

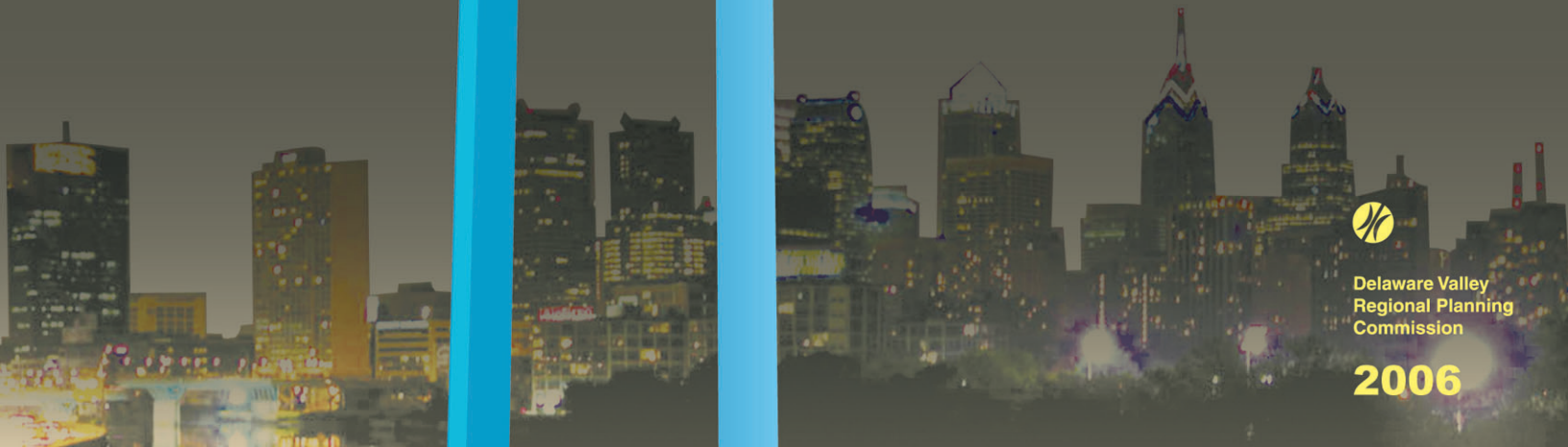


IMPACTS

OF *Gaming* IN
GREATER

PHILADELPHIA

cover designed by R.J.M.



Delaware Valley
Regional Planning
Commission

2006

Impacts of Gaming in Greater Philadelphia



**Delaware Valley Regional Planning Commission
190 North Independence Mall West
8th Floor
Philadelphia PA 19106-1520
www.dvrpc.org**

December 2006

Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency that provides continuing, comprehensive and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties, as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden, Gloucester and Mercer counties in New Jersey. DVRPC provides technical assistance and services; conducts high priority studies that respond to the requests and demands of member state and local governments; fosters cooperation among various constituents to forge a consensus on diverse regional issues; determines and meets the needs of the private sector; and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the Commission.



Our logo is adapted from the official DVRPC seal, and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole, while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for its findings and conclusions, which may not represent the official views or policies of the funding agencies.

Table of Contents

Executive Summary	1
Introduction	5
Chapter 1: Overview of Gaming in Pennsylvania	7
Legislation	7
Establishment of State Gaming Control Board	8
Licensing Process	8
Issue of Local Zoning Control in Legislation	9
Philadelphia Gaming Advisory Task Force	10
Concerned Organizations	10
Moratorium on New Delaware Waterfront Development	11
Penn Praxis to Plan Delaware Waterfront in Philadelphia	12
Chapter 2: Potential Casino Sites & Land Use Impacts	13
Philadelphia Park	17
Harrah’s Chester Racetrack and Casino	27
Limerick Casino, Hotel and Conference Center	39
Foxwoods Casino Philadelphia	51
Riverwalk Casino	63
SugarHouse Casino	73
Pinnacle Casino	79
TrumpStreet Casino	85
Land Use Recommendations	95
Chapter 3: Transportation Impacts	99
Regional Issues	99
Regional Transportation Impact	99
Transportation Planning Policy Issues	100
DVRPC’s Congestion Management Process	101
Gaming Facilities	103
Philadelphia Park	103
Harrah’s Chester Racetrack and Casino	111
Limerick Casino, Hotel and Conference Center	121
Foxwoods Casino Philadelphia	127
Philadelphia North Delaware Waterfront Casinos	133
TrumpStreet Casino	141
Transportation Recommendations	147
Conclusion	151
Chapter 4: Signage and Visual Quality Impacts	153
Types of Signs	153
Regulations: Local Sign Ordinances	157
Regulations: Billboard Legislation	163
Wayfinding and the Manual of Uniform Control Devices (MUTCD)	167
Signage Impacts	169
Signage and Visual Quality Recommendations	171
Conclusion	177
Bibliography	179
Glossary of Acronyms	183
Study Advisory Committee	185
Appendix A: Transportation Maps	187
Appendix B: The Public Trust Doctrine and Riparian Rights	213

List of Maps

Map 1: Greater Philadelphia Gaming Sites	15
Map 2: Philadelphia Park Land Use	18
Map 3: Philadelphia Park Zoning	22
Map 4: Harrah's Chester Land Use	30
Map 5: Harrah's Chester Zoning	34
Map 6: Limerick Casino Land Use	40
Map 7: Limerick Casino Zoning	43
Map 8: Foxwoods Land Use	54
Map 9: Foxwoods and North Delaware Future Development	58
Map 10: Foxwoods Zoning	60
Map 11: North Delaware Land Use	64
Map 12: North Delaware Zoning	71
Map 13: TrumpStreet Land Use	88
Map 14: TrumpStreet Zoning	91

List of Appendix A Maps

Map A1: Philadelphia Park Roadway Network	189
Map A2: Philadelphia Park Transit	190
Map A3: Philadelphia Park Traffic Counts	191
Map A4: Philadelphia Park PENNDOT Crash Clusters	192
Map A5: Harrah's Chester Roadway Network	193
Map A6: Harrah's Chester Transit	194
Map A7: Harrah's Chester Traffic Counts	195
Map A8: Harrah's Chester PENNDOT Crash Clusters	196
Map A9: Limerick Casino Roadway Network	197
Map A10: Limerick Casino Transit	198
Map A11: Limerick Casino Traffic Counts	199
Map A12: Limerick Casino PENNDOT Crash Clusters	200
Map A13: Foxwoods Roadway Network	201
Map A14: Foxwoods Transit	202
Map A15: Foxwoods Traffic Counts	203
Map A16: Foxwoods PENNDOT Crash Clusters	204
Map A17: North Delaware Roadway Network	205
Map A18: North Delaware Transit	206
Map A19: North Delaware Traffic Counts	207
Map A20: North Delaware PENNDOT Crash Clusters	208
Map A21: TrumpStreet Roadway Network	209
Map A22: TrumpStreet Transit	210
Map A23: TrumpStreet Traffic Counts	211
Map A24: TrumpStreet PENNDOT Crash Clusters	212

Executive Summary

The purpose of this study, *Impacts of Gaming in Greater Philadelphia*, is to assess the potential land use, transportation, and signage impacts of the pending casino licenses for the Delaware Valley region. Eight casinos have been proposed in the region, and licensing decisions are imminent. Affected communities will include the City of Philadelphia, with two of five casino proposals allowed; Bensalem Township and the City of Chester, each with one proposed “racino” (a racetrack with slots); and Limerick Township, with one casino proposed. The study acknowledges that neighboring communities, and indeed neighboring regions, will also be affected by the introduction of gaming. It has been said that gaming is the new Wal-Mart in terms of impacts and neighborhood opposition.

The gaming industry has expanded rapidly in the 1990s to include many more local markets, beyond the national draws of Las Vegas and Atlantic City. The Philadelphia region, and all of Pennsylvania, is now faced with planning for the arrival of several gaming facilities in the very near future. The Philadelphia region is unique, however, in the licensing of *slots-only* parlors, either freestanding, at a racetrack, or resort. Table games are not part of the gaming operations allowed under the state legislation, at least not yet. This makes the challenges to this region more complex, as all other national research on gaming has been focused on facilities with slots *and* table games.

According to the National Gambling Impact Study Commission, 68 percent of U.S. citizens have gambled legally once in the past year. This includes such other games as bingo and the lottery. Thus, given the region’s population of 5.4 million, it is estimated that 3.6 million Delaware Valley residents have gambled legally in the past year. There is a good chance some of these 3.6 million might patronize a greater Philadelphia casino. This report speculates on what changes may occur, and what the region and local municipalities should do to proactively plan for the arrival of casinos.

This year-long study, begun in the fall of 2005, examines the casino proposals in depth from a planning perspective. Existing planning regulations in the affected municipalities, including zoning and comprehensive plans, were reviewed. Prior related studies and the required casino impact reports were also examined. The study looks at the compatibility of existing land uses and future development near the proposed casinos, as well as the demographics of the study areas. The proposed architectural and site designs of each casino were also examined.

Existing transportation infrastructure, such as local roadways, transit, and multimodal connections were assessed. Existing daily traffic and roadway levels of service data was used to gain an accurate portrait of future transportation challenges. Existing signage regulations were reviewed in light of national best practices research.

The study was guided by a Study Advisory Committee, composed of representatives from the proposed casinos, affected municipalities, the state departments of transportation, the Pennsylvania Gaming Control Board, transit agencies, county planning commissions, the Philadelphia Gaming Advisory Task Force, the transportation management associations (TMAs), and local advocates. Quarterly meetings were held at DVRPC, featuring guest speakers and presentations by DVRPC staff on findings and recommendations.

While many groups have been working diligently on gaming issues locally and nationwide, DVRPC's study provides a unique regional viewpoint and recommendations geared towards the topical areas of transportation, land use, and signage, given the agency's role in fostering a continuing, comprehensive and coordinated planning process for the region.

Often times the costs and benefits of gaming are not equally distributed. While there are many issues associated with gaming, including very important social and economic impacts, these topics are beyond the reach of this study. The report bibliography lists some excellent websites that cover these topics.

