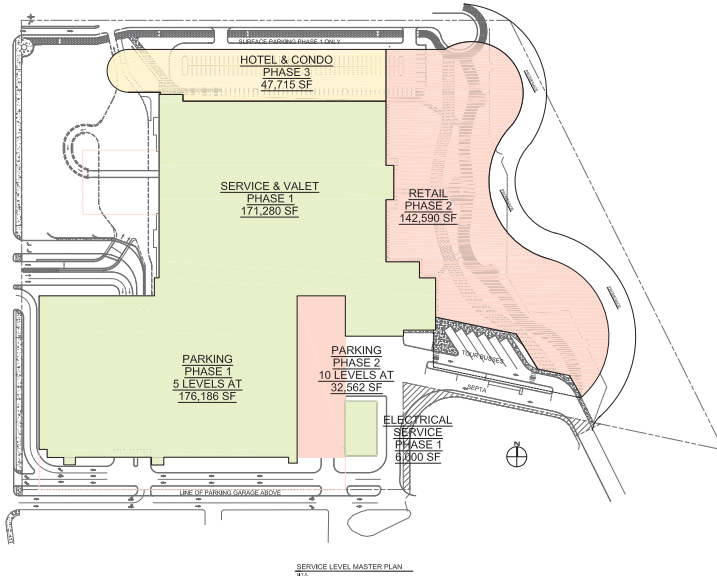
The following matrix defines the conclusions of PennPraxis and review team in evaluating the relative compatibility of current casino designs in relation to the goals of the civic vision and action plan.

**Yes** = compatible

**No - Fixable** = currently incompatible, but possible to modify to make compatible

**No - Not Fixable** = unable to be made compatible through reasonable measures

## Current design, Foxwoods Casino



Source: Philadelphia City Planning Commission

## Current design, SugarHouse Casino



Source: Philadelphia City Planning Commission

# Compatibility Matrix

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>ADOPT CLEAR ZONING, A DETAILED MASTER PLAN AND A COORDINATED REGULATORY POLICY</b>						
1. Are buildings constructed to ensure that massing, scale and form reflect the envisioned riverfront and neighborhood context?		*			*	
2. Are towers integrated into low-rise building blocks by staggering them so as to ensure views from adjoining buildings?		*		*		
3. Do tall buildings front open space, when possible, with the open space scaled to serve the density of the surrounding development?		*			*	
4. Are there no blank walls on primary streets?		*		*	*	
5. Is there active street frontage with ground-floor retail and commercial uses to enliven Delaware Boulevard?		*		*	*	
6. Are curb cuts and driveways limited on primary streets and riverfront access streets?		*			*	
7. Is there public riverfront access every 500 feet that connects to existing city street grid?		*			*	
8. Do developers submit a street network plan that shows road layout and accessibility for autos, pedestrians, and bicyclists?	*			*		
9. Do buildings meet the city street line (to prevent porte-cocheres etc.)?		*		*	*	

## NOTES

- Both:* The applicant indicates that towers will be constructed in later phases of the project.
- Foxwoods:* Every edge of the parcel is dominated by blank walls - for the parking garage as well as the building. *SugarHouse:* The renderings depict a small portion of its frontage along Delaware Ave with large, glass windows. However the majority of the frontage is dedicated to parking garage walls.
- Foxwoods:* The site plan indicates that the majority of the frontage is set back and dedicated to parking garage walls. *SugarHouse:* The site plan indicates that a small portion of the ground floor frontage along Delaware Ave is activated. However, the majority of the frontage is set back and dedicated to parking garage walls.
- Foxwoods:* There are four curb cuts along Columbus Blvd, 2 along Tasker, and 1 along Reed. They range in size from 12'-43' wide.
- Foxwoods:* The parking garage on the southern end of the site meets the streetline. However, over 480' of the street frontage is dedicated to a port-cochere and vehicular entrance. *SugarHouse:* A portion of the building meets the street line.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>ADOPT CLEAR ZONING, A DETAILED MASTER PLAN AND A COORDINATED REGULATORY POLICY</b>						
10. Are smaller buildings encouraged to allow permeability at the river's edge?		*			*	
11. Is public art incorporated into open-space and building designs?		*			*	
12. Is landscaping and tree planting incorporated on the property and its public access points to provide attractive links to the river?	*			*		
13. Is the past protected by ensuring that existing buildings are preserved, adapted, and reused?						
14. Is the design of pier development controlled as proportional to the size and location of the piers?					*	
15. Are there no billboards on the site?						
16. Is ongoing contribution to maintenance of waterfront and park assured in development agreement?						
17. Are ecologically sound design techniques such as vegetated swales, pervious pavements, and green building techniques used?		*			*	

**NOTES**

- 11. *Both*: public art does not appear in renderings. We recognize that this feature may be added at a later date.
- 13. *Foxwoods*: Archaeological resources are deemed "potentially significant" and date from an important period in Philadelphia's industrial development. However, the presence of artifacts at the site is not expected to prohibit development. *SugarHouse*: historic significance pending Army Corps investigation.
- 14. *Foxwoods*: Not applicable - The applicant proposed to remove piers 60, 62, and 63. *SugarHouse*: piers to be filled.
- 15. *Both*: Unknown at this time, though renderings indicate signage for

casino operator. This signage will be subject to compliance with CED legislation.

- 16. *Both*: Unknown at this time. The submitted materials do not address contributions for maintenance of waterfront park.
- 17. *Both*: There are opportunities to install green roofs, pervious pavers, etc.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>BUILD A CONTINUOUS, 7-MILE TRAIL ALONG THE CENTRAL DELAWARE RIVERFRONT</b>						
1. Is there continuous public riverfront access in the project area?	*			*		
2. Is a 100-foot minimum public easement provided (where possible) for a riverfront trail and green space?		*			*	
3. Is land at the river's edge open and green for stormwater management?		*			*	
4. Is landscaping and tree planting incorporated on the property and its public access points to provide attractive links to the river?	*			*		
5. Do site plans show land allocated for "interim trail" as proposed by Center City District?		*				
6. Are ecologically sound design techniques such as vegetated swales, pervious pavements, and green building techniques used?		*			*	

**NOTES**

1. *Both*: Unknown hours of operation.
2. *Both*: Both casinos have designed a public promenade that is about 50' wide.
3. *SugarHouse*: The river's edge features a structural bulkhead along the length of the promenade. The promenade also features about 18' of plantings.
5. *Foxwoods*: Talks with Center City District still pending. *SugarHouse*: Not applicable.
6. *Both*: There are opportunities to install green roofs, pervious pavers, etc.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>CREATE NEW PARKS AND IMPROVE TWO EXISTING PARKS</b>						
1. Is public art incorporated into open-space and building designs?		*			*	
2. Do tall buildings front open space, when possible, with the open space scaled to serve the density of the surrounding development?		*			*	
3. Is landscaping and tree planting incorporated on the property and its public access points to provide attractive links to the river?	*			*		
4. Are piers on the site less than 60 feet wide kept as public open space or used in converted wetlands?		*			*	
5. Is land at the river's edge open and green for stormwater management?		*			*	
6. Are parks or open space proposed ecologically productive to ensure long-term sustainability?						
7. Are ecologically sound design techniques such as vegetated swales, pervious pavements, and green building techniques used?		*			*	

**NOTES**

1. *Both:* Public art does not appear in renderings. We recognize that this feature may be added at a later date.
4. *Foxwoods:* The applicant proposed to remove piers 60, 62, and 63. *SugarHouse:* Piers will be filled.
5. *SugarHouse:* The river's edge features a structural bulkhead along the length of the promenade. The promenade also features about 18' of plantings.
6. *Both:* Not enough information.
7. *Both:* There are opportunities to install green roofs, pervious pavers, etc.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>GUARANTEE PUBLIC ACCESS TO THE RIVERFRONT AND MAKE IT EASIER FOR RESIDENTS TO WALK AND BIKE TO THE RIVER</b>						
1. Is there public riverfront access every 500 feet?		*			*	
2. Is there public riverfront access on the site that connects to the existing city grid?	*	*			*	
3. Do developers submit a street network plan that shows road layout and accessibility for autos, pedestrians, and bicyclists?	*			*		
4. Do all streets have sidewalks that are pedestrian-friendly, improving connections to the river's edge?		*		*	*	
5. Are there continuous bike lanes maintained in each direction along the Boulevard?	*			*		
6. Is there continuous public riverfront access in the project area?	*			*		
7. Is land at the river's edge open and green for stormwater management?		*			*	
8. Are curb cuts and driveways limited on primary streets and riverfront access streets?		*			*	

**NOTES**

1. *Both*: Single pedestrian pathway.
2. *Foxwoods*: Reed and Tasker are improved, but Dickinson stops at Columbus Boulevard.
3. *Foxwoods*: Improvements to Tasker and Reed. *SugarHouse*: no perpendicular streets; single pedestrian connection
4. *Foxwoods*: Sidewalks less than 10 feet in many places and one pedestrian connection to river. *SugarHouse*: 10 ft sidewalks along Delaware Avenue and one pedestrian connection to river.
5. *Both*: Currently exists.
6. *Both*: Unknown hours of operation.
7. *SugarHouse*: The river's edge features a structural bulkhead along

the length of the promenade. The promenade also features about 18' of plantings.

8. *Foxwoods*: There are four curb cuts along Columbus Blvd, 2 along Tasker, and 1 along Reed. They range in size from 12'-43' wide.



	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>GUARANTEE PUBLIC ACCESS TO THE RIVERFRONT AND MAKE IT EASIER FOR RESIDENTS TO WALK AND BIKE TO THE RIVER</b>						
9. Does "parking" also include bicycle parking?		*		*	*	
10. Is landscaping and tree planting incorporated on the property and its public access points to provide attractive links to the river?	*			*		
11. Does the casinos' proposed traffic mitigation accommodate future rail transit?		*			*	
12. Is the Beltline right-of-way preserved in the casino plans?		*				
13. Are there sidewalk planters or rain gardens for stormwater infiltration?		*		*	*	
14. Does the project support the vision of Delaware Boulevard that includes four traffic lanes and dedicated rail transit within the existing right-of-way?		*			*	
15. Does the project restrict itself to single turn lanes at key intersections to preserve walkability and the potential for future transit use?		*			*	

**NOTES**

- 9. *Foxwoods*: Not included in site plan. *SugarHouse*: Bike rack included in "Future Site Furnishings" but no space dedicated on site plan.
- 11. *Foxwoods*: Estimate that 0% of customers will use transit. *SugarHouse*: Not applicable – currently used as median strip.
- 12. *Foxwoods*: Planters only. *SugarHouse*: Some stormwater treatment, but not on sidewalk or median.
- 13. *Foxwoods*: Fractured crossings; no pedestrian refuge; dual turn lanes. *SugarHouse*: Adding through lane, and double left at Shackamaxon and Frankford.
- 14. *Foxwoods*: Double turn lanes. *SugarHouse*: Double left at Shackamaxon (Phase 1) and Frankford (Phase 2).

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>EXTEND TRANSIT TO THE RIVER</b>						
1. Is the Beltline right-of-way in the center of the Boulevard preserved for the possibility of future transit use?		*				
2. Are large-scale developments linked to mass transit – land and waterborne?	*	*		*	*	
3. Are innovative remedies to the auto-dominated landscape explored, including remote parking?		*	*		*	*
4. Does the project support the vision of Delaware Boulevard that includes four traffic lanes and dedicated rail transit within the existing right-of-way?		*			*	
5. Does the project restrict itself to single turn lanes at key intersections to preserve walkability and the potential for future transit use?		*			*	

**NOTES**

- Foxwoods*: Refers to SEPTA bus use, but estimates SEPTA use by 30% of employees and 0% of customers. *SugarHouse*: Not applicable – currently used as median strip.
- Both*: Plan references water taxis.
- Both*: 4 spaces per 5 slots required by CED zoning. *Foxwoods*: Uses some remote parking for Connecticut casino.
- Foxwoods*: Fractured crossings; no pedestrian refuge; dual turn lanes. *SugarHouse*: Adding through lane, and double left at Shackamaxon and Frankford.
- Foxwoods*: Double turn lanes. *SugarHouse*: Double left at Shackamaxon (Phase 1) and Frankford (Phase 2).

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>EXTEND KEY STREETS</b>						
1. Is there public riverfront access every 500 feet?		*			*	
2. Is there public riverfront access on the site that connects to the existing city grid?	*	*			*	
3. Do developers submit a street network plan that shows road layout and accessibility for autos, pedestrians, and bicyclists?	*			*		
4. Are curb cuts and driveways limited on primary streets and riverfront access streets?		*			*	
5. Are streets "complete," i.e. accommodate needs of peds, bike and transit where necessary?	*	*		*	*	
6. Do all streets have sidewalks that are pedestrian-friendly, improving connections to the river's edge?		*		*		
7. Are there continuous bike lanes maintained in each direction along the Boulevard?	*			*		
8. Are there sidewalk planters or rain gardens for stormwater infiltration?		*		*	*	
9. Does the project support the vision of Delaware Boulevard that includes four traffic lanes and dedicated rail transit within the existing right-of-way?		*			*	

**NOTES**

1. *Both*: Single pedestrian pathway.
2. *Foxwoods*: Reed and Tasker are improved, but Dickinson stops at Columbus Boulevard.
3. *Foxwoods*: Improvements to Tasker and Reed. *SugarHouse*: No perpendicular streets; single pedestrian connection.
4. *SugarHouse*: Only one, but large.
5. *Foxwoods*: New sidewalks, but does not meet overall civic vision. *SugarHouse*: Accommodates, but does not meet overall civic vision.
6. *SugarHouse*: Pedestrian-only connection.
7. *Both*: Currently exists.
8. *Foxwoods*: Planters only. *SugarHouse*: Some stormwater treatment,

- but not on sidewalk or median.
9. *Foxwoods*: Fractured crossings; no pedestrian refuge; dual turn lanes. *SugarHouse*: Adding through lane, and double left at Shackamaxon and Frankford.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>MANAGE TRAFFIC AND PARKING IN THE CENTRAL DELAWARE AREA</b>						
1. Are technologies used such as signal synchronization to make Delaware Avenue/Columbus Boulevard more efficient as auto traffic increases?	*			*		
2. Is parking visually unobtrusive and has a minimal impact on pedestrians' riverfront experience?		*	*		*	*
3. Are there no visible surface-parking lots and free standing structure parking garages?		*	*		*	*
4. Are there service streets for parking and service entrances to buildings and developments?	*	*		*	*	
5. Are remedies to the auto-dominated landscape explored, including remote parking?		*	*		*	*
6. Is there public riverfront access every 500 feet?		*			*	
7. Is there public riverfront access on the site that connects to the existing city grid?	*	*			*	
8. Do developers submit a street network plan that shows road layout and accessibility for autos, pedestrians, and bicyclists?	*			*		

**NOTES**

- 4. *Foxwoods*: Tasker Street. *SugarHouse*: Penn and Ellen Streets.
- 5. *Both*: 4 spaces per 5 slots required by CED zoning. *Foxwoods*: Uses some remote parking for Connecticut casino.
- 6. *Both*: Single pedestrian pathway.
- 7. *Foxwoods*: Reed and Tasker are improved, but Dickinson stops at Columbus Boulevard.
- 8. *Foxwoods*: There are four curb cuts along Columbus Blvd, 2 along Tasker, and 1 along Reed. They range in size from 12'-43' wide.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>MANAGE TRAFFIC AND PARKING IN THE CENTRAL DELAWARE AREA</b>						
9. Are curb cuts and driveways limited on primary streets and riverfront access streets?		*			*	
10. Does "parking" also include bicycle parking?		*		*	*	
11. Are ecologically sound design techniques used, such as vegetated swales and pervious pavements?		*			*	
12. Does the project support the vision of Delaware Boulevard that includes four traffic lanes and dedicated rail transit within the existing right-of-way?		*			*	
13. Does the project restrict itself to single turn lanes at key intersections to preserve walkability and the potential for future transit use?		*			*	

**NOTES**

- 9. *Foxwoods*: Not included in site plan. *SugarHouse*: Bike rack included in "Future Site Furnishings" but no space dedicated on site plan.
- 11. *Foxwoods*: Fractured crossings; no pedestrian refuge; dual turn lanes. *SugarHouse*: Adding through lane, and double left at Shackamaxon and Frankford.
- 12. *Foxwoods*: Double left at Washington and double left and right at Dickinson. *SugarHouse*: Double left at Shackamaxon and Frankford.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>CREATE A 100-FOOT GREENWAY ALONG THE WATER'S EDGE</b>						
1. Is the environment protected and enhanced by requiring sustainable and environmentally friendly planning and building techniques?		*			*	
2. Is a 100-foot minimum public easement provided (where possible) for a riverfront trail and green space?		*			*	
3. Are piers on the site less than 60 feet wide kept as public open space or used in converted wetlands?		*			*	
4. Is the edge naturalized for stormwater filtration?		*			*	
5. Is land at the river's edge open and green for stormwater management?		*			*	
6. Is vegetation proposed native to the Philadelphia area?	*	*			*	

**NOTES**

- 2. *Both:* Both casinos have designed a public promenade that is about 50' wide.
- 3. *Foxwoods:* The applicant proposed to remove piers 60, 62, and 63.  
*SugarHouse:* Piers will be filled.
- 5. *SugarHouse:* The river's edge features a structural bulkhead along the length of the promenade. The promenade also features about 18' of plantings.
- 6. *Foxwoods:* Complies with City list of plants, though not all listed plants are native. *SugarHouse:* Some vegetation is native, but not most.

	CURRENT FOXWOODS PLAN			CURRENT SUGARHOUSE PLAN		
	YES	NO - FIXABLE	NO - NOT FIXABLE	YES	NO - FIXABLE	NO - NOT FIXABLE
<b>CREATE A NATURAL RIVER'S EDGE AND RESTORE HABITAT</b>						
1. Are piers on the site less than 60 feet wide kept as public open space or used in converted wetlands?		*			*	
2. Is land at the river's edge open and green for stormwater management?		*			*	
3. Is the edge naturalized for stormwater filtration?		*			*	
4. Is vegetation proposed native to the Philadelphia area?	*	*			*	
5. Are any failing bulkheads constructed so that they can function as vegetated seawalls, diverse habitat zones and/or terraced wetlands?		*			*	
6. Do utilities plans submitted by casinos address treatment of CSOs using the Water Department's efforts to implement green infrastructure practices?	*				*	

**NOTES**

1. *Foxwoods*: The applicant proposed to remove piers 60, 62, and 63.  
*SugarHouse*: Piers will be filled.
2. *SugarHouse*: The river's edge features a structural bulkhead along the length of the promenade. The promenade also features about 18' of plantings.
4. *Foxwoods*: Complies with City list of plants, though not all listed plants are native. *SugarHouse*: Some vegetation is native, but not most.
6. *Foxwoods*: Complies with PWD stormwater management; also uses private on-site system.

# Discussion: Traffic and Transportation

“We are a walkable city...We want to preserve our urban form. We do not want the automobile and its design requirements to dominate the landscape.”

*Mayor Michael A. Nutter, City of Philadelphia, excerpt from policy address, 17 June 2008*

The physical form of Delaware Avenue/Columbus Boulevard has gradually transformed from an industrial corridor to a suburban-style strip highway. The creation of Delaware Boulevard as an urban thoroughfare is a key defining element of the civic vision. Continuing the current “auto-only” orientation of the corridor threatens to undermine the principles of the civic vision.

The traffic/access proposals for the two proposed waterfront casinos are suburban traffic proposals, rather than striving toward a multi-modal boulevard as defined by the civic vision.

They are predicated only on meeting the immediate need for site access by auto. The measures proposed—which include selective road widening, addition of turn lanes and dual-turn-lanes, intersection widening, loss of on-street parking, and encroachment upon the potential future transit right-of-way—are **in direct conflict with the objectives of the civic vision**. These measures move the corridor further toward a fully auto-oriented “highway” rather than a pedestrian-focused signature boulevard. As demonstrated in Figure 1, implementation of the traffic proposals by the two casinos would make it increasingly difficult—if not impossible—to achieve the reinvention of Delaware Avenue/Columbus Boulevard as a destination-worthy city street.

From a traffic and access perspective, the casinos—or any large-footprint land use—do not inherently preclude achieving the civic vision, assuming adequate adjustments are made to the manner in which they address their transportation demands. Modifications to the casinos’ transportation proposals—in conjunction with alterations to their site design—could ensure a sufficient level of short-term site access while contributing to the ultimate realization of the civic vision. These recommendations are designed to ensure that any investment along the riverfront takes significant steps toward the civic vision of creating a pedestrian-

friendly, multi-modal urban boulevard. This transformation will require cooperation and investment from the city and state, as well as the development community.

Modifications to traffic and transportation related to the casino site plans would include the following key components:

#### **Improve Vehicular Access by:**

- Adjusting the proposed Phase 1 parking supply to reflect the actual projected parking requirements of Phase 1 only. Currently Foxwoods calls for 4556 cars in Phase I and SugarHouse for 4011 cars in Phase I. This report caps the total cars on site at 2400 cars for all phases, which reflects the highest concurrent trip capacity identified in Phase 1 by casino traffic studies.
- Eliminating all dual-left-turn lanes from the transportation mitigation program.
- Reconnecting internal street network on the casino sites to allow maximum flexibility for site access/egress.

#### **Increase Passenger Capacity by:**

- Phasing public transportation improvements to gradually increase overall passenger capacity along the boulevard. Improved transportation will facilitate a shift from the current auto-only orientation of the boulevard to a multi-modal boulevard that includes public transit and interconnected street networks that establish safe conditions for vehicles, pedestrians, and bicyclists.

#### **Enhance Pedestrian Conditions by:**

- Improving the pedestrian experience through design and making the street a pleasant pedestrian realm.

The results of this phased approach are described in Figure 1.



## Recommendations for Traffic and Transportation:

### A. Vehicular Access

While it is acknowledged that the access demands to the casino sites in the short term will be accommodated mostly by private cars, it is proposed that the Phase 1 transportation program be modified to allow for greater flexibility to address longer-term travel demands. Phased steps towards the realization of the civic vision over the next few years could significantly alter how people access the sites, specifically the proportions of transit-users and walkers in comparison to those who arrive in cars.

Three key components of improved vehicular access include:

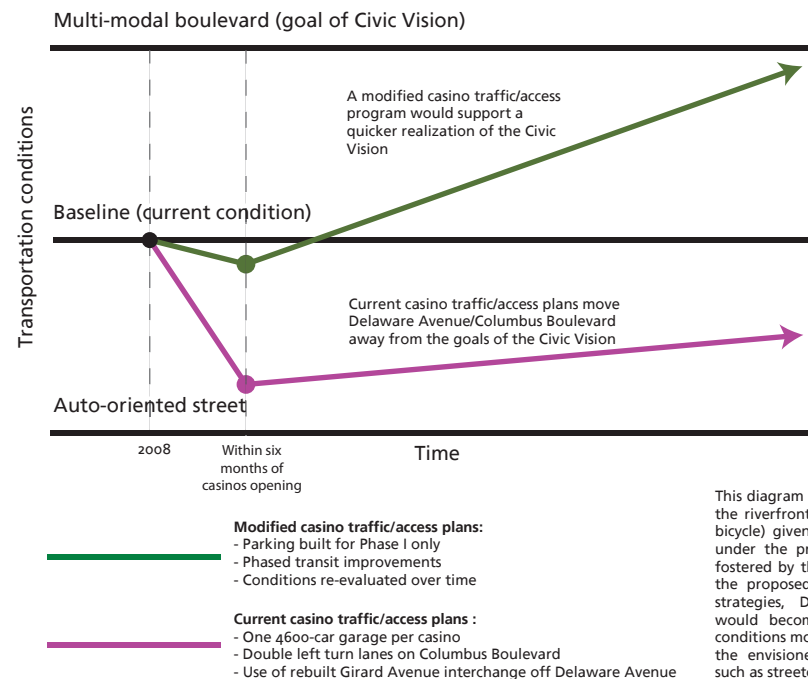
- **Adjustment of the proposed Phase 1 parking supply to reflect the actual projected parking requirements of Phase 1 only.** This will allow transportation and pedestrian access along Delaware Boulevard to evolve with implementation of the civic vision—such as steadily increased transit services—rather than perpetuating the dominance of car travel. Given that there has been little American casino development experience in cities as pedestrian-friendly and transit-supportive as Philadelphia, such a staging of the parking program allows for observation—after casino opening—of the actual mode-by-mode access characteristics of the sites.

Philadelphia’s Commercial Entertainment District (CED) code-specified parking requirement for Phase 1 is 4 parking spaces for every 5 slot machines ratio, a figure which is large enough to avoid spillover neighborhood parking issues. In other words, there is no need to “over-supply” the parking in Phase 1. Based on the Phase 1 slot-machine allotment

of 3000 for each site, it is recommended that the Phase 1 building program include 2400 spaces and not the 4600-car structured garages currently proposed in full build out.

- **Elimination of all dual-left-turn lanes from the transportation mitigation program.** Dual-left-turn lanes are the most damaging of all potential traffic measures with respect to the civic vision. Based on independent analysis, it has been determined that these measures offer very little real benefit

**Figure 1: Implementation of traffic and parking proposals**



This diagram compares trends in transportation along the riverfront across modes (automobile, pedestrian, bicycle) given the conditions that would be created under the proposed casino traffic plans and those fostered by the guidelines of the civic vision. Under the proposed casino designs and traffic mitigation strategies, Delaware Avenue/Columbus Boulevard would become increasingly auto-oriented, making conditions more difficult for future implementation of the envisioned multimodal boulevard, with transit such as streetcars and bus rapid transit.

with respect to traffic congestion. They equate to a total average time savings on the order of 10 to 30 seconds per vehicle at intersections for which they are proposed while significantly depreciating the pedestrian experience.