Findings and Recommendations

The study found that most of the communities have the proper zoning in place to encourage desirable land uses near the casinos and prohibit unwanted uses. The City of Philadelphia has proposed a new overlay zoning district that will guide new development around the two casinos ultimately licensed. All five of the proposed Philadelphia casinos are on redevelopment sites, and all are close enough to residential neighborhoods that care should be taken to mitigate negative impacts of new development. The study recommends zoning and comprehensive plan changes, as well as design review, to ensure good development. It also supports some form of community investment agreements between the affected Philadelphia neighborhoods and the casinos to compensate for negative impacts and improve the quality of life in those areas. It recommends the Philadelphia casinos provide public amenities and public access to the Delaware River waterfront.

While the overall level of impact to the transportation system is uncertain, introducing gaming, a land use which is widely dominated by car use, to the region will impact the mobility of the existing transportation network. The casino impact studies imply that regional transportation impacts should be minimal. Given the proposed number of trips generated and the capacity of the regional roadway network, the number of expected trips would be spread over a number of highways. But the cumulative impact needs to be considered, not only of the proposed gaming facilities but also of the ancillary land uses.

I-95 plays an important role as principal access to all of the sites except for Limerick. Given that portions of this highway are at or near capacity during weekday peak periods, proposed casino trips will add to saturation. Additionally, many of the other regional highways are also already congested according to the recently updated DVRPC Congestion Management Process (CMP). Additional trips will exacerbate congested conditions, increasing time of delay and extending peak periods. The local roadways will bear the brunt of the impacts. It is imperative that the increased traffic flow through established residential neighborhoods be mitigated, for accessibility and safety concerns, particularly pedestrian safety.

An examination of Pennsylvania Department of Transportation (PENNDOT) crash clusters for the region reveals several areas with a high number of crashes. This correlates closely with areas well traveled. The number of crashes will be impacted by the increase in trips.

The study recommends that transit service, and bike and pedestrian infrastructure, be expanded and enhanced to all the licensed gaming facilities, to serve both patrons and employees. A variety of alternatives to the recommendations given in the casino traffic impact studies are also given, including access management, traffic calming, signal timing and coordination, intersection reconfiguration, and streetscaping. A comprehensive regional transportation impact study should be conducted when the licenses are granted, and the exact locations of the facilities are known.

The study also found that while the gaming facilities will bring new and different types of signs into the region, these signs need not be “ugly” or a nuisance if recommended best practices are followed. Casinos may erect light beacons, digital video display signs, and other on-site and off-site signs. New signs will emerge on approach roads to the casinos, including billboards. Existing older billboards may be replaced with digital billboards, with rapidly changing images. More temporary signs along roadways may also occur, and vacant buildings may be candidates for wall wraps, as is already the case near one casino proposal. Other new development nearby may also add to the signage mix.

Orderly and legal signage is a challenge not only for the communities that may be licensed for the gaming facilities, but for the entire region. The affected communities must balance the need for economic growth with concerns over community aesthetics and traffic safety. Types of signs, regulations (such as local ordinances and billboard legislation), wayfinding, and signage impacts were reviewed. Most local sign ordinances were found to be out of date, in terms of keeping pace with the new types of signs and technology in the fast-changing commercial sign industry.

Signage regulations are frequently challenged in court, and the best defense is a well-written, easy to understand sign ordinance that is updated regularly. The study recommends specific changes to local sign ordinances on sign types and classifications, and on sign removal, enforcement, and permitting. The study also includes recommendations for wayfinding and directional signage, to ensure visitors can get to the casinos as easily and safely as possible.

Summary

While the issues surrounding the arrival of gaming facilities in the region are complex, what is easier to understand is the importance of local planning in creating good development. Local communities need to assert their perspective on local impacts and development controls. The myriad recommendations in the DVRPC study can only be implemented through local and regional entities, and the report attempts to reflect the best interests of local governments and neighborhood groups. As gaming licenses are awarded, it is in the public interest to be ready to mitigate potential impacts and capitalize on community building opportunities.

Note: The information in this report is current as of November 1, 2006.

Introduction

This study presents a thorough review of the potential land use, transportation, and signage impacts of the proposed gaming facilities in the Delaware Valley region. The gaming industry has expanded rapidly in the 1990s to include many more local markets, beyond the national draws of Las Vegas and Atlantic City. The Philadelphia region, and all of Pennsylvania, is now faced with planning for the arrival of several gaming facilities in the very near future. It has been said that gaming is the new Wal-Mart in terms of impacts and opposition.

The Philadelphia region is unique, however, in the licensing of *slots-only* parlors, either freestanding, at a racetrack, or resort. Table games are not part of the gaming operations allowed under the state legislation, at least not yet. This makes the challenges to this region more complex, as all other national research on gaming has been focused on facilities with slots *and* table games.

According to the National Gambling Impact Study Commission, 68 percent of U.S. citizens have gambled legally once in the past year. This includes such other games as bingo and the lottery. Thus, given the region's population of 5.4 million, it is estimated that 3.6 million Delaware Valley residents have gambled legally in the past year. There is a good chance some of these 3.6 million might patronize a greater Philadelphia casino. This report speculates on what changes may occur, and what the region and local municipalities should do to proactively plan for the arrival of casinos.

Chapter 1: Overview of Gaming in Pennsylvania

Legislation

Enabling legislation for gaming in Pennsylvania, titled The Pennsylvania Race Horse Development and Gaming Act, Act 71 (House Bill 2330), was signed by Pennsylvania Governor Edward Rendell on July 5, 2004, at Philadelphia Park in Bensalem Township, Bucks County. The legislation authorizes up to 61,000 slot machines at 14 sites across the Commonwealth, including Bensalem, Chester and Philadelphia. Prior to this legislation, the only legalized gambling in the Commonwealth were pari-mutuel wagering at racetracks and the state lottery.

Philadelphia Park, a thoroughbred racing facility in Bensalem Township, Bucks County, was the industry's leading proponent of the Gaming Act to permit slot machines at racetracks, due to the serious economic decline over the last ten years of the Pennsylvania horse racing industry. Both Delaware and West Virginia have legalized slot machines at their racetracks, providing significant revenue to the horse racing industry, enabling these tracks to increase their purses by 300 percent.

The Act requires that all 14 licensed gaming facilities contribute eight to twelve percent of their total receipts from slot machine gaming operations to the Pennsylvania Race Horse Development Fund to provide increased horse racing purses, breeding funds and other ancillary benefits to the racing industry. Other uses of the receipts include property tax relief and wage tax relief.

Under the legislation, there are three categories of facilities (with different licensure requirements), which are:

- **Category 1** allows slot machine licenses at up to seven racetrack facilities ("racinos") across the Commonwealth. In the DVRPC region, this Category will apply to the slot machines at Philadelphia Park in Bensalem, Bucks County, and the new Harrah's Chester Racetrack and Casino in Chester, Delaware County. A Category 1 license allows up to 3,000 slot machines, with an additional 2,000 each at the Board's discretion.
- **Category 2** allows up to five stand-alone slot machine licenses in First Class or Second Class Cities or in tourism-enhanced areas. Across the Commonwealth, the Board will allow no more than two such facilities in Cities of the First Class (*two in Philadelphia, one in Pittsburgh*) and no more than one is allowed in the Second Class. Facilities in First Class Cities cannot be within ten linear miles of a Category 1 facility, regardless of the municipality it is located in. There are some other exceptions on siting, which are contained within the legislation.

In the DVRPC region, this Category will apply to two slot machine licenses for stand-alone facilities in the City of Philadelphia. Five applicants with sites submitted applications for the two slot machine licenses in the City. Four of the five applicants have sites along the Delaware River waterfront, while one applicant is located near the I-76/US-1 interchange in the Nicetown-Tioga neighborhood of northwest Philadelphia.

A Category 2 application was also received for a site in Limerick Township, Montgomery County, for a stand-alone slots parlor license in the Commonwealth, potentially qualifying as a tourism-enhanced area. On September 22, 2006, Boyd Gaming, the casino applicant for this site, withdrew their gaming facility application.

A Category 2 license allows up to 3,000 slot machines, with an additional 2,000 each at the Board's discretion.

- **Category 3** allows up to two slot machine licenses in resort hotels having no fewer than 275 guest rooms and having year-round guest recreational amenities. These facilities cannot be within 15 linear miles of another licensed facility. Licensed facilities can operate no more than 500 slot machines. No such facilities are proposed in the DVRPC Region.

Draft regulations for these facilities were released in the spring of 2005, for public comment, and final regulations were released July 21, 2005. Nine final regulation amendments have been issued between July 2005 and March 2006. Category 1 and 2 regulations are similar, though Category 2 regulations are stricter, as most applicants in Category 1 are operators of existing racetracks that have already gone through a strict licensure and review process to allow pari-mutuel wagering at their racetracks.

Establishment of State Gaming Control Board

The Gaming Act establishes the Pennsylvania Gaming Control Board. This is a seven member Board, with three members appointed by the Governor, and the remaining four appointed from each Legislative Caucus. A super majority is needed for any licensing decision. The Board was established in August 2005, and expects to issue all 14 licenses by December 2006. The Board expects to act on conditional Category 1 license applications in September 2006, and on Category 2, Category 3 and permanent Category applications in December 2006. Operations are expected to begin in the City of Philadelphia by 2007.

Licensing Process

Applications for all three categories of gaming licenses were due to the State Gaming Control Board at the end of December 2005. Each operator applies to the Board with a specific site chosen. The Board must decide whether both the applicant and the site meet their requirements for licensure. The Board is charged with issuing licenses within twelve months of the receipt of the application. In addition to licensing the operators, the Board must also license manufacturers and suppliers, before the Category 1, 2, and 3 operators and owners. Following these licenses, all employees of the facilities and any related non-gaming entities and employees must also be licensed. The Board will review applications in detail, including the detailed financial analysis required in the submission.

Twenty-five applications were received by the Board for the three categories of operator licenses. Six applications were received for the possible seven Category 1 racino licenses. Seventeen applications were received for the possible five Category 2 slots-only parlor licenses. Two applications were received for the possible two Category 3 slots at resorts licenses. Three of the 25 applications were deemed ineligible for consideration, due to their failure to submit the statutorily required letter of credit or bond

demonstrating their ability to pay the \$50 million license fee required under the gaming act.