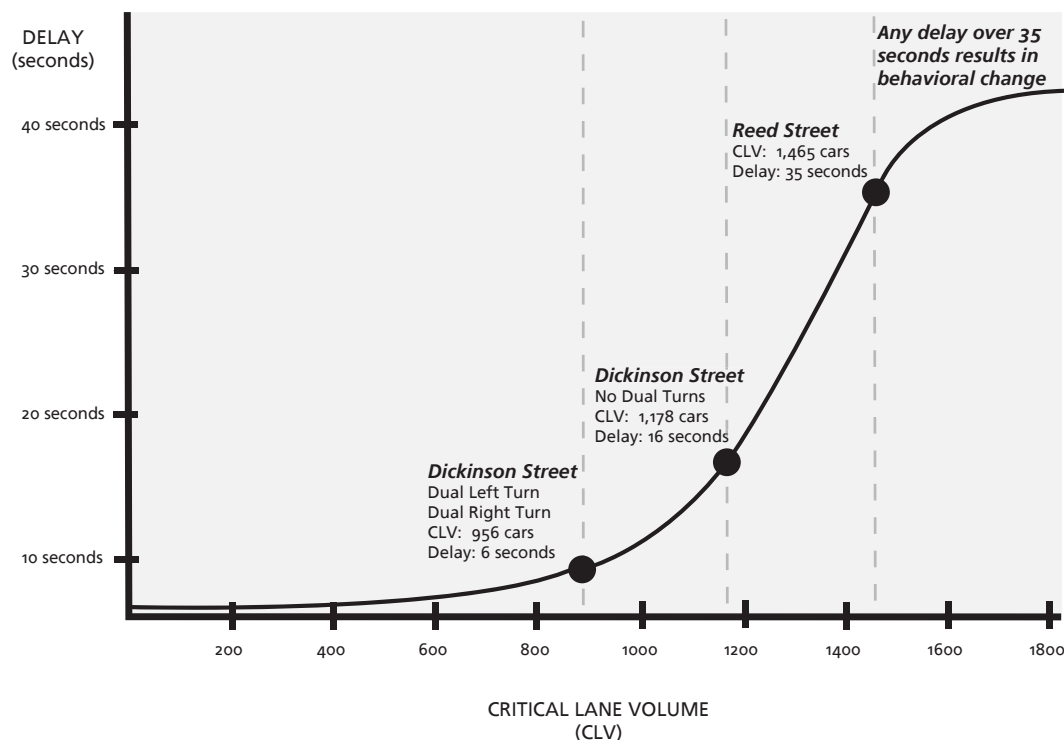
While dual left-turn lanes are largely based on the perceived “mandate” that traffic flow at all locations be demonstrably “better” than pre-development conditions, they are intended to achieve a traffic standard that is well

beyond what is typically acceptable in urbanized areas. For instance, the proposed second left-turn lane at Dickinson Street (the primary entrance to Foxwoods) results in a Level-of-Service (LOS) ‘A’ for the 2018 Saturday peak. This is considered an excessively “free-flow” condition in urban areas. Figure 2 demonstrates—based on a “Critical Lane Volume” methodology—that the total average time savings that would result from this second left-turn lane would be approximately 10 seconds per vehicle. Moreover, this level of time savings is relevant only during the absolute peak hour (early Saturday afternoon) which would occur just once per week (in contrast to the typical weekday morning/evening peaks which occur five times per week). The travel time savings during other periods would be much less significant if at all discernable.

Although this evaluation supports the strategic addition of single left-turn lanes at critical locations (which account for the slight “dip” toward auto-orientation evident in Figure 1), dual-left-turn lanes are not recommended due to their marginal impact on traffic flow in comparison with their overall detrimental effect on the civic vision. Projected impacts on traffic congestion of eliminating these dual-turn-lanes would be moderated by proposed transit improvements in conjunction with adjustments of the travel behavior of future visitors (see Figure 2) , including:

- Adjustment of travel/arrival schedule toward less-congested hours. As visits to the casino are not considered as time-sensitive as many other urban uses—such as trips to work or school—it is anticipated that patrons will tailor their travel habits accordingly to avoid the utmost peak conditions. This effect is greatest for discretionary trips and is generally underrepresented

**Figure 2: Dual Left Turn Lanes as an Approach to Traffic Mitigation**

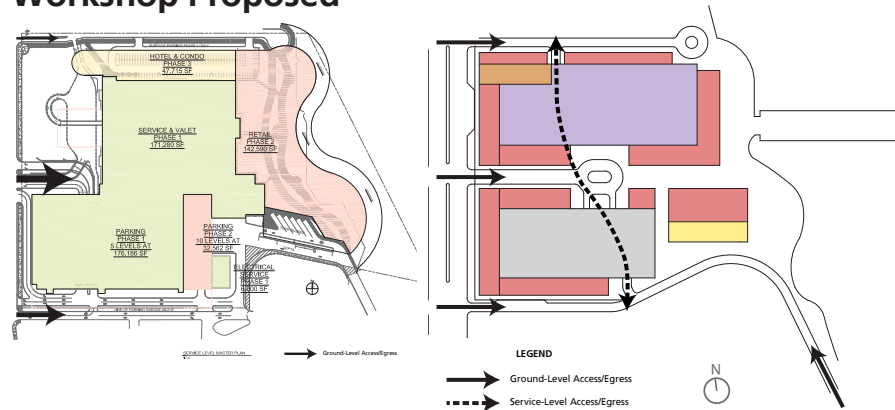


in traffic studies.

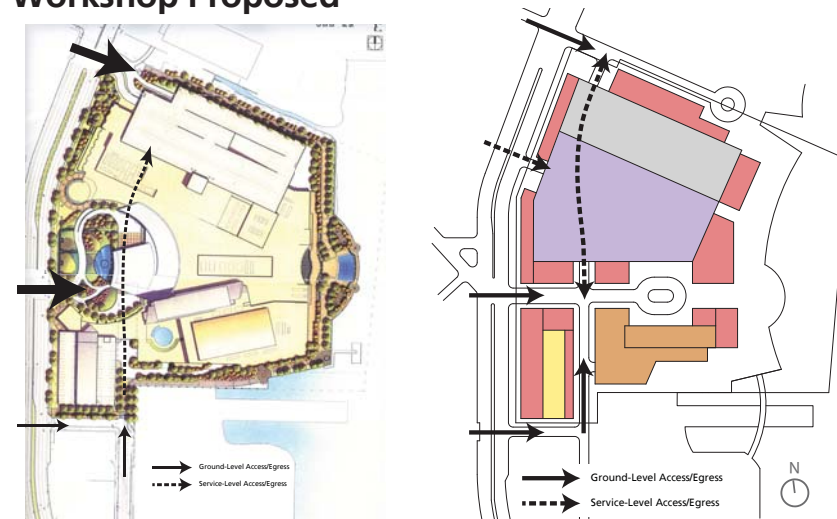
- Extended stay at destination. Many casino visitors—as well as other visitors to the riverfront—will often respond to traffic by staying longer at their destinations, and/or varying their activities, to avoid peak-period congestion. This expectation is realistic given that the projected peak hour is on a Saturday afternoon, due to the more leisurely, flexible nature of the subject activities in comparison with typical weekday morning/evening commutes.
- **Reorientation/reconnection of internal street network to allow maximum flexibility for site access/egress.** Any large urban development can benefit from multiple access/egress points to/from its main parking supply, which allows the “even-ing out” of the distribution of turn movements to/from the main thoroughfare (in this case Delaware Avenue/Columbus Boulevard). This avoids over-concentration of traffic at just one or two primary access points, which is a condition that typically leads to mitigation measures such as dual-left-turn lanes. Given the proposed modified site plans, Figures 3 and 4 illustrate the implications of this improved interconnectivity on the distribution of site access. The thickness of the arrows depicts the relative distribution of traffic entering from Delaware Avenue.

To reach the vision, it is essential that the city establish new policies that will ultimately alter the existing, auto-centric approaches to transportation. These single mode focused policies threaten to significantly move Delaware Avenue toward a more fully auto-oriented design that is increasingly disconnected from—rather than *reconnected to*—the adjacent communities.

**Figure 3: Foxwoods Site Access, Current and Workshop Proposed**



**Figure 4: SugarHouse Site Access, Current and Workshop Proposed**

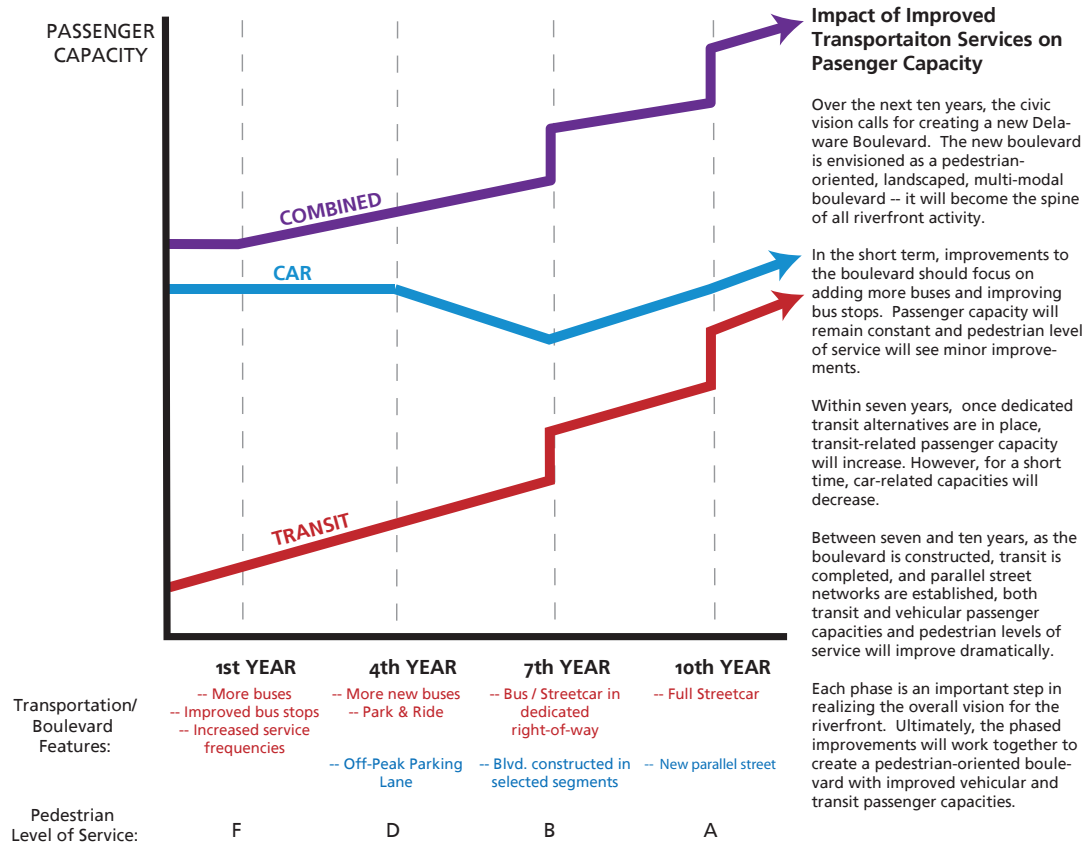


See the “Findings and Recommendations” section for more details on the Workshop proposals.

## B. Passenger Capacity

The civic vision proposes a significant increase of overall transit capacity as a main component of the eventual Delaware Boulevard, with the ultimate goal of a modern streetcar service

**Figure 5: Impact of Improved Transit Service on Passenger Capacity**



to guarantee continued growth in passenger capacity along the route. It is recognized that the achievement of such an amenity is a longer-term action with a 10- to 12-year time frame. Therefore, it is critically important that there are interim measures taken to accommodate corridor travel demands while accelerating the transformation of corridor travel characteristics toward a higher level of transit use. While careful attention to complementary urban design issues (i.e. pedestrian-scale buildings, sidewalk orientation) is a key component of this objective, the ultimate realization of more transit riders depends on steady enhancements to service quality and coverage.

Figure 5 depicts the potential impact of improved transit service on the total passenger capacity of the corridor over time.

While car access capacity is projected to remain basically steady for the first five years, enhancements to transit service would steadily increase the total passenger capacity of the corridor. Specific proposed actions toward this end include:

- 0 to 5 years:** Increase in frequency of existing bus services, as well as improved stops/stations (in the form of plazas and “super-stops” as depicted in Figures 6 and 7, potential extension of existing routes, and potential establishment of new routes (either standard-bus or “shuttle-bus”) that connect the casinos with high-order transit facilities such as the Market-Frankford El and Broad Street Subway.
- 5 to 10 years:** The medium term would consist of establishment of a “traffic-separated” transit system connecting at least the two casinos with main transit lines and park-and-ride facilities (for workers and visitors). This may require the creation of parking garages at strategic locations to intercept traffic and allow passengers to shift to transit. Possible

locations for intercept garages would be near highway off-ramps proximate to the central Delaware. This would be a step toward the creation of a “park-once district”, and allow for trips to be extended to multiple venues along the riverfront accessed by walking or transit, likely increasing the value of each trip. Intercept garages would benefit other developments along the riverfront as well.

- **10 to 12 years:** The envisioned “permanent” transit system would represent a significant step-change in service quality, with a traffic-separated modern streetcar along the length of the central riverfront with direct connectivity to multiple SEPTA and PATCO facilities.

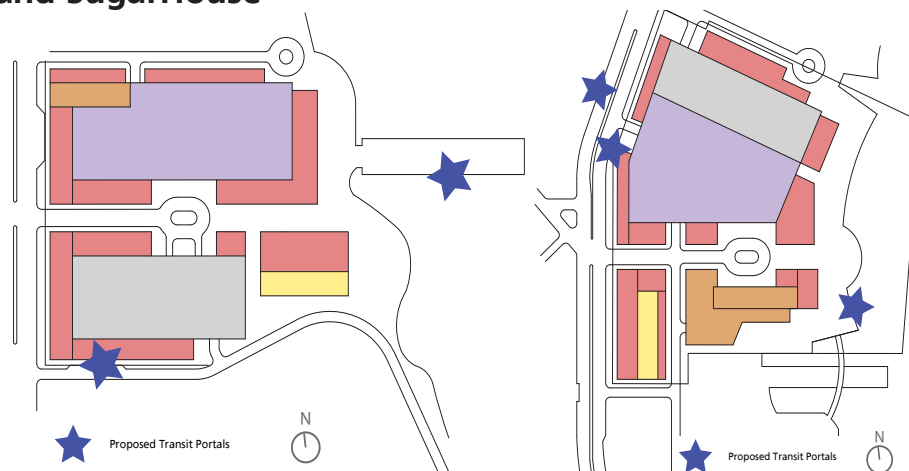
Concurrently, it is anticipated that the **road capacity** in the corridor would go through a variety of phases:

- **0 to 5 years:** The initial impact of casino development along the riverfront would see a minor increase in traffic capacity given the additional turn lanes and other measures as proposed by the modified casino traffic/access plans. This may be followed by minor strategic decreases in overall traffic capacity as specific sections of the corridor—i.e. those that have moderate traffic demand compared with other, critical sections—are rebuilt to the ultimate boulevard cross-section with consistent bicycle lanes, improved pedestrian features, and on-street parking.
- **5 to 10 years:** The medium term would exhibit a gradual increase in total car capacity with the implementation of parallel streets and local connections as proposed in the civic vision. The primary benefit of this improved local-network interconnectivity would be that local residents would no longer have to “mix” with longer-distance through-traffic

on Delaware Boulevard when traveling to/from local destinations—including the casinos, shopping, and the riverfront itself. Traffic operations along the boulevard would benefit from removal of local “traffic friction” from the general travel stream, making for an overall more efficient movement of traffic—local, regional, passenger, and freight—throughout the corridor.

- **10 to 12 years:** Concurrent with the construction of the full streetcar line, the further completion of the envisioned local street network would continue to add to total traffic capacity, with the combination of streets and transit leading to an unprecedented level of mobility to/through the corridor.

**Figures 6 & 7: Workshop Proposed Transit Portals, Foxwoods and SugarHouse**



## C. Pedestrian Conditions

The pedestrian experience proposed in the casino's traffic studies is strikingly inconsistent with the civic vision's goal of creating a pedestrian-friendly, connected, accessible waterfront. Enhancements to current pedestrian conditions along the Delaware Avenue corridor are key to the ultimate realization of the civic vision, as well as a critical component of the city's improving urban/neighborhood character. The overall quality of the pedestrian environment can be measured by a "Pedestrian Level-of-Service," a label that in this case would need to consider *qualitative* as well as quantitative measures.

The pedestrian experience entails much more than traveling from point A to point B. As a result, it is important that analyses of pedestrian levels-of-service take into account *qualitative* factors as well as traditional volume and capacity considerations. It is important that any comprehensive assessment of pedestrian levels-of-service combine urban design/architectural principles with practical safety and capacity considerations.

The following nine specific factors of evaluation<sup>2</sup> allow a broad, comprehensive analysis of pedestrian conditions. Each of these has direct relevance to the civic vision in that their achievement is threatened by implementation of the types of traffic-capacity enhancements currently proposed by the two casino plans:

- **Enclosure/Definition:** The degree to which the edges of the street are defined. Commercial streets best demonstrate enclosure when buildings are constructed side-by-side along the sidewalk, minimizing the volume of empty space between and in front of buildings.
- **Complexity of Path Network:** A complete/complex path

<sup>2</sup> Amos Rapoport, *History and Precedent in Environmental Design (1990)* and Allan Jacobs, *Great Streets (1993)*.

network furnishes pedestrians with numerous route choices between origins and destinations and ensures a high degree of connectivity between activity centers.

- **Building Articulation:** Storefronts and houses add interest to the pedestrian experience through the varied application of materials, design, color, and décor.
- **Complexity of Spaces:** Frequent variation in the orientation and character of public spaces adds to the general level of interest of commercial districts and residential neighborhoods.
- **Overhangs/Awnings/Varied Roof Lines:** Items *above* street level contribute to the experience *at* street level, in terms of both aesthetics *and* functionality.
- **Buffer:** The presence of a "buffer" between pedestrians and moving vehicles greatly enhances pedestrian safety and comfort. A buffer improves both *actual* safety and *perceived* safety.
- **Shade Trees:** The presence of shade trees improves the general comfort level of pedestrians, contributing to street definition, buffer, shade, and shelter.
- **Transparency:** Addresses the transition between the public space and private space. In business areas, transparency is created through the use of windows, outdoor displays, and sidewalk cafes.
- **Physical Condition:** Physical condition addresses both the structural integrity and functionality of the sidewalks and the

overall contribution (positive or negative) of other physical elements in the corridor, such as the street itself. Specific elements include: sidewalk configuration and condition, vehicular speed, and lighting.

Full understanding and attention to these factors at all phases of development of Delaware Boulevard, including the two casinos, is absolutely necessary to ensure that the civic vision can ultimately be achieved. Provided these factors are enhanced rather than eroded as the timeline progresses, the ultimate increases in both road and transit capacity as depicted in Figure 5 will also be accompanied by a steady improvement to pedestrian level-of-service.

At a more basic roadway design level, it can be demonstrated that the current casino traffic/access proposals run counter to the achievement of optimal pedestrian conditions. While the existing Delaware Avenue violates these principles at a number of defined locations along the corridor, the casino proposed traffic improvements will *add* to the total such violations throughout the corridor rather than helping to resolve them. Figures 6 and 7.

### **Conclusion**

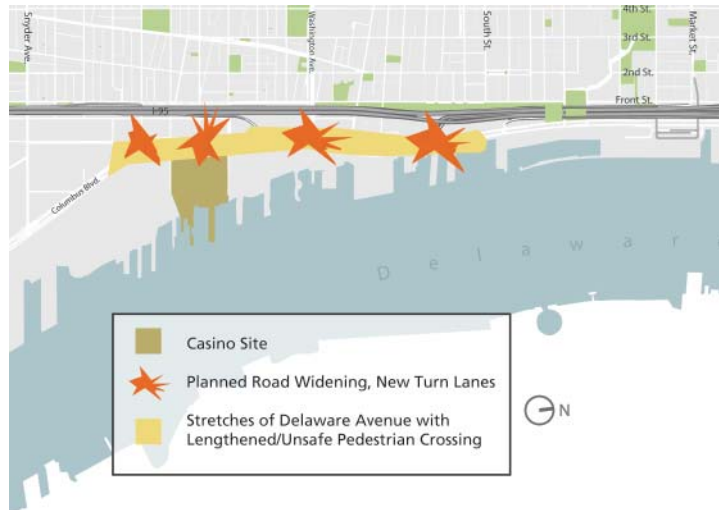
The “business-as-usual” approach to transportation within the Delaware Avenue corridor must be reversed if the objectives of the civic vision are to be reached. Development such as casinos—in and of themselves—do not preclude the transportation/mobility goals of the civic vision, yet it is important that the proposed program of transportation mitigation measures be adapted to the longer-term vision of ensuring that Delaware Boulevard is a centerpiece of riverfront activity.

While achieving the goals of a pedestrian-friendly, urban-scaled,

multi-modal boulevard on Delaware Boulevard is possible given careful attention to phased transit solutions and stemming the further erosion of the character of the existing street, reduction in the size and number of structured parking garages is also critical to achieving the civic vision. New parking, traffic and transportation policies must be coordinated across the city in order to ensure that structured parking and automobile-oriented solutions to urban access do not dominate the landscape. This incompatibility is addressed in the urban design section of this report.

**This report strongly recommends that no additional road capacity is added to Delaware Avenue/Columbus Boulevard.** Adding road capacity to an anticipated level of service is an outdated traffic engineering model that is a never ending proposition. Well-designed, human-scaled, healthy cities balance growth with investment in infrastructure (mass transit, shared parking, remote parking, water taxis) that contributes to the quality of urban life.

Figures 8 & 9: Planned Road Improvements, Foxwoods and SugarHouse







# Discussion: Urban Design

Large developments will contribute to the riverfront when they are designed as part of a connected urban framework in which land use, open spaces, transportation and development are shaped by comprehensive and mutually supporting policies and practices. Private development that both supports and is supported by public amenities such as roads, trails, and parks that go beyond a single site will contribute to the civic vision. This includes developments in which thru-ways and access points break down building size so that the resulting sites are urban in scale and economically viable.

To be considered contributing, buildings and site designs must add to the vibrancy, activity and scale of Philadelphia's existing urban fabric. The civic vision calls for the extension of Philadelphia's signature street grid to the river's edge in order to continue the active, pedestrian-scaled rhythms of Philadelphia street life as it makes its way over and under I-95 to the river's edge. Currently, the urban design character along the central Delaware is suburban and automobile dominated.

To contribute to the *Civic Vision for the Central Delaware*, buildings and sites must:

- Disperse their building program across Philadelphia-scale parcels that allow for through-traffic and public access to the river;
- Include urban build-to lines and active frontages;
- Include a mix of uses;
- Preclude superblock-scaled floor plates; and
- Exclude large structured parking garages that dominate the site.

The two proposed casinos could be considered contributing

members of the waterfront community if the developments meet the following design conditions:

- Building massing meets the 500-foot block size to allow for frequent riverfront access for pedestrians, bicyclists, and autos.
- Moves away from the suburban "big box" form by separating the parking garage from the casino structure and building vertically instead of spreading horizontally.
- Maintains a 100-foot riparian set back from the river's edge
- Does not allow parking and single uses to physically dominate the site.
- Provides active uses along the boulevard and the river sides of the site through a mixture of uses that enhances the pedestrian experience.
- Builds infrastructure that connects to adjacent developments (either existing or future) through trails, streets, and other public spaces.
- Integrates transportation, ecological, and other sustainable systems into its site design.

## Recommendations for Urban Design:

The urban design recommendations developed during the workshop include:

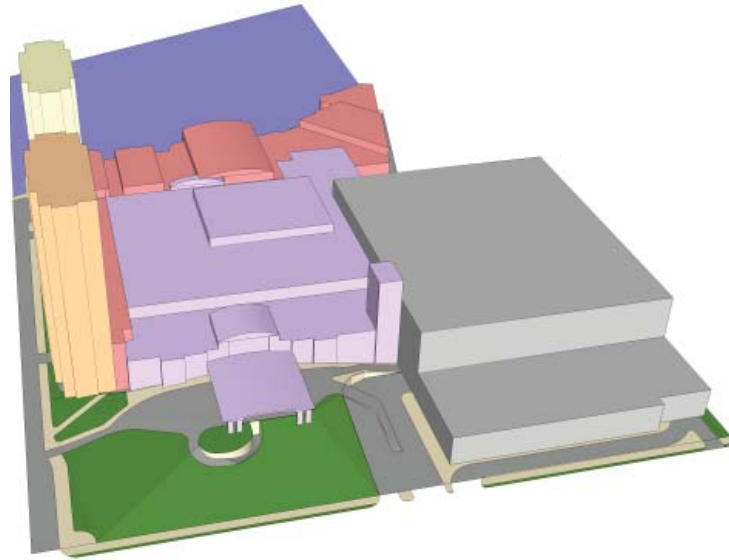
- Invoke the 500-foot block scale of the civic vision (which is drawn from the traditional Philadelphia block-size) by building streets that provide perpendicular riverfront access and frame more urban scale development parcels.

- Design buildings that are scaled to fit this new urban fabric.
- Modify the valet parking and porte-cochere area within the current casino site plans by pulling these functions off Columbus Boulevard/Delaware Avenue and making a through-block connection that preserves a grand entrance while enhancing the character of the urban boulevard. This through-street becomes part of a street network that increases overall site, neighborhood and riverfront connectivity.
- Create multiple entry points to the site to increase access points and break down the scale of the large parcel.
- Require mixed-use development and public riverfront access in Phase I as well as in all future development phases. Emphasize a mixture of uses along the river and Delaware Boulevard sides first to enhance the most publicly accessible parts of the site.
- Separate the parking garage from the casino building, with connection points on the service and lobby levels.
- Wrap the parking structure with mid-rise residential or retail development. This frontage will mitigate the visual obtrusiveness of the open garage.
- Create activities and attractions along the riverfront that can connect to future riverfront development such as trails.
- Connect the parking structure directly to the public riverfront activities, providing access that can be open to non-casino users. This non-gaming public use of the parking garage could be leveraged for future development of the riverfront.
- Create an on-site street network (above and below grade) that helps disperse auto traffic as well as incorporates “complete streets” that provide parallel and perpendicular connectivity for pedestrians, bicyclists, and autos.
- Provide open space that allows for public access on roads, trails, and parks.
- Construct the 100-foot greenway.
- Re-conceptualize existing piers to bolster riverfront public space.
- Build green roofs – in the form of activity decks or planted areas – to add value to adjacent high-rises and on-site riverfront views as well as manage storm water.
- Improve the streetscape of Delaware Boulevard to include widened sidewalks and double tree grooves for stormwater management and reduction of the heat island effect.
- Integrate green building techniques such as pervious paving and rainwater gardens for public spaces.