Local Impact Reports

As part of the licensing process, the twenty-two operator applicants were required to submit local impact reports. According to the act, the requirement is as follows:

A local impact report, which includes but is not limited to: engineering reports and traffic studies, including details of any adverse impact on transportation, transit access, housing, water and sewer systems, local police and emergency service capabilities, existing tourism, including historical and cultural resources or other municipal service or resource.

These local impact reports were posted on the State Gaming Control Board's website (<http://www.pgcb.state.pa.us>) in early March 2006. Many of the reports are considered "preliminary impacts," implying that further impact analysis would be done at a later date.

Public Hearings

Public hearings were held across the Commonwealth in April and May of 2006. Thirteen days of hearings were held at nine locations. Individuals and community organizations were invited to speak. Three days of public testimony on the five Philadelphia sites was heard in Philadelphia from April 10-12, 2006. One day of testimony on the Bensalem and Chester racino sites was heard on May 12, 2006, and one day of testimony on the Limerick site was heard on May 23, 2006. Information gathered at the hearings become part of the formal record that the Gaming Control Board considers when deciding which of the proposed facilities to license.

Licensing Hearings

Licensing hearings were held before the Gaming Control Board in Harrisburg in September through mid-November 2006. The Board heard testimony on conditional licenses for Category 1 facilities on September 11 (Harrah's Chester) and September 12 (Philadelphia Park). Hearings were held on Category 2 Philadelphia facilities on November 13 (SugarHouse Gaming and Riverwalk) and November 14 (Foxwoods and TrumpStreet) and November 15 (Pinnacle). The permanent licenses hearings for Category 1 facilities, including Harrah's Chester and Philadelphia Park, are scheduled for December 13.

On September 27, 2006, the Board approved conditional licenses for five Category 1 licenses, including Harrah's Chester and Philadelphia Park. The decision on the licensing of the Category 2 casinos in Philadelphia will be announced December 20, 2006.

Issue of Local Zoning Control in Legislation

The original legislation stated that the Gaming Control Board could "consider" but was not bound by local zoning ordinances. A June 2005 State Supreme Court decision reversed this, ruling that the Pennsylvania General Assembly unconstitutionally granted those zoning powers without specifying limits; and granted local zoning officials the

power to decide where slot parlors would be located. It also denied a challenge from gambling opponents who claimed the law was unconstitutional. Legislation restoring this provision, House Bill 1876, allowing the Gaming Control Board to oversee zoning, was introduced on July 3, 2005 by State Representative Michael R. Veon (D-Beaver), and was referred to the Committee on Tourism and Recreational Development. Senate Bill 862, a gaming reform bill, was amended in February 2006 to place zoning control for the City of Philadelphia's casinos into the hands of the State Gaming Control Board.

Gambling proponents say that a municipal zoning process could delay the expected \$1 billion in property tax cuts statewide that are expected to be financed by a tax on slot-machine revenue.

As of late October 2006, zoning control over gaming facilities and related development has been restored to local governments, including Philadelphia and Pittsburgh. This is part of a larger gaming reform bill currently under consideration by the Pennsylvania House and Senate.

Philadelphia Gaming Advisory Task Force

Philadelphia Mayor John Street appointed a Philadelphia Gaming Advisory Task Force in January 2005, in response to the gaming legislation passed in 2004. The Task Force's mission was to make recommendations to his administration and the City Planning Commission on:

- acceptable locations for the slots-only parlors
- land use and urban design standards for such facilities
- mechanism for future governance and operations of such facilities
- overall impacts of gaming on Philadelphia, including impacts on city finances, public safety, transportation, social services, education, workforce development, and economic development associated with gaming overall and at the specific sites

The Task Force was made up of three Co-Chairs (Bernard Anderson, Paul Levy and Sandra Dungee Glenn), a General Counsel (Romulo Diaz), and 45 people serving on three topical committees. These include Economic Impact, Site Evaluation, and Social Impact Committees. There is a staff of nine. The Site Evaluation Committee is the closest in mission to this study. The Task Force issued an interim and final report in late 2005.

Concerned Organizations

Many communities have active neighborhood associations, such as the Northern Liberties Neighbors Association and the Fishtown Neighbors Association for the North Delaware communities, which advocate for local residents and businesses on such issues as zoning, safety and planning. Many of these organizations are concerned with the impacts to their neighborhoods, but may not take an official stance for or against any one gaming applicant.

On the other hand, the state's decision to legalize gaming has become a heated issue for many residents within the region and individuals and neighborhoods have organized to voice various concerns with the gaming facilities and gaming itself. Most of the organizations have raised concerns with potential increased traffic on local roads and potential decreases in property values. Some organizations are concerned that hiring will

not be local and that the gaming impact reports overestimated the total number of new jobs as well as overall economic fiscal impact. Others are concerned with potential increases in number and types of crime. Local increases in gambling addiction, potentially resulting in a spending decrease within the local economy, are also major concerns. Some organizations are concerned with specific proposals while others are more general with their concerns. Listed below are several of the more prominent organizations:

Statewide

- Casino Free Pennsylvania - www.casinofreepa.org

Chester

- FAIR Deal Coalition – www.fairdealchester.org

Philadelphia

- Casino Free Philadelphia – www.casinofreephila.org
- Multi-Community Alliance - www.casinofreezone.com
- Neighbors Allied for the Best Riverfront (NABR) – www.nabrhood.org
- Riverfront Communities United - www.riverfrontunited.org

Limerick

- Stop the Casinos - www.stopthecasinos.com

Moratorium on New Delaware Waterfront Development

With the potential development of two casinos along the Delaware River in Philadelphia, the need for a comprehensive waterfront plan has never been greater. In response, Governor Rendell in April 2006 issued a moratorium on the state's practice of granting riparian rights for riverfront development along the 20-mile stretch of the Delaware River between the Bucks County line and the Navy Yard in Philadelphia. This pause in development offers the opportunity for the city or some other entity to prepare a comprehensive plan for the waterfront. Such planning should include the need to protect public access to the waterfront.

Up until the moratorium was issued, the state received only \$1 per year to lease these riparian rights to private developers. The purpose of these nominal cost 99-year leases was to facilitate development and new investment along the waterfront and remove blight. Given the large amount of development currently underway and planned along the Delaware, the moratorium allows time to reassess these fees to benefit from the amount of new development. New Jersey leases riparian rights and charges an annual fee based on the size and value of the submerged lands.

The moratorium affects the Foxwoods and SugarHouse applications, as these groups do not own the riparian rights, while Pinnacle and Riverwalk do.

Riparian rights are those rights which are derived from the ownership of property underlying or bordering navigable streams and rivers to access or use the water, shore, and bed of the waterbody. Under the U.S. Constitution, the states retained these rights and title to the shore and submerged soil of navigable waterbodies. The states hold these lands and waters in trust for the benefit of the public. This practice is based on English Common Law and the Public Trust Doctrine. The Public Trust Doctrine is a common

law doctrine of property law, which establishes the public's right to access and use common property and natural resources, including navigable waters and their shores. The doctrine stems from the principle that waters and shores have long been used by the public as common areas for food, travel, and commerce. Therefore, states hold these lands and waters in trust for the benefit of all people so that no member of the public is excluded from these rights. In the United States, public trust waters are considered the navigable waters of the states and public trust lands are all lands beneath those waters and their shores. See Appendix B: Riparian Rights for more information about riparian rights.

The Governor asked lawmakers to delay legislation authorizing transfer of riparian rights until the state Gaming Control Board issues licenses for casinos, which is expected by the end of 2006.

Penn Praxis to Plan Delaware Waterfront in Philadelphia

Philadelphia Mayor John Street announced in October 2006 that Penn Praxis, the clinical arm of the School of Design of the University of Pennsylvania, working with the City Planning Commission, would prepare a plan for the Central Delaware waterfront from Allegheny Avenue to Oregon Avenue. For more information on this waterfront planning effort, please see the website at www.planphilly.com. Who will execute the plan and manage the waterfront, such as new nonprofit organization or business improvement district, is still to be determined.

Chapter 2: Potential Casino Sites & Land Use Impacts

There are eight applications for casino licenses in the Delaware Valley region (see **Map 1: Greater Philadelphia Gaming Sites**). This chapter will give an overview of some of the details of the casino applications, and then discuss existing land uses, zoning, comprehensive plans, other studies, demographics, development potential, design, and finally overall land use impacts. The following are the central issues and questions this study addresses.

- Land Uses:
 - *Are there incompatible uses nearby or what types of uses tend to cluster near casinos?*
 - *What are the effects of the casino as a mega-structure?*
 - *How can Philadelphia waterfront retain industry while also accommodating more residential and commercial uses and access to the riverfront?*
- Zoning:
 - *Does the zoning allow for desirable ancillary uses, and prohibit those that are undesirable?*
 - *Are the proposed casinos compatible with surrounding land uses re: height, size, setback, density, and parking?*
- Comprehensive Plans:
 - *What is the community's long-range vision for the casino and surrounding areas?*
- Other Studies:
 - *Are there conflicts with, or support from, other studies?*
- Future Development:
 - *Will the casinos increase or decrease surrounding land values? Will there be land speculation, gentrification, and/or revitalization?*
 - *Will vacant lots and underutilized land be redeveloped?*
 - *How will the nearby neighborhoods be affected? What are the cumulative impacts of other developments? Will new housing be built to accommodate casino workers?*
- Demographics:
 - *Who lives in the study area?*
 - *Are their disadvantaged groups living near the future casinos that may be adversely impacted by such development?*
- Design:
 - *Are there exterior public amenities? Is there access to the waterfront?*
 - *Is parking visible or masked from street? Is the street façade inviting and visually connected to the interior?*

- *Does the design incorporate Leadership in Energy and Environmental Design (LEED) standards? The LEED Green Building Rating System, developed by the United States Green Building Council, is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.*

Insert Map 1

Category One Racinos

Philadelphia Park

Location: Street Road between Mechanicsville Road and Richlieu Road, Bensalem Township, Bucks County, Pennsylvania

Website: www.philadelphiapark.com

Owner/Operator/Developer

Greenwood Racing Inc. owns and operates Philadelphia Park, a thoroughbred racing facility on Street Road in Bensalem Township, Bucks County. Philadelphia Park, founded in 1974, offers thoroughbred racing and pari-mutuel wagering at the racetrack, as well as off-track betting and telephone account wagering. It is also home to Pennsylvania's premier thoroughbred race, the Grade II Pennsylvania Derby, a nine-furlong race for three-year old horses, with a \$750,000 purse, held on Labor Day. Greenwood purchased the Park in 1990 and has provided the Park with a multi-million dollar capital improvement program over the last six years.