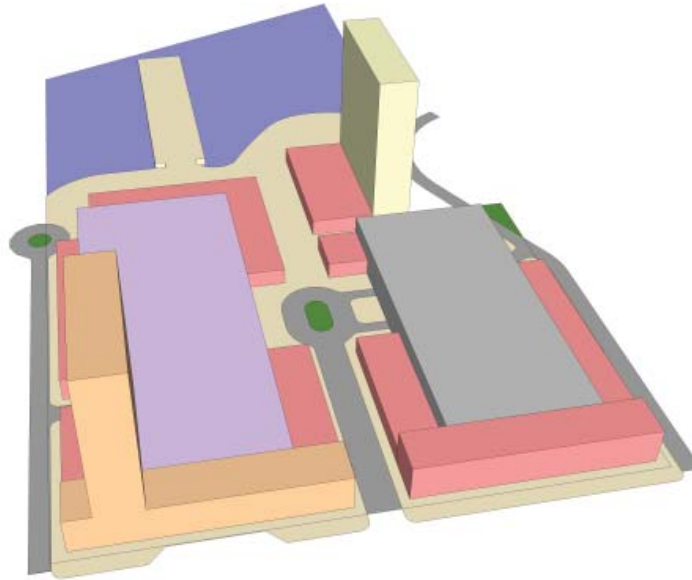
## Conclusion

The casino site design workshop explored ways that the casinos might contribute to the waterfront community and produced recommendations for specific design components for each site. The review-team proposed substantial modifications which could contribute to the civic vision, and demonstrated important trade-offs in design and program which should inform decision-making at the city and state level, including bringing streets and public access ways through the site; creating the 100-foot riparian buffer; dispersing building program across the site; wrapping the parking and casino floor with active uses; and reducing the size of the parking structure. However, the schematic site plans produced during the workshop demonstrate the limitations of this type of building on these sites within the framework of the civic vision. In particular, the large casino floor plate (similar to the Gallery at Market East and the US Mint at 4<sup>th</sup> and Arch Streets) and the dominant garage structures (equal to ¼ of all of the parking at Philadelphia International Airport on one site) create superblock-scaled designs that are difficult to urbanize and do not contribute to the civic vision.

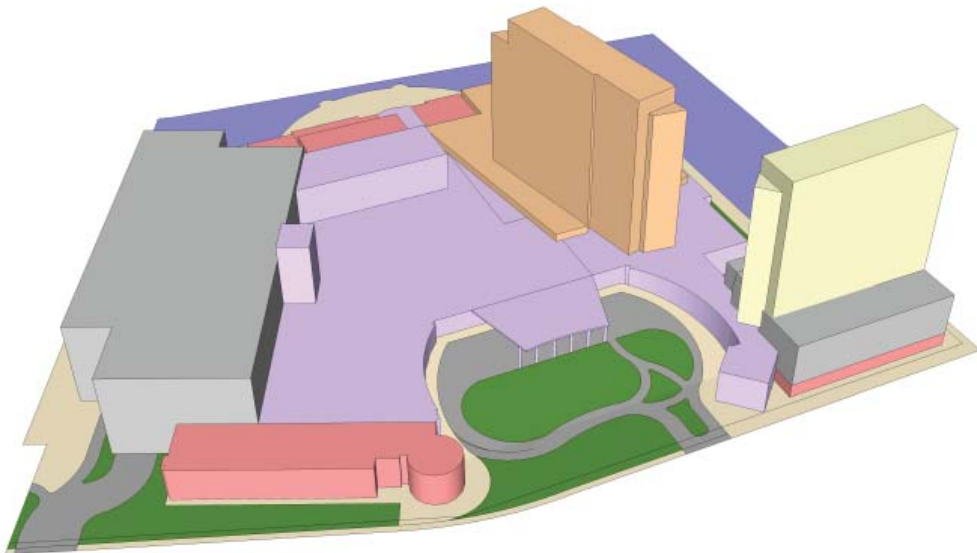
**Current design, Foxwoods Casino**



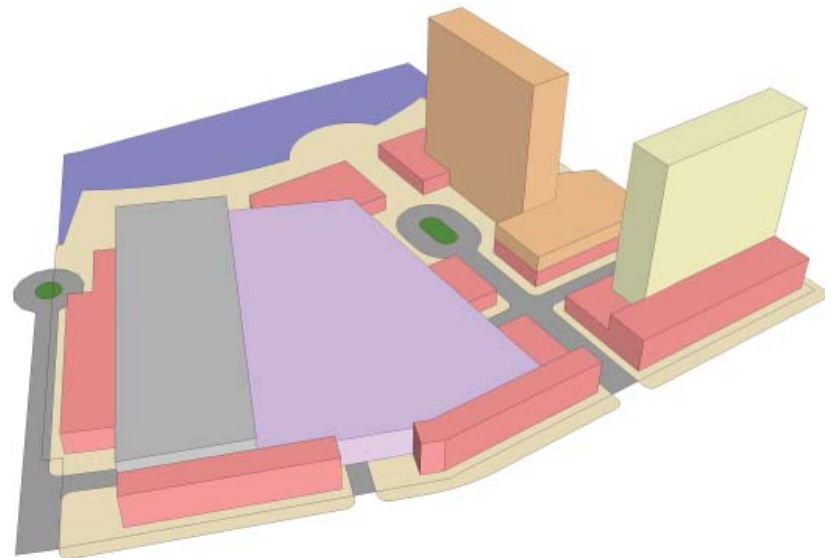
**Workshop design, Foxwoods Casino**



**Current design, SugarHouse Casino**



**Workshop design, SugarHouse Casino**





## Discussion: Ecology

In working to create the Civic Vision for the Central Delaware, PennPraxis and the Central Delaware Advisory Group applied ecological and sustainability best practices to many of the vision's signature recommendations, including a continuous greenway, ample open space, wetland restoration, emphasis on multi-modal transportation strategies, and a dense walkable extension of the city to the river's edge. This emphasis on reducing future impacts was driven by the design principle to "Honor the River", drawn from civic engagement and advisory group consensus in the Central Delaware planning process. To "Honor the River" means that both the environmental impacts of site design and operations and the long-term rehabilitation and preservation of the Delaware River estuary are important conditions for any development to contribute to the future of the riverfront.

The overall ecological goal of these large-scale developments should be to create a net positive impact on the health of the



*Tinicum Marsh, the largest freshwater tidal wetland in Pennsylvania, is a significant naturalized habitat along the Delaware River.*

Delaware, improving the river such that when the casinos are finally constructed and operational, the ecological conditions of the river are better than those that exist today. These conditions include multi-faceted aspects of environmental health as well as a strengthened connection between the city, its people, and the river. In addition, the casino designs should perform ecologically, working to enhance the river and the broader ecosystem the river supports.

Given this goal, the casinos should be designed to:

- regenerate the ecology of the degraded and polluted riparian riverside corridor;
- re-naturalize the river's edge where at all possible;
- manage storm water in an ecologically beneficial way;
- conserve clean potable water.

### Recommendations for Ecology:

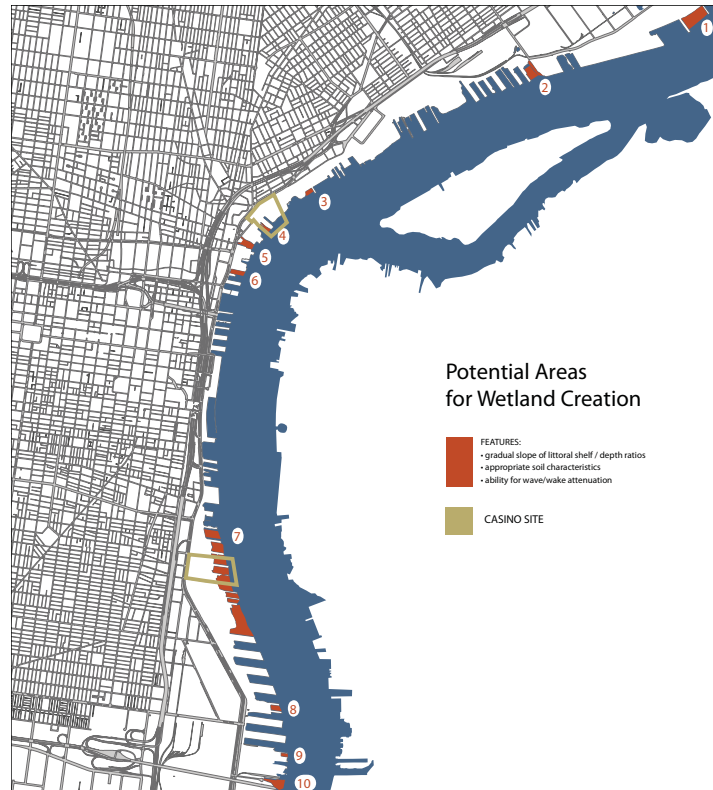
To accomplish these goals, the casinos and other large development must:

- Ensure 30% of site is green space; this can include green walls and roofs, as in Seattle's Green Factor program (see <http://www.seattle.gov/dpd/Permits/GreenFactor/>)
- Ensure 50% green roof coverage and 70 % cool roof coverage, which reflects more sunlight and heat away from building than conventional roofs
- Maximize pervious ground surface via landscaping and pervious pavers to facilitate establishment of vegetated systems (trees, shrubs, herbaceous plants and vines)
- Design site to best manage stormwater and control runoff to avoid erosion and sedimentation problems
- Incorporate storm water biofiltration to improve water

- quality
- Use pesticide-free, integrated pest-management landscaping
- Use landscaping that is appropriate to a riparian location with native and non-invasive species
- Reduce the heat island effect with green space and high albedo materials
- Remediate brownfield contamination where applicable
- Protect existing animal and plant habitat
- Restore wetlands where possible to create habitat and clean the river; capitalize on all existing opportunities for wetland restoration
- Design interior/exterior lighting to reduce light pollution

## Conclusion

The Delaware Estuary is the result of millions of years of evolution, an extremely complex ecosystem marked by high productivity, internationally recognized habitat, and a large range of biodiversity. Any development along the Delaware waterfront regardless of land use and size must be viewed as an opportunity to enhance the life supporting systems of the river and its inhabitants. In simpler words, “honor the river”.



The Philadelphia Water Department Office of Watersheds identified the casino sites as two potential areas for wetland creation along the central Delaware (Source: PWD, Andropogon Associates).

# Discussion: Sustainability

“We need to begin developing a comprehensive plan now that supports a sustainable network of systems to protect public health so citizens and businesses don’t lose out on quality and dependable services.”

*Governor Ed Rendell,  
Commonwealth of  
Pennsylvania, 28  
February 2008*

Together, the two casino designs as proposed through Phase I will have significant environmental impacts. They will create over 3.5 million square feet of new construction, house up to 6,000 slot machines, and will generate thousands of visitors daily, with an estimated 80 % of the patrons using private automobiles. Structured, on-site parking will be provided “free” for a Phase I built-out total of over 8,500 cars.

For these casino developments to contribute to the sustainability of Philadelphia and the Delaware riverfront, the overarching goal must be to significantly reduce the carbon footprint of the casino developments by designing the buildings and sites to:

- use less energy than conventional design practices and building codes prescribe;
- reduce the number of visitor and employee trips made by car;
- enhance urban connectivity and public access to the waterfront by taking full advantage of the existing street network;
- help the City to meet its national and global commitments to reduce greenhouse gas emissions.

The ecological, environmental, and carbon impacts for the casinos have not been analyzed fully, but their proposed designs infer that daily water use, energy consumption, garbage and waste generation and associated carbon emissions will be considerable. Using full-cost accounting, these impacts increase even further, since the burden for cleaning the river, hauling waste, producing energy, handling pollution and compromised health of citizens will be borne by the public. However, a number of mitigation strategies exist that do not affect the cost of development. For example, studies have shown that as much as 50% reduction in

energy demand can be achieved at no extra cost by using green design strategies such as building orientation and form, natural daylighting, automated lighting controls, passive cooling, and solar devices.

There is a compelling rationale to make Foxwoods and SugarHouse among the first casinos in the U.S. to build green. Among the benefits of building these casinos for sustainability are:

- responsible global climate action through reduced carbon emissions;
- cleaner air and water;
- reduced waste;
- restored habitat and regenerative riparian ecology;
- healthier indoor environmental quality;
- significantly reduced operating and maintenance costs for the casinos.

## Recommendations for Sustainability:

To accomplish these goals, the casinos must meet the following sustainability standards:

- Ensure 50% green roof coverage and 70% cool roof coverage, which reflects more sunlight and heat away from buildings than conventional roofs
- Ensure 30% of site is green space; this can include green walls and roofs, as in Seattle’s Green Factor program (see <http://www.seattle.gov/dpd/Permits/GreenFactor/>)
- 20% or more reduced energy use below conventional buildings
- Generate 20% or more renewable energy on-site
- Supply 35% or more of the building’s energy by



purchasing from off-site renewable green power sources—wind, solar, geothermal, etc.

- Purchase 50% or more of wood products used from certified sustainable forests
- Attain 60% employee use of alternatives to driving to work alone (60/40 mode split)
- Attain 30% visitors use of alternative transportation (transit, walking, shuttles, etc.)
- Achieve 30% reduction in construction waste
- Achieve 60% recycling/solid waste diversion
- Achieve 30% or more reduction in potable water usage
- Design to attain LEED Silver rating or better
- Incorporate city's historic preservation guidelines into planning process, particularly in relation to archaeological findings
- Ensure all site design and operational practices are compatible with the City's sustainability agenda, as laid out by the Mayor's Office of Sustainability
- Develop sustainable building standards for all development along Philadelphia's Delaware waterfront.

The City of Philadelphia aspires to become, in Mayor Nutter's words, "America's greenest city." This once in a generation opportunity—to design these facilities with the best green practices and principles—should not be missed.

In order for Philadelphia to achieve this goal, below are examples of sustainable design strategies that the city can encourage and codify:

### **Reduced Energy Demand**

- Design sites so that building orientation, form and massing

harness passive heating and cooling opportunities

- Right-size mechanical systems and building functions to reduce energy needs
- Generate on-site renewable energy from wind, micro turbines, geothermal, wave, tidal energy, etc.
- Co-generate power from on-site plant; use waste heat recovery to heat water
- Use natural daylighting, skylights
- Use variable lighting controls
- Use LED artificial lighting
- Employ natural passive cooling techniques: cross-ventilation, shading devices, green roofs, etc.
- Explore energy-efficient slot machines
- Use insulated/coated glazing for glass/intelligent glass systems
- Use green roofs, high albedo materials, and vegetation cover to reduce heating/cooling needs
- Commission buildings post construction to verify compliance and fine-tune functional performance

### **Transportation Alternatives**

- Encourage alternatives to driving alone: biking, walking, transit
- Minimize and manage on-site parking to reduce demand
- Employ car sharing and use of low emission, electric vehicles
- Create bicycle storage facilities
- Subsidize free transit passes for employees
- Offer visitor shuttle service from transit stops
- Pedestrian-friendly site design to provide easy street access

## Water Management

- Reduce overall water usage demand
- Employ rainwater harvesting for irrigation, toilet flushing, etc.
- Use low-flow bathroom fixtures
- Use high efficiency irrigation system without using potable water

## Indoor Air and Environmental Quality

- Use recycled content, non-toxic and low VOC (Volatile Organic Compound) paints and materials
- Provide a smoke-free environment for patrons and employees
- Use displacement ventilation
- Monitor and adjust delivery of outside air
- Use reduced chemical and eco-friendly cleaning products



*Green roofs help buildings achieve better energy efficiency by reducing heating and cooling needs, as well as aiding in stormwater management through increased vegetative surfaces. They also decrease heat island effect through absorption of solar radiation.*

## Garbage and Waste Reduction

- Recycle, reduce, and reuse construction waste
- Eliminate use of disposable cups, glasses, utensils
- Strive for a “zero waste” policy; compost food and recycle on-site all landscape waste

## Model Rating Systems and Public Policy Commitments

- LEED NC (New Construction):

The U.S. Green Building Council Rating System for energy efficiency, building performance and environmental stewardship.

- LEED ND (Neighborhood Design): A neighborhood-scaled design and locational efficiency criteria based on the combined principles and strategies of Smart Growth, New Urbanism, Green Building, and Transit-Oriented Development.
- Seattle Green Factor: An ordinance enacted in May 2007 by the City of Seattle, requiring new development in neighborhood commercial districts to incorporate green space as part of their open space plan. It allows developers to combine a set of strategies to “layer” green spaces, such as landscaping, green roofs and green walls, in flexible combinations along streets and other public spaces to help filter rainwater, decrease heat island effects and provide for a vibrant streetscape.

The following commitments have been made by the City to national/global climate compacts (via Philadelphia Local Action Plan for Climate Change):

## Cities for Climate Protection® (CCP) Campaign of ICLEI-Local Governments for Sustainability

In 1999 the City committed to a goal of reducing Philadelphia greenhouse gases to 10 percent below 1990 levels by 2010.

## Climate Protection Agreement of the U.S. Conference of Mayors

In 2005 the City agreed to meet or beat the greenhouse gas reduction targets recommended for the US under the Kyoto Protocol (seven percent below 1990 levels), and to urge state and federal governments to enact policies and programs to

reinforce local efforts.

**Large Cities Climate Leadership Group and Clinton Climate Initiative (CCI)**

In 2006 the City joined an international group of major cities committed to reduce urban carbon emissions and adapt to climate change. This initiative is supported by the Clinton Climate Initiative (CCI) of the William J. Clinton Foundation.

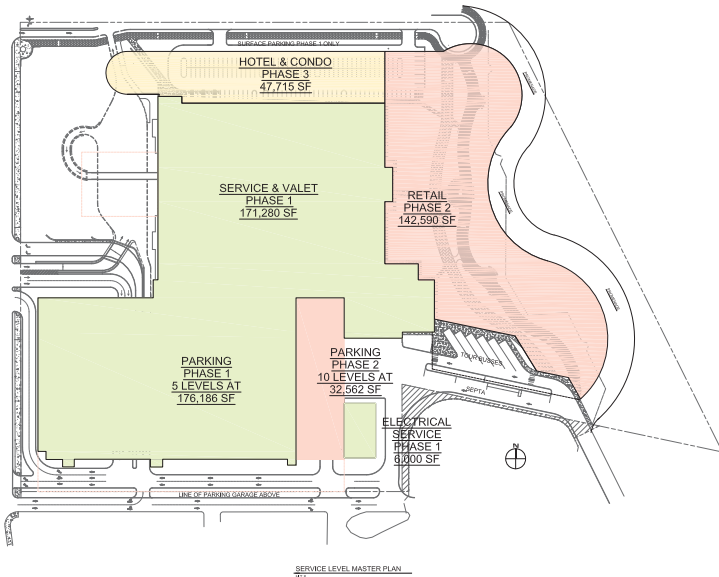
## Findings and Recommendations

Through its review of the proposed designs of the Foxwoods and SugarHouse site plans, PennPraxis and its consulting team of experts concluded that the casinos as currently designed were not compatible with the goals of the Civic Vision for the Central Delaware. This outcome was determined by the many non-contributing aspects of the current casino designs (seen in greater detail in compatibility matrix – see pages 46-53).

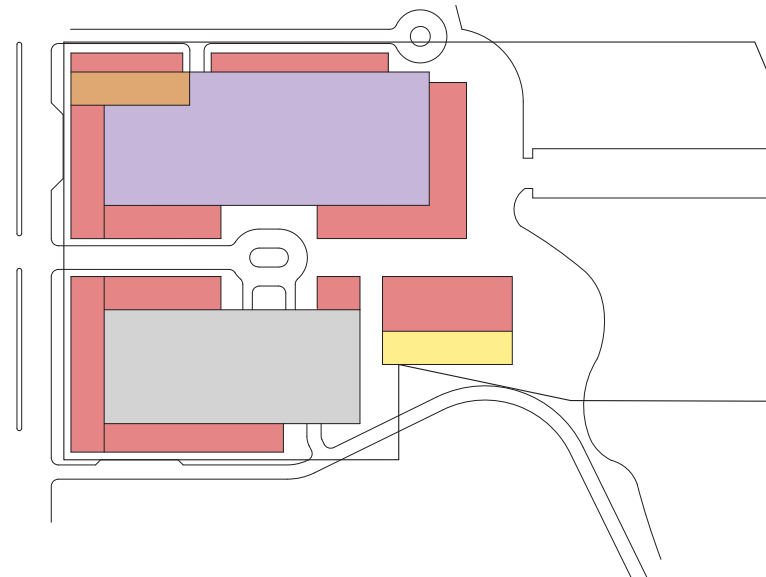
In an effort to demonstrate the conditions in which the casinos' designs could contribute to the civic vision, PennPraxis and the expert team conducted a design workshop. The focus of this workshop was to explore modifications to the casino designs and programs which could enable the developments to meet the guidelines and goals of the civic vision. In an effort to test the civic vision against the actual program of development, the work focused on changes which left most of the proposed casino program intact (see pages 61-62 for current proposed casino program). This effort was aided by Tim Magill, a casino and resort architect, who led the workshop's physical site planning session.

This workshop concluded that many modifications to the two 5000-slot machine casino parlors with their respective 4556- and 4011-car garages in Phase I could be made to the site designs that would enable them to contribute to the civic vision. These site plans show modifications that demonstrate how the casinos could be classified as partially contributing to the civic vision. However, the group concluded that the two casino projects cannot fully contribute to the civic vision, due to the scale of the projects and the impact of their parking structures on the urban landscape.

### Current design, Foxwoods Casino



### Workshop design, Foxwoods Casino



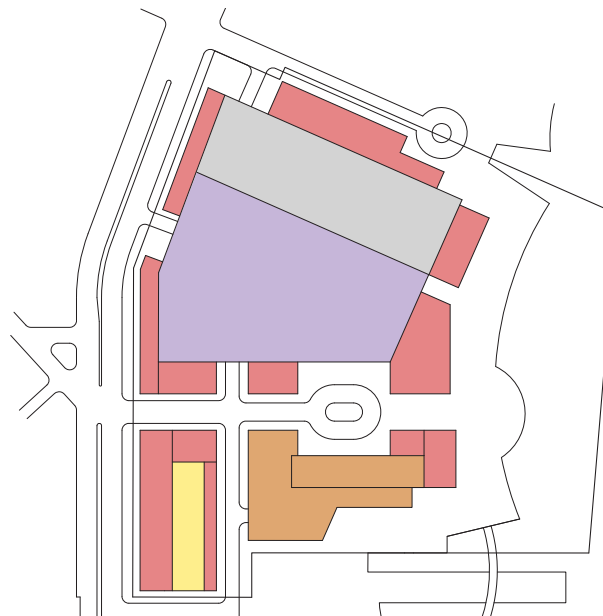
#### LEGEND

- Hotel
- Parking
- Low-Rise Mixed Use
- Casino
- Condo

### Current design, SugarHouse Casino



### Workshop design, SugarHouse Casino



# Comparative Analysis Matrix

*Foxwoods*

*SugarHouse*

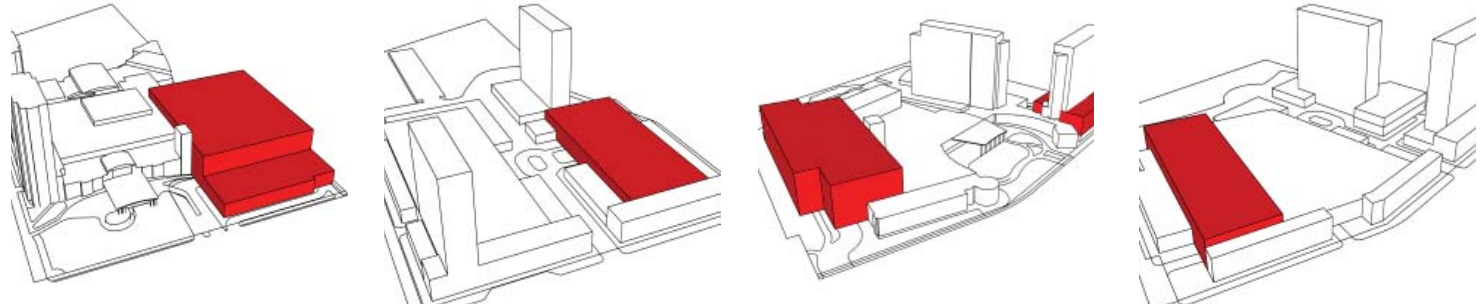
*current design*

*workshop design*

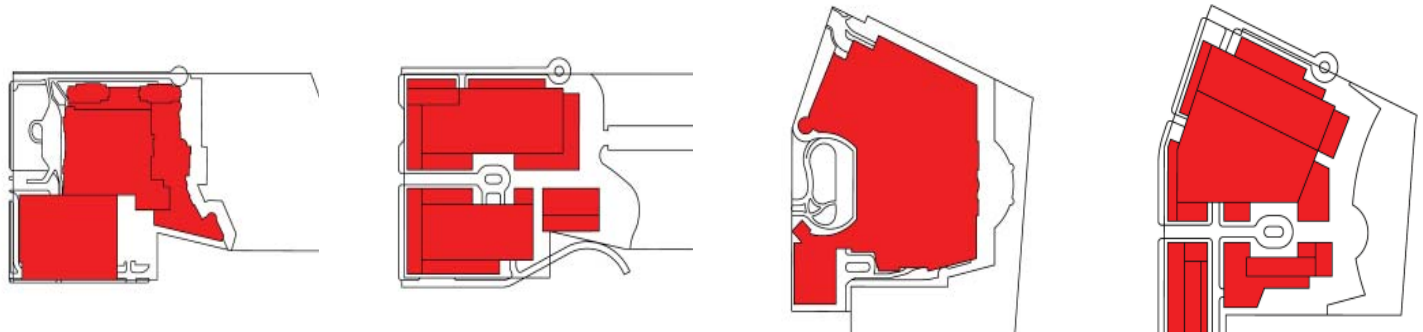
*current design*

*workshop design*

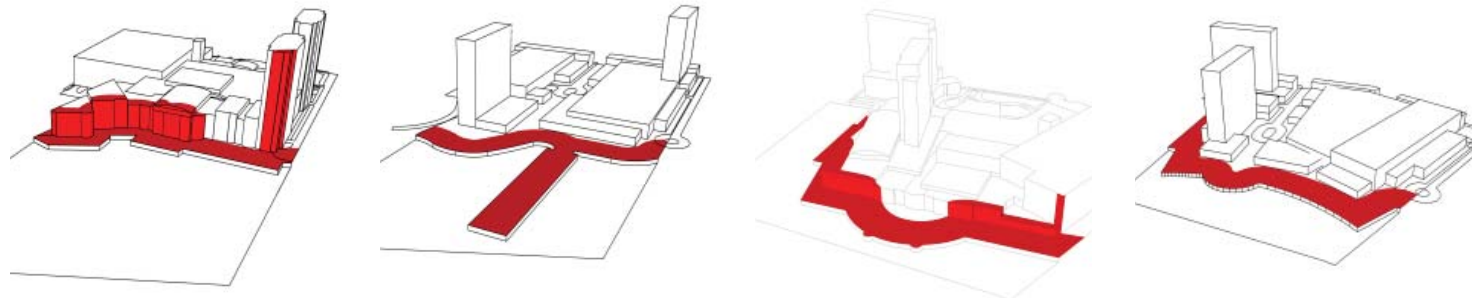
## Parking Size



## Building Footprint



## Waterfront Setback



## Notes

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**Current:** The parking garages of both casinos dominate their sites and reflect a suburban style of development. They would be the largest and second largest garages in the city.