Philadelphia Park currently offers seven dining options, including two cafés, two delis, a pub, a sports bar, and a fine dining restaurant. The Teletheater provides over 100 screens and personal wagering terminals. A picnic area is located on site for families and large group gathering areas, containing 100 picnic tables, three pavilions, a gazebo bar, and a playground.

The Park is one of the major employers in the area, with over 1,000 employees, and contributes significantly to the area's economy. Over a half a billion dollars a year is spent in wagers through Philadelphia Park (at the racetrack, at the off-track betting Turf Clubs, and through Phonebet). Greenwood was able to turn the facility from a loss making enterprise into a success story, and also preserved 450 acres of open space.

Development Proposal

If granted licensure, Philadelphia Park will expand to include 3,500 slot machines, in a 300,000 square foot facility with structured parking for 2,000 automobiles, though this parking information was not submitted in the impact report. No employment projections were included in the local impact report.

According to their master plan, besides the gaming facility, at build-out the site may contain additional single and multi-family residential units, a hotel and conference center, retail, and a golf course.

The Philadelphia Park complex is located east of Street Road and south of I-276, with access from Street Road. The Philadelphia Park study area, at over 1,000 acres, is the largest of the eight sites studied. See **Map 2: Philadelphia Park Land Use**. The Philadelphia Park site sits in the middle of a parcel surrounded by a large parking lot to the west, some wooded land to the south, and equestrian facilities to the east. Unlike the other locations, Philadelphia Park, along with the Limerick site, is unique among the Greater Philadelphia sites for having a vast amount of undeveloped land in a natural or cleared state. Vacant (cleared) or wooded land encompasses over 40 percent of the land.

Map 2

Map 2 Legend

Rendering of Future Philadelphia Park Casino



Grandstand at Philadelphia Park



Residential uses comprise over 160 acres, or 16 percent of the land, in the study area. Most of the housing here are single-family detached homes. Clusters of housing developments are located at the intersections of Galloway Road and Mechanicsville Road. West of Richlieu Road are several multi-family subdivisions.

Community Services encompass about four percent of the land in the study area, which is significant for this township. The Bucks County Visitors Center is located next to the entrance to Philadelphia Park. There are several community service land uses in the study area, including two large cemeteries, a fire station, the Christian Life Center, and five other churches, including Our Lady of Fatima church and school. The Samuel K. Faust Elementary School is located at the intersection of Street Road and Richlieu Road. ITT Tech also has a location within the study area. The Bensalem municipal center is located along Byberry Road. Bensalem Community Park is located northeast of the site and contains several ball fields. Just outside of the study area, adjacent to the municipal

complex, is the Commerce Bank Amphitheater, which hosts family-oriented movies and concerts.

Commercial uses dominate the land on both sides of Street Road and comprise three percent of the study area. Included here are several shopping centers, many full service restaurants, office complexes, and five hotels. A mini-mall is also located along Galloway Road. Just outside of the study area to the north is the Neshaminy Mall. Industrial uses are minimal and generally are located east of Galloway Road.

Future Development

A new 142-unit single-family subdivision named Belmont Ridge is being constructed between Neshaminy Boulevard and Richlieu Road. A portion of this subdivision has been dedicated to Bensalem Township for use as a park. Other recent developments include the Christian Life Church and the Villas at Regent's Glen, an age-restricted community off of Byberry Road. Development potential for additional residential and commercial establishments exists along Galloway and Mechanicsville Roads. Currently under construction are 149 new single family homes by Realen Homes, a Commerce bank, and a CVS Pharmacy, all located on the former Youth Development Center property, just south of the intersection of Rockhill Drive and Neshaminy Boulevard. Also proposed are 206 single family homes, another bank, and four sit-down restaurants on the former St. Francis Tract on the northern side of Street Road just west of Bristol Pike.

The largest development potential is actually within the vacant and wooded Philadelphia Park parcel areas as described in the master plan. Infill development on the Philadelphia Park parking lot is also part of this plan.

Bucks County Visitors Center at the Entrance to Philadelphia Park



Current Zoning

The Philadelphia Park study area is zoned as Convention Stadium District (CSD). See **Map 3: Philadelphia Park Zoning**. Nearby zoning districts include R-A Rural District, R-AA Conservation District, R-A-1 Residential District, R-1 Residential District, R-11

Map 3

Impacts of Gaming in Greater Philadelphia

Residential District, R-2 Residential District, R-22 Residential District, R-D Apartment District, H-CI Highway Commercial District, G-I General Industrial, L-I Light Industrial, BP Business and Professional District, G-C General Commercial, PCD Planned Commerce Park District, and IN Institutional.

The CSD permits activities normally associated with horseracing. The Zoning is intended for a Stadium, a Conference Center, or for both, but all uses in this district are conditional uses. Permitted stadium uses include:

- Stadiums
- Restaurants
- Retail stores
- Offices
- Personal service shops
- Horse stables
- Pari-mutuel betting
- Accessory Uses

When used for a Stadium, the types of events permitted include but are not limited to baseball, football, horse racing, basketball, soccer, prize fighting, and wrestling. The tract size should be at least 100 acres and no building should be taller than 100 feet. Driveways are the only type of construction permitted within 200 feet of the property line or right-of-way.

Permitted Convention Center uses include:

- Convention center with a meeting hall, reception area for at least 500 persons and at least a 300-room hotel
- Accessory uses

When used for a Convention Center, the tract size is smaller at 50 acres while the height limit remains 100 feet. Setbacks are also smaller here, where no construction other than driveways is permitted within 100 feet of the property line or the right-of-way. Buildings must be at least 75 feet apart. If both stadium and convention center uses are present, then the more spacious stadium regulations apply.

A conditional use application is required for all development in this district. The developer is strongly urged to submit a preliminary conceptual plan to the Planning Department. Following this, Council will appoint at least a five member committee consisting of at least a member of council, a member of the mayor's staff, a member of the planning commission, the township engineer, and an individual selected by council to review the conceptual plan. This committee will have 90 days to review the preliminary conceptual plan for national stadium or convention center conformance standards.

Included in these standards will include:

- Economic Analysis
- Traffic Impacts
- Parking
- Sewer and Water
- Environmental Impacts
- Landscaping and Buffer areas
- General Land Use

Upon committee review completion, the conditional use application may be submitted to council. If the conditional use request is granted, then all other subdivision and land development procedures apply. Council may approve provision for staged construction.

As adult establishments or other sexually oriented businesses are only permitted in general industrial zones, there will not be any types of these businesses on site. The closest GI zone is located to the west of the site and currently is used by PennDOT.

Comprehensive Plan

Bensalem's comprehensive plan, *Comprehensive Plan, Township of Bensalem*, was adopted in 2002. One section outlines potential development for Philadelphia Park. The plan recognizes the potential market value for this property and recommends the site be considered for a regional convention center or for a larger sports complex. Furthermore, as the current zoning does not allow for flexibility with other development if the current uses prove not to be viable, the plan recommends a zoning change to permit mixed-use development with an emphasis on commercial uses. Gaming facilities are not included or outlined in this plan.

Other recommendations relevant to this study in the plan include:

- Encourage use of bus and paratransit options
- Encourage park and ride lots
- Promote mixed use on underutilized parcels along Street Road
- Encourage development of commercial, office, age-restricted housing, assisted living facilities, low-density single family homes, and luxury townhouses
- Promote uniform signage criteria to control clutter
- Consolidate older retail centers into centralized centers
- Consolidate several existing commercial districts along Street Road into one uniform highway commercial district

Other Studies

Bensalem Township has formed their own township task force on gaming, to prepare for the slots parlor and related development.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except otherwise noted. The study area had a population of approximately 14,700 residents within three census tracts (1002.06, 1002.07 & 1002.08), while Bensalem Township's population was 58,434 residents.

The majority of these residents in the three census tracts are White (79 percent), with seven percent African American and six percent Asian. These percentages are similar to Bensalem Township as a whole. Ten percent of the population in the three census tracts is Hispanic, which is higher than Bensalem Township at four percent.

Seventy six percent of the residents in these census tracts only speak English, which is lower than the rest of Bensalem Township (83 percent) and Bucks County (91 percent). Nine percent of the population, or 1,255 residents, speak Spanish either at home or at work, with over five hundred of these residents speaking English not well or not at all. Another eleven percent speaks another Indo-European language at home or at work, the highest of the eight proposed casino sites studied in this report.

Four percent of the population uses public transportation to get to work, which is the same percentage for Bensalem Township as a whole. Three percent of the population in the three census tracts, while two percent of Bensalem Township walked to work. The unemployment rate in 2000 was 3.5 percent in these census tracts and 3.4 percent in Bucks County. As of November 2005, the unemployment rate for Bucks County was 4.1 percent.

DVRPC employs an environmental justice methodology that quantifies levels of disadvantage within the nine-county region. Using 2000 census tract information, categories of eight potential disadvantaged groups are analyzed, including female head of household with child, non-Hispanic minority, Hispanic, carless households, impoverished, elderly over 85 years of age, physically disabled, and limited English proficiency. Each category is analyzed for the total concentration in the region, generating a baseline. If a census tract contains a concentration higher than the baseline, it is considered disadvantaged. Census tracts can therefore contain zero to eight degrees of disadvantage (DOD).

Philadelphia Park's census tract contains four DOD. Eleven census tracts surround the site, where no tracts contain seven to eight DOD and only one contains five to six DOD. When compared to the other sites, Philadelphia Park contains lower amounts of DOD both at and around the site.

Design

Philadelphia Park is an auto-oriented design that sits far back from Street Road. Its street façade does not appear to be visually connected to the interior, as there are mostly street-level blank walls. It does appear to contain two fountain areas that could be used as public space; however, they do not seem particularly monumental or inviting. The fountains are also surrounded by surface parking. There is no mention of designing to LEED standards.