**Workshop:** The parking garages have been reduced in size to reflect only Phase I parking requirements. Foxwoods has been reduced from 4556 cars in Phase I (full build-out is proposed for the same number) to 2400 cars. SugarHouse parking has been reduced to 2400 cars (full Phase I build-out is proposed for 4011 cars). Combined, these two garage in their reduced configuration would equal nearly half of the 10,000-car garages that currently serve the seven terminals at Philadelphia International Airport.

---

**Current:** The casinos do not provide street access every 500' and allow for building footprints which cover most of their sites. The SugarHouse site plan is equal to the size of the current Pennsylvania Convention Center.

**Workshop:** Block size is reduced by the inclusion of streets and multiple ingress/egress options through the sites. The inclusion of an additional connection on SugarHouse would have been desirable but was unworkable during the course of the workshop. Despite the addition of new streets, the building footprints of the casino floor and the parking garages are superblock-scaled.

---

**Current:** The casinos do not include a continuous 100'-foot setback from the water's edge at all phases of development.

**Workshop:** Reduction of parking on the site and reconfiguration of the casino program allows for the creation of a continuous 100-foot setback along the water's edge.

*Foxwoods*

*SugarHouse*

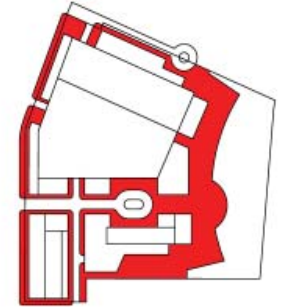
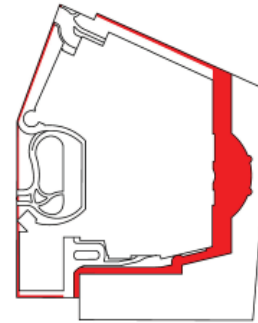
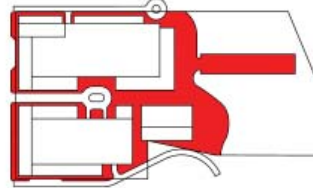
*current design*

*workshop design*

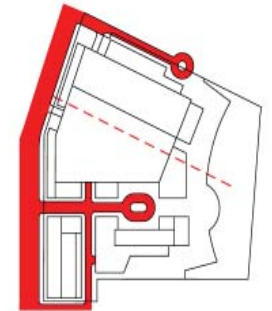
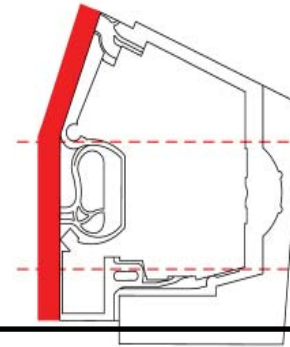
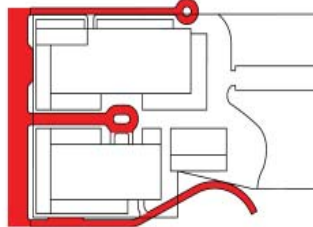
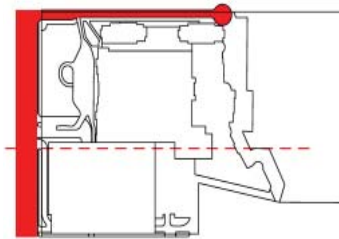
*current design*

*workshop design*

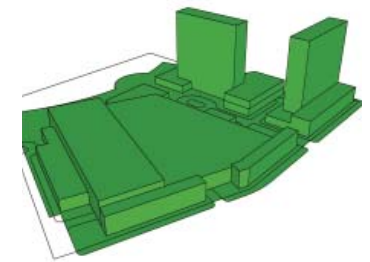
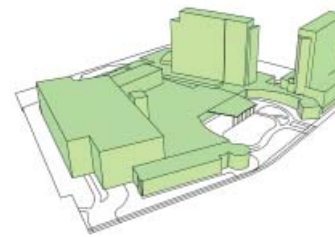
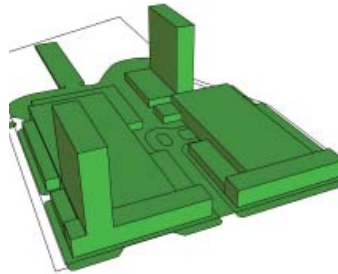
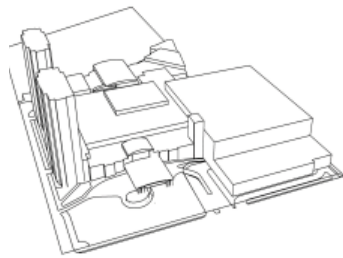
**Public Access**



**Street Grid**



**"Green Design"**





## Notes

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**Current:** Both casinos allow for public access on the water's edge but not at 500' intervals.

**Workshop:** Connections are enhanced through additional public streets and walkways.

---

**Current:** Both casinos lack street grid connections to existing city streets.

**Workshop:** The addition of connections to existing city streets allows for greater site access and public safety. The group chose to align a street connection with Frankford Avenue, a natural extension of the city's grid, despite not complying with required connections every 500 feet.

---

**Current:** Site design and building techniques: SugarHouse site plans indicate pending project registration for LEED certification as of 2007.

**Workshop:** To meet the ecological and sustainable design standards, casino design must include the addition of open space and permeable surfaces, including green roofs and walls, and minimum LEED Silver certification and site design standards must be met.

*Foxwoods*

*SugarHouse*

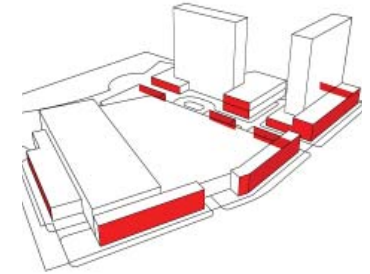
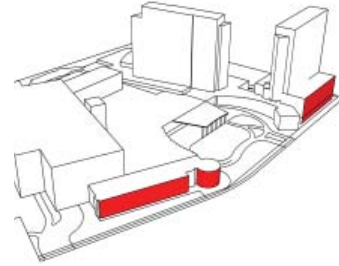
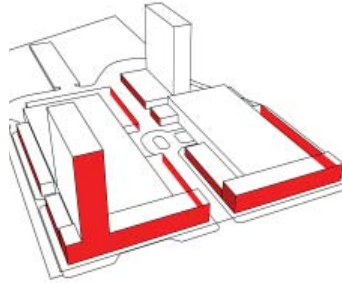
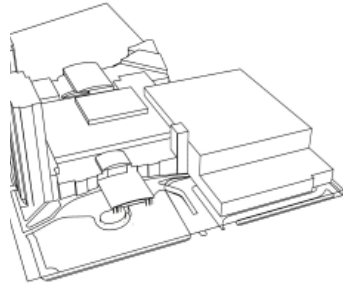
*current design*

*workshop design*

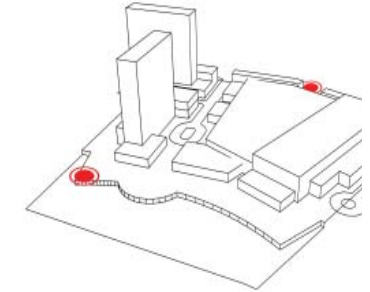
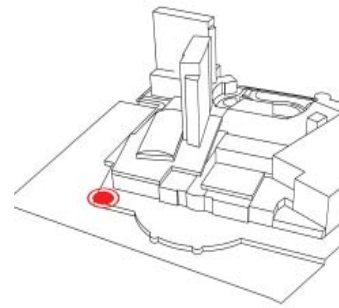
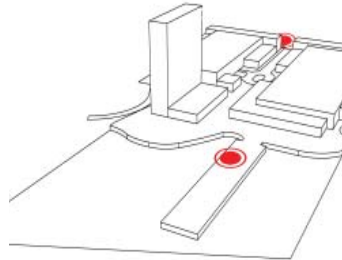
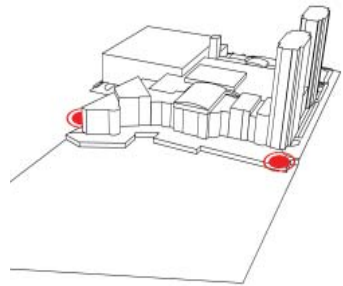
*current design*

*workshop design*

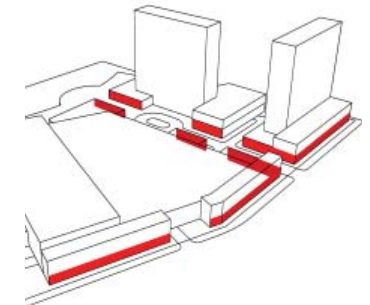
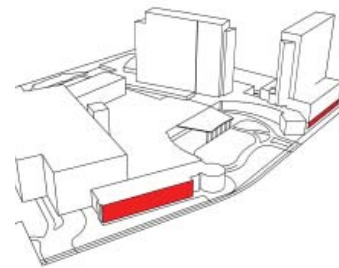
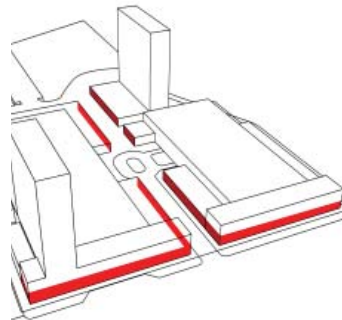
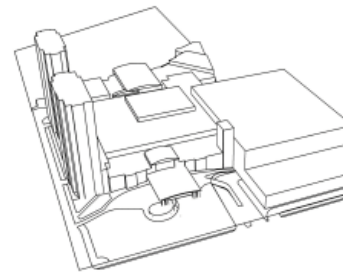
**Street wall**



**Transit**



**Active Uses**



## Notes

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**Current:** Neither casino fully meets the urban build-to line along the boulevard, although SugarHouse's design creates a more urban façade than Foxwoods.

**Workshop:** Buildings were aligned to meet the boulevard build-to line, as well as along the perpendicular streets which lead to the river.

---

**Current:** Neither casino has been designed to accommodate or encourage the use of public transportation to visit their site.

**Workshop:** Transit stops which emphasize the connections to transit were added as destinations in the casino designs.

---

**Current:** SugarHouse includes active ground floor uses along the boulevard and at the river at all phases of construction. Foxwoods does not include it until later phases.

**Workshop:** Active ground and upper story uses (retail, residential and commercial) were added to the perimeter of the gaming hall and parking structure in order to better integrate the superblock-scale floor plates into the urban landscape.

*Foxwoods*

*SugarHouse*

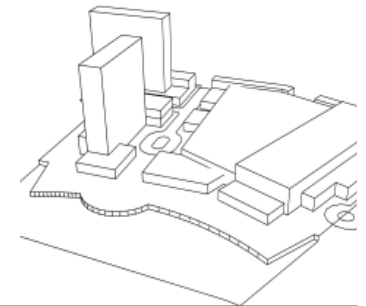
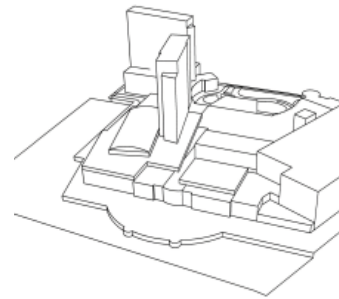
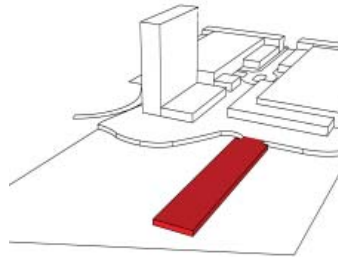
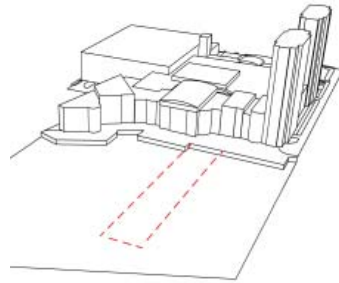
*current design*

*workshop design*

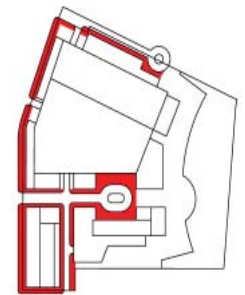
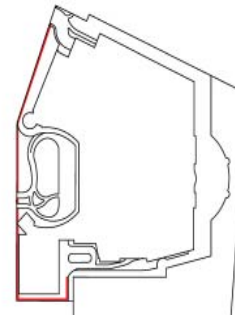
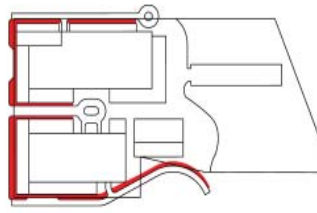
*current design*

*workshop design*

**Use of Piers**



**Street Character**



## Notes

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**Current:** Neither casino includes designs for creative use of existing pier structures.

**Workshop:** The Foxwoods design shows use of the pier as passive recreation pier which could be the focal point for the river-facing façade. The SugarHouse site includes two deteriorating piers that could be used for wetland restoration.