Potential Land Use Impacts

As this site is currently being used as a sports complex, most of the land use impacts should be consistent with past development. Additional highway commercial uses may locate along Street Road, but most of the land has been built out. It is more probable that older buildings or structures will be upgraded to newer or larger buildings capable of handling more customers.

Harrah's Chester Racetrack and Casino

Location: PA 291/Industrial Highway between Morton Avenue and the Ridley Creek, City of Chester, Delaware County

Website: www.harrahs.com/casinos/harrahs-chester/hotel-casino/property-home.shtml

Owner/Operator/Developer

The Harrah's Chester Racetrack & Casino will be a joint venture of Harrah's (holding a 50 percent interest) and three local businessmen, Joseph Lashinger Jr., George K. Miller and Kevin D. Flynn, under the name Chester Downs and Marina, LLC. Harrah's Entertainment is an established gaming corporation, owning and operating over 40 casinos in Las Vegas and Atlantic City, as well as several other states and three countries. Specific other brand names operated by Harrah's include Caesars, Horseshoe, and Ballys.

Development Proposal

Chester Downs & Marina, LLC, has completed construction of a 5/8-mile harness racetrack and a 1,500 seat grandstand, which opened for business on September 18, 2006. This facility is located on the old Sun Shipbuilding site along the Delaware River in the City of Chester, Delaware County. Construction of a 2,500-slot casino is under way and expected to open in January of 2007. The 64-acre site is located between PA 291 and the Delaware River, and between Ridley Creek and Morton Avenue, approximately. It is located adjacent to the State Correctional Institution at Chester (SCI-Chester). The Pennsylvania Shipbuilding Company, formerly the Sun Shipbuilding and Dry Dock Company, closed in 1989. Since then the site has been idle.

In addition to the racing facilities, 3,500 slots machines, an amphitheatre, a public promenade, and a variety of dining options, including a 15,000 square foot buffet, an 8,000 square foot coffee shop, a 6,000 square foot pub, and an 8,000 square foot steak and seafood fine dining establishment are planned for this site. Parking will be available in a garage with 2,598 self-park spaces and 575 valet spaces. There will be an additional 48 horse trailer parking spaces and 74 paddock spaces.

Harness races will be run between 10 a.m. and 6 p.m. 150 days a year. The casino will operate 24 hours a day, and employees will work one of three shifts: 200 employees for the midnight shift, 450 employees for the 8 a.m. day shift and 350 employees for the 4 p.m. swing shift.

Harrah's expects the project to cost \$392 million, half of which will be put up by Harrah's. Harrah's officials indicate the casino and racetrack would create about 400 construction jobs and 900 to 1,000 full-time positions (70 of which will be at the racetrack). If an additional 1,500 slots are added at a later date, an additional 100 jobs would be created.

The project is part of a large redevelopment project on the Chester waterfront.

Renderings of Harrah's Chester Racetrack and Casino



Existing Land Use

Harrah's Chester Racetrack and Casino is located in a highly industrial area of Chester, given its waterfront location and Chester's rich industrial heritage. See **Map 4: Harrah's Chester Land Use**. Almost 40 percent of the land in the study area is industrial, by far the largest by percent and acreage out of all the gaming sites in this study. Major industrial uses lie to both the east and the west, including the Kimberly Clark paper plant, a recycling center and a speaker manufacturing company.

Almost the entire eastern section of the study area in Eddystone is used by shipping company Penn Terminals. Penn Terminals is a privately owned marine terminal and stevedoring company specializing in the handling of containers, steel, forest products and perishable cargoes. This 71-acre private port is the second busiest in region along the Delaware River and operates seven days a week, 24 hours a day. As the industry is primarily imports, freight here is unloaded from a ship and placed either on trucks or into a warehouse. The facility has cranes capable of lifting 250 metric tons as well as 300,000 square feet of warehousing. These operations can be seen from the grandstand at Harrah's Chester.

Postcard of Former Sun Shipbuilding Company and Aerial of Site During Construction of Harrah's Chester



The Chester Secondary freight line forms the northern border and is an active rail line used by many industrial businesses in southern Delaware County. This rail line is grade-separated at Melrose Avenue, the main entrance to the facility, but the Morton Avenue crossing is at-grade. The City of Chester is currently pursuing plans for installation of single gates in each direction, a non-traversable median to impede motorists driving around the gates, and widening this crossing to 54 feet. There will not be a pedestrian walkway across the tracks at this location.

Commercial, residential, and community service uses are very minimal in this study area, only accounting for 15 percent of the total land. There are no churches, police stations or fire stations within the ¼ mile study area. Within one mile of the facility however are police and fire stations in both Chester and Eddystone. There are also police and fire stations in Essington within three blocks of the Route 291 and Route 420 interchange.

Map 4

Insert Map 4 Legend

The recently established Chester Community Charter School at Fifth and Madison Streets contains several buildings situated at three corners of this intersection and currently has over 1,300 students. Chester's City Hall and downtown shopping district can be found to the west of the racetrack, along Avenue of the States. North of the Industrial Highway is Amtrak's Northeast Corridor and SEPTA's grade-separated R-2 Regional Rail line,

A residential neighborhood lies north of the rail lines. This neighborhood contains older houses that are in moderate to poor condition as well as several vacant parcels.

Commercial land uses are very minimal near this site, and none are currently located along PA 291 within the study area. The closest hotel, a small Days Inn, is on the other side of Interstate 95 at Providence Avenue and Edgemont Avenue. A larger Comfort Inn is located about five miles from Harrah's Chester in Essington along Interstate 291.

Future Development

Chester overall has seen significant development in the last ten years, such as the new Synergy at the Wharf at Rivertown, a brownfield conversion of the former PECO Chester Power Station into Class A office space, currently employing 1,400 workers. A new Municipal Building and Chester Community Charter School have been built in recent years. Harrah's is planning an upscale hotel along the waterfront.

The Chester City planning department is working to consolidate vacant or deteriorating properties along the waterfront. These contiguous properties would be marketed to developers for potential opportunities for compatible development, such as commercial and recreational uses. Additionally, the planning department is reassessing the zoning codes along PA Route 291 to encourage commercial uses instead of residential uses.

Former PECO Chester Power Station, now the Wharf at Rivertown



Current Zoning

In 2003, the City of Chester created a new zoning district, the W-1 Waterfront Development District, adapting the earlier Waterfront Overlay District. See **Map 5: Harrah's Chester Zoning**. Public access to the water and preservation of scenic views to the river are encouraged in this district, though not required. Similar to the overlay district, this district allows commercial, entertainment, and tourist uses by right, including gaming facilities and race tracks. Unlike the previous M-3 Heavy Industrial and Waterfront Overlay zoning, heavy industrial and adult-oriented uses are no longer permitted. Other permitted uses in W-1 Waterfront Development District include:

- Office buildings
- Commercial retail and restaurant facilities
- Hotels, motels, and inns
- Conference centers
- Amusement parks & theaters
- Public or private recreation facilities
- Marina
- Sports stadiums
- Entertainment centers
- Service, sales, repair, and storage of boats and other marine equipment
- Various residential dwellings, including multi-family and condos
- Accessory uses including dwellings for employees and day care center

A combination of uses may be permitted if part of unified development plan. Private helistops, floating restaurants, and tour boat facilities are permitted by special exception.

Buildings may not be higher than 80 feet. The lot must be greater than two acres and a width of 250 feet for uses other than residential. Front yards must be 40 feet wide while side yards must be 40 feet in aggregate. Residential uses have separate development regulations.

If the planning commission has given final approval for land development, temporary structures can be erected for up to eighteen months for the operation of gaming machines and dining facilities.

Buffering and landscape plans are required, specifically next to major collector roads and larger parking lots. Parking areas must be located 35 feet from all public streets and shade trees should be used in large lots. LEED standards are not required.

Other zones located near the site include M-1 Light Industrial, M-2 Medium Industrial, M-3 Heavy Industrial, CBD Central Business District, C-1 Commercial, C-2 Commercial, and R-3 High Density Residential. In neighboring Eddystone Borough, the zones are I Institutional, LI Light Industrial, HI Heavy Industrial and R-2 Medium Density Residential. In Chester, residential and commercial uses can be found northeast of the site above 6th Street and west of Morton Avenue.

Insert Map 5

Comprehensive Plan

Chester City Vision 2000, Chester's comprehensive plan, was adopted in 1994, and outlines many of the projects the City has engaged in over the last ten years. The plan is divided into the following sections: land use, housing, community facilities, transportation and mass transit, and economic development. Harrah's Chester's site is located in Planning District 2, and several strategies in the plan are relevant to the gaming study, including:

- Create healthier business climate through PA 291 widening and improvements
- Establish an industrial parkway with signs, lighting, and trees
- Develop a new zoning district that promotes multiple uses along the waterfront
- Assemble parcel remnants from the PA 291 widening project into more usable property
- Develop a revitalization strategy for Chestnut Street / Morton Avenue
- Revise zoning ordinance to protect non-compatible land uses

In addition to this, Harrah's Chester site (then known as Metro Machine site) was identified in the plan as a key development site. The plan states that Chester should shift strategies for this site depending on market pressures. Since this plan was adopted, PA 291 has been widened, the Waterfront Overlay District (later replaced by the by-right Waterfront District) has been established, and the Metro Machine site is now the home of Harrah's Chester. While gaming was not mentioned as a possible use in the plan, an entertainment or recreational facility was.

Chester City Vision 2000 cites inadequate access between the city's waterfront industrial corridor and interstate facilities as the most pressing transportation issue.

Other Studies

DVRPC completed a *Conceptual Access Plan for the City of Chester* in October 2001. Contained in this plan are short and long-term recommendations for both passenger car and truck traffic. Recommended is an automobile and truck access loop system within the city using PA Route 291, to minimize increased traffic through residential communities. Also discussed in the study are land use/freight traffic conflicts, inadequate height of grade-separated rail bridges, poor signage, and inadequate street parking. The plan balances safety and aesthetics concerns with Chester's economic development needs.

CH Planning, a local consulting firm, has recently created a new waterfront study, titled *Chester Waterfront Redefined*. This plan will designate potential properties for Harrah's proposed hotel development.

Other studies include DVRPC's *Chester City Ramp Access Study* in February 2003. The City of Chester is currently undertaking a signage study aimed at safely and efficiently moving traffic into and out of the city using appropriate signage.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except otherwise noted. The study area had a population of roughly 11,000 residents within five census tracts (4043, 4048, 4049, 4050, and 4056), while the City of Chester had 36,854 residents.

Sixty percent of the residents in the five census tracts are African-American, 31 percent are White, and less than one percent of the residents are Asian. In the City of Chester, 75 percent of the residents are African-American, 20 percent are White, and one percent is Asian. Ten percent of the population in the five census tracts and five percent in the City of Chester is Hispanic.

Eighty-nine percent of the residents in these census tracts speak English only, which is similar to the rest of the City of Chester and Delaware County. Nine percent of the population speaks Spanish either at work or at home, with roughly 300 of these residents speaking English either not well or not at all.

Twelve percent of the population in the five census tracts uses public transportation to get to work, which is lower than the City of Chester as a whole (16 percent). Six percent of the population in both the five census tracts and the City of Chester walk to work. An unemployment rate of 6 percent is higher than Delaware County (3.1 percent in 2000 and 4.6 percent as of November 2005), but lower than several of the Philadelphia sites. There are a large number of residents not in the labor force (49 percent), representing those residents who are not listed as employed or unemployed, but are over 16 years of age. These residents are students, retirees, or not employed and no longer eligible for unemployment benefits or actively seeking work.

The census tract for the Harrah's site contains five degrees of disadvantage (see discussion on degrees of disadvantage in Philadelphia Park's Demographics section). Eleven census tracts are within one mile of the site, where four contain seven or eight degrees of disadvantage and one tract contains five to six degrees of disadvantage.

Design

Harrah's Chester is an auto-oriented design, with a large single-use parking structure, and porte cochere entryway. It does not incorporate LEED standards. It does have some exterior windows along its frontage, and will afford nice views of the Delaware River on the racetrack side of the facility. It is unclear whether there are any public amenities.

Potential Land Use Impacts

The industrial nature of the location results in conflicts between existing uses and the new gaming and racetrack uses. Freight demand is projected to continue to increase. With Penn Terminals adjacent to the east, freight-related value-added businesses may choose to locate nearby. Such businesses might include warehouses, or those that take unloaded freight and perform a second operation, such as breaking it down into smaller containers or wrapping/unwrapping containers. At the same time, it is imperative that gaming visitors do not wander into the port facilities.

To access Penn Terminals, trucks travel first from Interstate 80 to PA Route 291 and then pass under the Chester Secondary tracks (with a 14-foot clearance) above Saville Avenue. There is no turning lane into Penn Terminals from PA Route 291 in either direction. Trucks greater than 14-feet-tall sometimes become lodged in the overpass, forcing traffic to back up in both directions along PA Route 291. As this is the only entrance to Penn Terminals, trucks can back up over a half mile waiting to enter the facility. Conflicts between freight vehicles and gaming visitors, specifically along PA Route 291 in Eddystone, Ridley and Tinicum townships, may arise as both will be using this roadway.

Impacts of Gaming in Greater Philadelphia

There is little room around the site for commercial development, as most of the land is built out with very active industrial uses. There are two active parking lots between Morton Avenue and PA 291, and some vacant land across from the prison, which could attract commercial development. Highway commercial activity, such as gas stations, restaurants and hotels, might be more inclined to locate near the I-95 exits.

Another potential land use conflict may be the proximity of the growing Chester Community Charter School with Harrah's. This could create traffic and student pedestrian safety issues during school hours and school events.

Category Two Slots-Only Casinos

Limerick Casino, Hotel and Conference Center

Location: US 422 between Evergreen Road and Possum Hollow Road, Limerick Township, Montgomery County

Website: N/A (www.boydlimerick.com is no longer in operation)

On September 22, 2006, Boyd Gaming Corporation withdrew their application for a gaming facility at this site, citing lack of community support for their proposal. Prior to the state licensing hearing in April 2006, the Limerick Township Board of Supervisors voted 5-0 to send the following one sentence statement to the Gaming Control Board opposing the project: "The Limerick Township Board of Supervisors cannot support the application and the location proposed by the applicant, Boyd Pennsylvania Partners LP." As Boyd is still the rightful owner of the land and their intentions for this property are not known at this time, it is possible that they may re-apply for a gaming license on this site at a later date. The Pennsylvania Premium Outlet Mall, a related development adjacent to the casino site, is under construction.

Owner/Operator/Developer

Boyd Gaming Corporation has submitted the only proposal for the floating Category 2 gaming license in the region. Boyd Gaming Corporation owns or operates over 21 casinos in six states, including the Stardust and California Casinos in Las Vegas and the Borgata in Atlantic City.

Development Proposal

Included as part of the development package are plans for entertainment, dining, retail, and conference facilities with two development phases. Phase One includes a 3,000-slots parlor, a variety of dining options (a 24-hour restaurant, a buffet, a coffee shop, and a 195-seat steakhouse), four bars, a 200-room hotel, and a 60,000 square foot convention meeting facility with additional ballroom. Phase Two will include a 400-room addition to the hotel and three more restaurants, most likely seafood, Italian, and Asian cuisines, and most likely an additional 2,000 slot machines pending state approval.

Boyd Gaming projects 5.8 million visitors annually. The overall project will generate 2,560 full and part-time construction jobs, with a total of 3,950 full and part-time jobs at the casino, hotel, and retail shops once both phases are complete.

Surface parking for 3,000 cars will be built in phase one, with an additional 1,900-space surface lot and 4,000-space parking garage added in phase two, for a total of 8,900 spaces.

Existing Land Use

The study area surrounding the proposed Limerick Casino is presently predominantly wooded or agricultural land, but its susceptibility to be developed is high, given its location along US 422 in a growing part of Montgomery County. See **Map 6: Limerick Casino Land Use**. There are a few commercial land uses nearby, but the largest neighbor nearby is the Exelon Limerick Generating Station, a nuclear power plant just to the southwest of the site that generates 2,400 megawatts and supplies energy to over two million homes. Also nearby are low density single-family homes. Several light

Insert Map 6

Rendering of Proposed Limerick Casino and Site Plan for Casino and Outlet Mall



industrial uses, contractors, and auto-related industries are located on Lightcap Road. There are a few single-family detached homes as well.

The Pottstown Limerick Airport (PTW) located north of US 422 on West Ridge Pike and just outside the study area, is a privately-owned, public-use airport, serving mostly local businesses. These include Teleflex, Smith-Kline, Drug Plastics and Glass, Stanley Tools and the Dana Corporation. These businesses use the airport to receive supplies and move goods and people. The airport is also used for personal charter flights, as well as recreational flying. The airport serves on average 119 planes per day. It has one runway that is 3,300 feet long. Exelon, the airport owner, is currently looking to sell this airport and it is unclear what changes a new owner would bring.

Future Development

This project will also include the construction of the Pennsylvania Premium Outlet Mall, with 110 stores on 78 acres, offering 430,000 square feet of retail space, developed by the Chelsea Group (owners of the King of Prussia Mall). The mall will employ between 800 and 1,000 workers. The outlet mall received a conditional use approval from Limerick Township, and construction began in September 2006, with opening slated for fall 2007. These types of outlet malls generally draw customers from within 45-60 miles. A separate retail component developed by Tornetta Realty will provide an additional 57 acres of retail and commercial space.

Exelon Limerick Generating Station



Current Zoning

Most of the area surrounding the Limerick site is zoned Limited Light Industrial (LLI). See **Map 7: Limerick Casino Zoning**. The casino would require a zoning change, however, the outlet mall has received a conditional use approval. The outlet mall as well as a casino would be developed under the Interchange Overlay District option, summarized below. Permitted in the LLI district are a wide variety of nuisance-free light industrial uses, as well as some residential and commercial uses. Permitted by right in this district are:

- Scientific, industrial research, or engineering facilities.
- Manufacturing, testing, repair and ancillary storage or distribution of materials, goods, foodstuffs or products.
- Storage or distribution of materials, goods, foodstuffs or products, such as transportation depots, truck terminals, mini-warehouses and self-storage operations.
- Administrative, business or professional offices
- Printing, publishing, lithography and similar processes, up to 100,000 square feet in size.
- Radio and/or television studios and transmission facilities.
- Motor vehicle storage and maintenance

Insert Map 7

Impacts of Gaming in Greater Philadelphia

- Non-motorized commercial recreation facilities, such as golf courses, swim clubs, equestrian facilities, country clubs, and ballfields
- Residential development outlined under the R-1 Residential District.
- Agricultural uses and related buildings
- Game farm, fish hatchery or hunting and fishing reserve for protection and propagation of wildlife.
- Outdoor plant nurseries.
- Veterinarian; animal boarding facility.

As adult uses are permitted only by special exception in the Heavy Industrial District, they are not permitted here. Outdoor storage can be an ancillary use and must meet screening requirements. Accessory uses and buildings are also permitted. Planned Industrial Parks and an Interchange Overlay are permitted as conditional uses.

The non-industrial park option has a minimum lot size of four acres with the minimum width at 350 feet. Maximum building height is 35 feet. The setback from the right-of-way is 50 feet, 100 feet from residential or institutional districts, and 50 feet from commercial or industrial districts. Forty percent of the tract must be used as open space. Landscaping and buffering is as required by the Subdivision and Land Development ordinance. Age-qualified residential communities are permitted as a conditional use but have separate dimensional standards. Other dimensional standards apply for golf course facilities.

The Interchange Overlay District was created to take advantage of opportunities provided by the US Route 422 interchange. Parcels eligible for this overlay option must be at least 60 acres, have at least one boundary along the US Route 422 right-of-way for a minimum distance of 1,000 feet, and be at least within 1,800 feet of any portion of a state-owned ramp of a limited access expressway. In addition to the uses permitted in the LLI and RB districts, conference centers are also permitted here. Dimensional and signage standards have been modified to better reflect the commercial nature of the overlay.

Parking is required at one space for every 250 square feet of gross floor area of retail; one space for every 100 square feet of gross floor area of restaurant; and one space per room plus one space for every 100 square feet of public space in the hotel.