---

**Current:** Both casinos have extra-wide curb cuts and few pedestrian amenities. Foxwoods creates a particularly unfriendly pedestrian environment with its traffic mitigation strategy.

**Workshop:** Multiple entry points and use of secondary streets allow for more pedestrian-friendly intersections and a more urban streetscape.

## Conclusion

While this workshop suggested modifications that could be made to the casino site plan designs that would contribute to the civic vision, there remain too many outstanding design factors, including large garages, mega-block building footprints, and blank walls that cannot be overcome based on the American slot parlor casino business model. These challenges lead to a conclusion that casinos of this program-type do not work on these sites, and by extension, would be better sited elsewhere.

The following issues are illustrative:

### *Parking Garages and Inactive Facades*

Even in a revised condition, the parking garages produced during the workshop would be the largest in the city. At 2400 cars apiece (note that these are Phase I numbers only) they are nearly 1000 cars larger than the city's largest garage – the 1500-car garage at the Cira Centre at 30th Street. Because of the size of these garages, it is difficult to tailor the site program to conceal the excessive amount of exposed parking decks. This is a particular challenge to these important and sensitive riverfront sites that

could present massive parking structures (as at the airport and Atlantic City) as the face to the community until the market is ready to absorb additional retail, residential and commercial uses to wrap the garages. These sites are too valuable to the city to allow exposed parking decks and accompanying visual blight along this signature natural resource. The casino designers must seriously explore remote parking, and work with the city and state on a parking intercept and transit growth strategy to significantly reduce the parking footprint required.



15th and Spring Street  
Parking Garage: 1,050 spaces

+



30th Street Station  
Parking Garage: 1,525 spaces  
*(includes two levels of parking below grade)*

= 2,575 parking spaces

*The workshop participants proposed that each casino limit their parking garage for Phase 1 to 2400 vehicles. Even with these reductions, the garages remain very large. These two Center City parking garages provide a total of 2,575 parking spaces. The exposed parking decks compromise the quality of the pedestrian environment.*

### *Size of gaming floor*

The gaming floor, even when put on two levels (as in the workshop renderings for the Foxwoods site) still creates a mega-block scale that is comparable to that at the Convention Center, the Gallery at Market East and the Philadelphia Mint at 4th and Arch Streets. The sheer size of these buildings will create challenging access issues through the site, which is particularly damaging on a waterfront where access is a main goal. The casino designers must explore vertical gaming floor models or allow for a reduction in the number of slot machines in this facility to create smaller building floorplates.

It should be noted that the proposed modifications are applicable to all future development along the central Delaware. It is important that the city work in partnership with state and federal authorities to create the regulatory, transportation and investment framework that will enable the creation of a dense, walkable, urban, pedestrian-friendly extension of Philadelphia to the riverfront. The two proposed casino plans do not contribute to this vision.



*The United States Mint, 4th and Arch, serves as a local model of a mega-block structure. The large expanse of blank walls in the midst of an urban setting serves to detract from the pedestrian environment and creates a physical and psychological barrier between the neighborhoods north of Old City and Society Hill.*

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Trained both as an architect and a landscape architect, José Almiñana is a principal at Andropogon Associates, a landscape architecture firm known internationally for its ecological design, planning and sustainable development approach. Since 1983, he has been instrumental in many of the firm's complex site development projects, striving to create sensitive, sustainable designs that respond directly to site conditions and incorporate innovative construction technologies.

He believes that the ecology of a place deeply informs the conceptual strategy for any building design, site development, and construction process that is determined to increase environmental performance through the regeneration of ecosystem services.

José is a visiting lecturer at the University of Pennsylvania School of Design, at Philadelphia University, and at the Executive Education Program of the Graduate School of Design of Harvard University. He is a LEEDTM Accredited Professional, and ASLA representative on the Product Development Committee of the Sustainable Sites Initiative which is developing a "site and landscape only" sustainability rating tool. José serves as a member of the board of directors of the Delaware Valley Green Building Council in Philadelphia.

## **Frank Jaskiewicz, P.E.**

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Frank Jaskiewicz, PE, is a transportation planner and traffic engineer with twelve years experience in the development of sustainable, inclusive transportation networks. JzTI Transport Planning operates two major focus areas: Balanced Streets and Public Transport.

Frank has been a transportation consultant for numerous transit projects within Philadelphia, including the Stadium Area Transit Study, North Delaware Riverfront Rail Stations Urban Design Study, and the Transit Revitalization Investment District (TRID) pilot program focusing on Temple Station (Regional Rail) and 46<sup>th</sup> Street Station (Market-Frankford El). Frank has also helped develop several well-regarded pedestrian-focused re-designs for key multi-functional streets/intersections in the city, most notably the 2004 modifications to Logan Circle (including new crosswalks).



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Walter has 30 years of experience in traffic engineering for institutional, public and private projects. Since the 1990's, Walter has focused on restoring balance to the design of streets, improving not just their performance for vehicular traffic but also their livability, appeal for non-motorized travel, their value as settings for business, and role as focal points of civic pride and enthusiasm. This approach, now advocated in "new urbanism" and "context sensitive" road design, applies to the design of new communities, the "retro-fitting" of existing damaged areas such as suburban commercial strips and early-generation shopping malls, and accommodating currently absent transportation modes, such as walking, bicycling and streetcars.

Walter Kulash was previously a principal and Senior Traffic Engineer with the Orlando-based community planning firm of Glattig Jackson Kercher Anglin Lopez and Rinehart, Inc.

**Tim Magill**

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Tim Magill is one of the five founding partners of 5+DESIGN, an 80-person architecture and urban design studio based in Hollywood. Tim's 25 years of experience brings to the partnership a passion and commitment to create projects with transcendent social and economic value. With expertise in retail, mixed-use, gaming resorts, large-scale planning and urban regeneration projects, he is currently directing the design for projects in the US, Macau, Turkey, Doha, the UAE and multiple projects for Royal Caribbean Cruise Lines.

Tim's pioneering approach to interpreting the vision of his clients has led to the creation of many successful projects around the world. Included in those projects is Dubai Festival City, a worldclass waterfront project that encompasses the finest shopping, dining, entertainment, homes, schools, hotels, offices and leisure in one ideal location. Tim is also responsible for leading the project's further expansion to include a unique district for luxury brands adding over 900,000 square feet of additional retail, restaurant, and marina waterfront pavilions.

Prior to founding 5+DESIGN, Tim worked with Jerde as a principal designer for 19 years. During that time he effectively realized built projects in China, Hong Kong, Argentina, Mexico, Great Britain, Japan and the US.

**Dan Plottner**

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Daniel Plottner is an Associate and the Acting Director of the Transportation Department at SSE with a background in transportation and traffic engineering and planning. He has 10 years experience with traffic impact studies, stadium operations and planning, signal warrant studies, corridor and master planning as well as traffic and pedestrian analysis and simulation. His specific area of focus is large event generator traffic analysis and operations planning in urban environments. This focus has included trip generation, traffic analysis, design recommendations, parking analysis and planning for the following: Wrigley Field in Chicago, IL, Shea Stadium, Proposed Barclay's Arena and the Javit's Center Expansion all in New York City and the Prudential Center in Newark, NJ. Mr. Plottner graduated with a Bachelor's of Science in Civil Engineering from Marquette University in Milwaukee, WI. Mr. Plottner has an expert knowledge of traffic analysis software's including Synchro/SimTraffic, Highway Capacity Software, Legion, Tgap and Signal97.

**Peter Steinbrueck, FAIA, Principal**  
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Peter Steinbrueck is an architect and was elected to the Seattle City Council in 1997, and recently completed his third term, through 2007. He was elected President of the City Council in 2001. From 1997 to 2001, Steinbrueck chaired the Housing and Human Services committee. In his second term, Steinbrueck chaired the Parks, Education & Libraries Committee, and in his final term, he chaired the Urban Development and Planning Committee, which focused on comprehensive planning, city design, land use policy and zoning.

Peter Steinbrueck is passionate about urban sustainability. Steinbrueck is committed to advancing more sustainable solutions to meeting our region's major challenges in housing, transportation and the environment. He is principal of Steinbrueck Urban Strategies, LLC, a mission-driven consulting firm engaged in strategic planning and complex problem solving around urban development and infrastructure.

Steinbrueck has been recognized nationally as an outstanding public policy maker, civic leader and citizen architect. In 1999 he received Young Architect Award from the American Institute of Architects, the Public Sector Achievement Award from the National Alliance to End Homelessness in 2002, and was inducted into the distinguished AIA College of Fellows in 2006. In 2006, Seattle Magazine named Steinbrueck as one of Seattle's "most influential" people.

# Appendix

## List of documents

The following are background and supporting documents used by PennPraxis and workshop participants in conducting this casino design review:

- *A Civic Vision for the Central Delaware* (published November 2007)
- *An Action Plan for the Central Delaware: 2008-2018* (published June 2008)
- Site plans for proposed Foxwoods casino, including architectural drawings, elevations, and building renderings (dated May 21, 2007)
- Foxwoods traffic impact analysis, completed by Ewing Cole, Inc. (dated May 15, 2006)
- Foxwoods traffic impact report, completed by Stantec (dated December 5, 2007)
- Foxwoods traffic impact report, completed by Sam Schwartz, LLC (dated May 22, 2008)
- Plan of Development for proposed SugarHouse casino, including site plans and building renderings (dated March 26, 2007)
- SugarHouse traffic impact analysis, completed by Gannett Fleming, Inc. (dated May 21, 2007)
- Amendment to the Philadelphia Zoning Code for Commercial Entertainment District (dated March 9, 2006)
- SketchUp models of future central Delaware waterfront using Civic Vision guidelines
- SketchUp models of proposed casinos
- Aerial pictometry of the Delaware waterfront (via Philadelphia City Planning Commission, dated December 2006)
- Site and context photos (via PennPraxis staff, taken July 2008)
- "Impacts of Gaming in Greater Philadelphia" draft report, completed by Delaware Valley Regional Planning Commission (dated December 2006)
- Background material on Seattle Green Factor program (via Peter Steinbrueck, FAIA)
- Schaaf, Debby, 2008. Casino Review, 24 July. Available at: Debby.Schaaf@phila.gov [Accessed 07.24.08].

*All site and development plans are courtesy of the Philadelphia City Planning Commission.*

## Local Resources

Local resources and guests who attended to the workshop session on the morning of Wednesday, July 30, 2008:

Laurie Actman, Select Greater Philadelphia  
Jeremy Alvarez, Stantec  
Matt Bergheiser, The Knight Foundation  
Chris Brennan, Philadelphia Daily News  
Rina Cutler, Mayor's Office of Transportation and Public Utilities  
Charles Denny, Philadelphia Streets Department  
Patricia Ellis, SEPTA  
Terry Gillen, Philadelphia Redevelopment Authority  
Nancy Goldenberg, Center City District  
Mark Alan Hughes, Mayor's Office of Sustainability  
Caryn Hunt, Central Delaware Advocacy Group  
Frank Jaskiewicz, JzTI  
Paul Levy, Center City District  
Jennifer Lin, Philadelphia Inquirer  
Shawn McCaney, The William Penn Foundation  
Brian Mohl, Philadelphia Water Department  
Howard Neukrug, Philadelphia Water Department  
Natalia Olson, Delaware Valley Regional Planning Commission  
Maitreyi Roy, Pennsylvania Horticultural Society  
Scott Fletcher, PennDOT  
Anthony Santaniello, Philadelphia City Planning Commission  
Dave Schaaf, Philadelphia City Planning Commission  
Don Shanis, Delaware Valley Regional Planning Commission  
Sandra Shea, Philadelphia Daily News  
Patrick Starr, Pennsylvania Environmental Council  
Michael Tweed, Wallace Roberts and Todd

## PennPraxis Staff

Harris Steinberg, FAIA  
Michael Greenle  
Bridget Keegan, AICP  
Andrew Goodman  
Julie Thompson

## Current Casino Building Programs

<b>Foxwoods Casino</b>	<b>Square feet</b>	<b>Notes</b>
Casino (Phase I)	167,665	
Casino (Phase II)	159,390	
Parking (Phase I)	1,517,620	3,000 spaces
Parking (Phase II)	325,620	4,556 total spaces
Retail (Phase II)	142,590	
2 Hotels or Hotel/Condo (Phase III)	1,176,145	up to 1,000 rooms
Service and Valet (Phase I)	171,280	
Electrical Service (Phase I)	6,000	
Meeting Rooms/Restaurant (Phase I)	108,630	
Meeting Rooms/Restaurant (Phase II)	163,250	
Porte-Cochere Canopy	17,100	
<b>TOTAL</b>	<b>3,955,290</b>	

SOURCE: Zoning Submission, April 17, 2007

<b>SugarHouse Casino</b>	<b>Square feet</b>	<b>Notes</b>
Parking		
North	1,015,700	10-story garage; 2,330 spaces built in interim phase
Southwest	266,300	
Casino	207,000	
Casino Level		
Gaming	129,650	
Retail	24,250	
Public	91,250	
Back of House	192, 900	
Food and Beverage	149,900	
Entertainment/Spa	287,400	
Hotel (Phase II)	608,200	1,264 total hotel rooms
Hotel (Phase III)	247,950	
Mezzanine Level	209,550	
<b>TOTAL</b>	<b>3,237,150</b>	

SOURCE: (1) Zoning Code and Project Summary, March 26, 2007; (2) Updated Traffic Impact Analysis, May 21, 2007