The Board of Supervisors may reduce the required parking by 50 percent if recommended by the Planning Commission and township engineer. Shared parking is also an option for establishments on the same or abutting lots.

There are no requirements for LEED buildings.

As part of the Airport Zoning Act of 1984, airport zoning regulations were adopted by the state, creating airport hazard areas, limiting the height of tall obstructions and recommending incompatible land uses. The Limerick Casino is located within the hazard area.

Other zones near the site in Limerick include Office Light Industrial (OLI), and Heavy Industrial (HI). In neighboring Lower Pottsgrove Township, the nearest zones are Limited Light Industrial (LI), and Residential (R1 and R3).

Comprehensive Plan

The comprehensive plan for Limerick, *Growth Management and Comprehensive Plan*, was adopted in 1995. In this plan, the future land use for the Limerick casino site is office and light industrial. Like most comprehensive plans in Pennsylvania, this one does not mention gaming.

Other Studies

There are no other relevant studies for this area.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except otherwise noted. Limerick Township's population more than doubled between 1990 and 2000, growing from just under 7,000 to 13,534 residents. A continued growth of an additional 7,000 residents is forecasted for this township by 2020.

Ninety-five percent of the population in Limerick is White, two percent are African-American (compared to seven percent in Montgomery County), and one percent is Asian (compared to four percent in Montgomery County). One percent of the population is Hispanic, compared to two percent at the county level.

At less than one percent, Limerick Township has the lowest percentage of the population that uses public transportation to get to work. Four percent of Montgomery County used public transportation to get to work. Two percent of the population in Limerick Township walked to work, which is slightly lower than the three percent who do in Montgomery County. The unemployment rate in Limerick in 2000 was 1.9 percent, making it the lowest among all of the sites. Montgomery County had an unemployment rate of 4.5 percent in 2000 and 3.9 percent in November 2005.

The Limerick Casino lies in a census tract without any degrees of disadvantage. Four census tracts are within one mile of the site and none of them contain more disadvantaged populations (five or more degrees of disadvantage). This site contains the lowest number of degrees of disadvantage when compared to the other sites. Please see Philadelphia Park's Demographics section for a more detailed description of degrees of disadvantage.

Design

The Limerick Casino proposal contains no exterior public amenities such as plazas, arcades, or monumental spaces. Its large 5,000-space surface parking lot in phase one only adds to its auto-oriented design. Street facades are not visually connected to the interior, and there are few windows on the first level. There is also no mention of building to LEED standards.

Potential Land Use Impacts

The potential land use impacts of the Limerick Casino are similar in nature to the impacts of the approved outlet mall. The surrounding agriculture and wooded land will most likely be developed within a few years, given the land's location next to US 422, and expected improvements to the interchange with US 422. As the outlet mall required a conditional use approval, the adjacent wooded land could also be granted a conditional use or rezoned outright to permit other commercial uses. Given its location adjacent to the nuclear power plant, residential may not be a marketable option. Or perhaps this area would remain zoned Limited Light Industrial, and development will occur under this

zoning. The 1995 comprehensive plan lists the future land use of the area as office and light industrial.

City of Philadelphia Casinos

Philadelphia is expected to receive two stand-alone slot machine facilities, with 3,000 to 5,000 slot machines each, for a total of 6,000-10,000 machines, by 2007 under Category 2 licensure. The Philadelphia Gaming Advisory Task Force has been working on site selection issues, and gaming in Philadelphia has received a good amount of media coverage. The University of Pennsylvania held a planning charrette on the topic, and the Center City District has also hosted a number of seminars on what gaming might mean to Center City. The Design Advocacy Group (DAG), an ad hoc group devoted to design quality in architecture and physical planning in the Philadelphia region, formed a gaming task force that has created siting and design principles for the new casinos. These include:

- *Analyze impact before selecting the site.* Such impacts would include access by public and private transportation; pedestrian circulation; noise, light, and environmental pollution; affect on existing and new businesses.
- *Design to protect and enhance immediate surroundings.* Design attention should be given to the massing, scale, material, rhythm, color and detail of construction to avoid damage to existing neighborhoods.
- *Encourage a variety of uses.* Gaming establishments should be part of mixed-use developments that include such uses as theaters, retail, hotels, and other related activities.
- *Include the public in the process.* Siting and design of gaming establishments should be vetted through an open public process, with siting experts informing the discussion.

In addition, the Design Advocacy Group has created Casino Design Standards to demand the very best design quality for the casinos. DAG wants to see casinos as part of larger urban entertainment centers that include a vibrant mix of gambling, restaurants, retail, live performances, movies, dance clubs, and other uses. DAG wants the best architects “to create precedent-setting buildings of incomparable quality that radiate a majestic sense of excitement, entertainment, fun and a little risk.”

The design criteria by which casino designs could be evaluated include the following:

Location

- Compatible with site context in land use, scale, appearance and materials
- Makes maximum use of the site’s development potential
- Will enhance prospects for further appropriate development of adjacent sites
- Accessible by public transit
- Easily connected to other cultural and entertainment destinations

Program

- Includes an effective plan for pedestrian, auto, bus and service traffic
- Incorporates a unique development concept
- Contains an exciting mix of recreational and entertainment activities
- Includes retail and restaurant space
- Allows for expansion of gaming space

Site

- On-site parking is not visible from the street

Impacts of Gaming in Greater Philadelphia

- Contains exterior public amenities such as plazas, arcades, riverwalks

Building

- Design approach is bold, contemporary and innovative
- Street facades are active, inviting and visually connected to the interior
- Uses institutional and corporate quality building materials
- Contains monumental and memorable public spaces that connect to the exterior
- Clear and legible interior spatial organization and circulation
- Meets LEED standards for sustainable design

Design Team

- Experienced in design of gambling and entertainment development
- Has achieved public awards for design excellence

Penn Praxis also created some principles for the Philadelphia Gaming Advisory Task Force, among them:

- Philadelphia should create a non-partisan, apolitical design review commission to render judgment on the quality and viability of the proposed design and development proposal. The Commission would have final say on matters of aesthetics, siting, planning, and design before building permits are issued.
- Create real urban places, rather than faux “Disney” cities; reject the traditional hypervisual casino exterior; create authentic, dense and alive urban streets and places
- Create real public spaces that invite active use by the public, whether they are casino patrons or not
- Create an entertainment and cultural nexus, with the casino as part of a larger mixed-use complex of hotels, residences, retail, entertainment, culture), as this is the trend in the industry
- Avoid monumental windowless boxes surrounded by surface parking; enhance the streetscape and engage the pedestrian; create a civic building with a significant presence; use contemporary materials and construction techniques to create a building with lasting value
- Create parking and transportation plans that capitalize on shared parking, valet parking, public transit, remote parking; do not let the automobile govern design
- Acknowledge that quality of life is a design issue and a public health issue
- Any development is not good development; be selective and rigorous in design review of casinos
- Make the casino a stimulus (opportunity), rather than a deterrent, to reconnecting fraying parts of the city

A central challenge is the lack of comparables in the United States for slots-only parlors. Most stand-alone facilities in the United States, such as in Atlantic City, Las Vegas, New Orleans, Kansas City and Detroit have casinos with slots, table games (such as poker, roulette, blackjack, craps), off-track betting, and other gaming options. There are 106 urban casinos in Canada, all of different shapes and sizes.

The Center City District and the Central Philadelphia Development Corporation recently completed a plan for the central Delaware River waterfront, funded by the William Penn

Impacts of Gaming in Greater Philadelphia

Foundation and prepared by Wallace Roberts & Todd. The plan covers the Delaware waterfront between Penn Treaty Park to the north and Home Depot to the south. The plan recommends a 5.76-mile-long continuous riverfront trail, a series of parks, and connections to adjacent neighborhoods and parks.

The Delaware waterfront is also part of the proposed East Coast Greenway, a 2,950-mile-trail from Maine to Key West, Florida, that is currently under development. The trail will connect all major East Coast cities along a continuous off-road path.

The Philadelphia City Planning Commission has drafted a new zoning district, Commercial Entertainment District (CED), to accommodate the development of licensed gaming facilities. The legislation to amend the zoning code to allow the new CED passed in 2006. The district would allow the following uses:

- Exhibition hall, meeting facilities, and banquet facilities
- Single-family, two-family and multi-family dwellings and hotels.
- Licensed gaming facilities
- Marinas, boat launches
- Offices
- Parking lots and garages
- Restaurants, nightclubs and other entertainment
- Retail sales of goods and provision of services
- Theaters
- Accessory uses

Thirty percent of the site shall be open area, on parcels four acres or more, while ten percent of the site must be open if the parcel is less than four acres. Thirty percent of such open area may be located above ground level. Maximum height shall not exceed 300 feet or 30 stories.

The CED requires front, side and rear yards, with a required setback no less than twelve feet along a waterfront to allow for unrestricted public access to the river's edge. Access to any parking, loading or service areas is not permitted within 50 feet of any residential district. If a permitted use faces a public street, a significant pedestrian entrance shall be on and front that street. Adequate public access is also required, to be determined by a traffic study performed by a licensed professional engineering firm. A landscape plan and lighting plan are also required.

For off-street parking for the gaming facilities, specifically for patrons or guests, four parking spaces are required for every five slot machines, while one parking space per slot machine is required for other specifically designated areas. For hotels, one parking space is required for every two rooms. Employee parking is not discussed within the ordinance.

Design review is required in the CED, and LEED accreditation is encouraged. The public art percentage requirement applies in the CED.

Foxwoods Casino Philadelphia

Location: South Columbus Boulevard between Reed and Tasker Streets, Philadelphia

Website: www.foxwoods.com

Owner/Operator/Developer

Philadelphia Entertainment and Development Partners and Foxwoods Development Company applied for one of the two Philadelphia Category 2 Gaming licenses. The Mashantucket Pequot Tribal Nation opened the Foxwoods resort casino in 1992 in Ledyard, Connecticut, which is now the largest resort casino in the world.

Development Proposal

Foxwoods Casino Philadelphia would be completed in three phases and would include the casino, retail, dining facilities, entertainment venues, conference spaces, a health spa, hotel, condominiums, and an entertainment venue.

Phase one includes a 3,000-slot parlor, four restaurants (buffet, coffee shop, food court and a fine dining establishment.), several retail stores, and an entertainment venue. Phase two will bring additional retail and dining facilities, 2,000 more slot machines, and a Pier 60 Entertainment District. Phase three includes a health spa, a 500-room hotel tower with meeting space, and 200 condominiums.

Jobs expected to be generated include 1,556 construction jobs in phase one, 587 in phase two, and 1,288 in phase three, for a total of 3,431 construction jobs. Full and part-time operating jobs at the complex will grow from 954 in phase one to 1,780 jobs by phase three.

Parking will be provided in a 4,500-space garage in phase one, with an additional 1,500 spaces added in phase two.

Aerial Photo of Foxwoods Site and Big Box Retail along Delaware River



Renderings of Proposed Foxwoods Casino



Photo Simulation of Proposed Foxwoods Casino



Existing Land Use

The land use analysis for the four potential Delaware River casinos reviews land uses within a quarter mile of the potential casino, using the building footprints in the Philadelphia Gaming Task Force study as the center point. While some of these footprints have gotten larger as this study progressed, specifically the Pinnacle application, the original quarter mile radius has been retained.

The Foxwoods study area has two diverse sections divided by I-95, with commercial uses to the east and residential uses to the west. See **Map 8: Foxwoods Land Use**. This study area contains the largest amount of land devoted to commercial activities at 24 percent of the land in the study area. Highway commercial establishments, such as recently built big box shopping centers, are located east of I-95. Big box retail in the immediate area includes Home Depot, Wal-Mart, and Target. Other big box retail to the south includes IKEA, Lowe's, and Best Buy. Many smaller shops and restaurants are found on South Columbus Boulevard as well. Across from the proposed site is the United Artists Riverview 17-screen multiplex. Several adult entertainment establishments are located nearby. While once a large part of this neighborhood, industrial uses now comprise less than one percent of the total land.

At the northern end are a municipal ice-skating rink, the Sheet Metal Workers union building, and the Riverview strip shopping plaza. Just outside of the study area to the north at Columbus Boulevard and Washington Avenue is the U.S. Coast Guard station. Gloria Dei Church, a national historic site and the second oldest Swedish church in America, constructed in 1700, occupies seven acres of parkland at this intersection.

Insert Map 8

Map 8 Legend

Impacts of Gaming in Greater Philadelphia

On the other side of I-95 lies the Pennsport neighborhood, characterized by two and three-story row homes on small lots. Residential uses comprise 13 percent of the land in the study area. Neighborhood businesses and small corner eateries are located throughout the area, particularly along South Front Street and South 2nd Street. Four schools and at least six houses of worship are located in Pennsport. Two city parks can be found here, including Dickinson Park and Jefferson Square.

I-95 accounts for a quarter of the land in each of the four Delaware waterfront gaming sites. The land under I-95 at the Foxwoods site is used for parking, with the lots being well-maintained, free, and well-lit. These lots serve many of the businesses on South Columbus Boulevard and South Front Street, specifically the United Artists Riverview movie theater.

Of the 11,500 properties in the Pennsport neighborhood in 2004, 82 percent are residential, five percent are commercial, and one percent is industrial. Vacant parcels account for seven percent of the total parcels and five percent of the building stock is vacant. In 2000, 61 percent of the residential units were owner-occupied. In 2003, 700 residential parcels changed hands, and based on data from the City's Board of Revision of Taxes, the median residential housing value in 2005 was \$96,000 based on 591 sales, a 50 percent increase from the 2000 Census.

Pennsport Homes, Mummers Mural, and Big Box Retail



Future Development

Future development in Center City, the waterfront and surrounding neighborhoods will influence the overall impact of the casinos, particularly those along the Delaware waterfront. Center City has experienced a renaissance over the last 15 years and new housing is being built at a rapid pace. The demographics of the City are changing and vacant and underutilized land is highly sought after by developers. See **Map 9: Foxwoods and North Delaware Future Development**.

Currently under construction in Center City is the Comcast Center, a 975-foot, 57-story office building, scheduled to open in summer 2007. The Comcast Center will be the tallest building between New York and Chicago.

Many new residential towers are also planned or under construction in Center City. These include: 1441 Chestnut (58 stories), the Residences at the Ritz (44 stories), the Murano (43 stories) Mandeville Place (41 stories), Ten Rittenhouse Square (33 stories), and Symphony House (31 stories). Planned residential towers outside Center City include the Barnes Tower (47 stories) near the Art Museum, and Bridgepoint (16 stories) in Queen Village.

Planned office-to-residential conversions include Two Liberty Place, which will convert twenty floors from office to 140 residential condominiums, making this Philadelphia's first office plus residential high-rise. Other conversions include the Ellington, City View I and II, the Aria, and the Ayer. The Warwick hotel will be converted to residential, and the closed Metropolitan Hospital has been redeveloped as the MetroClub condominiums.

In Old City, new residential developments planned or under construction or recently completed include: 101 Walnut, Nouveau, National at Old City, the Beaumont, the Americana and 22 Front. If all of these projects are completed, they will add at the least 275 new units to the neighborhood.

In Pennsport, new residential development planned or under construction includes: Liberty Landing (1,600 units in four towers, 60 townhomes, marina, and several restaurants) at South Columbus Boulevard just north of Reed Street; and the Sophia, a conversion of the closed Mount Sinai Hospital on South 4th Street between Reed and Dickinson Streets into residential.

In Queen Village, new residential development planned or under construction includes: Columbus and Catherine (two towers, 16 stories and 19 stories, or one 60-story tower) at South Columbus Boulevard and Catherine Street, next to the I-95 southbound Washington Avenue off-ramp; Bridgepoint (16 stories), adjacent to Dockside at South Columbus Boulevard and Bainbridge Street; Pier 34 South and River Tower Place. In Society Hill, plans for the controversial New Market Condominiums are currently in development.

It should be noted that many development projects are contingent on market pressures. As of July 2006, several external forces may limit proposed projects. These forces are three-fold: rising material costs, possibly stemming from a supply shortage after Hurricane Katrina and increased manufacturing costs for steel and other materials; saturation of the luxury condominium market in Center City; and increasing interest rates (from four percent in June 2003 to 8.25 percent in June 2006). If these trends continue,

Map 9

many of the proposed projects may be forced to modify their designs or redo their plans entirely. It is possible that the market may change to include more building renovations (lower construction costs) and or apartments (higher interest rates make buying a home less appealing). Developers for three proposed projects (1919 Market, Old City 205, and Marina View Tower) have recently announced that they will no longer pursue these developments or be on hold indefinitely.

Current Zoning

The following zones are located around the Foxwoods site: C-1 Commercial (neighborhood retail), C-3 Commercial (regional retail), C-7 Commercial (neighborhood retail), L-4 Limited Industrial, LR Least Restrictive Industrial, G-2 General Industrial, PI Port Industrial, R-10 Residential (multi-family), and R-10A Residential (single family). See **Map 10: Foxwoods Zoning**. On the eastern side of I-95 all of the land is zoned for either General Industrial or Commercial uses. Residential zoning dominates the land west of I-95, save for a few blocks zoned for industrial uses.

Comprehensive Plan

While the City of Philadelphia does not currently have an overall comprehensive plan, the Philadelphia City Planning Commission in partnership with Penn Praxis and a 45 member Advisory Group will complete a comprehensive Central Delaware River Waterfront Plan by 2007. The waterfront plan will include the four proposed gaming locations along the Delaware River.

In May 2003, the Planning Commission published the *South Delaware Redevelopment Area Plan*, which covered South Columbus Boulevard from Moore Street to Oregon Avenue. There has not been a study of the immediate Foxwoods site recently, though many of the recommendations contained within the *North Delaware Riverfront, Philadelphia: A Long Term Vision for Renewal and Redevelopment (2001)* could apply to the southern Delaware riverfront as well.

Other Studies

Wallace, Roberts & Todd, along with the Center City District and the Citizen's Alliance for Better Neighborhoods have been working on the multi-year *Delaware River Waterfront Planning Study* since 2003. The study covers the area from Penn Treaty Park to the Columbus Commons Shopping Center at Snyder Avenue.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except otherwise noted. The Foxwoods site lies in four Pennsport census tracts (25, 26, 27 and 366) with a total of 11,400 residents. The City of Philadelphia had a total of 1,517,550 residents.

The local population is diverse at this site, where 57 percent of the population in the four census tracts is White, 28 percent African-American, and ten percent Asian (highest of the eight sites). In the City of Philadelphia, 45 percent of the population is White, 43 percent is African-American, and four percent is Asian.

Eighty percent of the residents in these census tracts speak English only, which is similar the rest of the City of Philadelphia (82 percent). Seven percent of the residents in these census tracts as well as in the City of Philadelphia only speak Spanish either at home or at work.

Map 10

Impacts of Gaming in Greater Philadelphia

Eight percent of the residents speak an Asian or another Pacific Island language at home or at work, much higher than the Philadelphia average of two percent, but over half also speak English either very well or well.

For local workers, 23 percent used public transportation to get to work and 11 percent walked to work, the highest of any site. In the City of Philadelphia, 25 percent of the population used public transportation to get to work while nine percent walked to work. These census tracts had an unemployment rate of 6.3 percent in 2000 which is comparable to the overall City of Philadelphia's 6.1 percent rate in 2000. In November of 2005, the City of Philadelphia's unemployment rate was seven percent.

The site is in a census tract without any degrees of disadvantage, but this is mainly due to a very small population within this tract. The more appropriate tract lies across Columbus Boulevard. This tract contains seven of eight degrees of disadvantage, all except for the elderly measurement. Twelve census tracts are within one mile of the site, where four contain seven or eight degrees of disadvantage and seven contain five to six degrees of disadvantage. The Foxwoods impact report did underestimate housing values in the area, as the Pennsport neighborhood has seen very large increases in home values between 2000 and 2006. Please see Philadelphia Park's Demographics section for a more detailed discussion on degrees of disadvantage.

Design

The positive design features of the Foxwoods proposal include public amenities such as the boardwalk, day-use docks, water taxi, and Pier 60 Entertainment District. Its "festival marketplace" design does offer many windows with views of the river and city, and the proposal indicates that the developers will build to the highest level of LEED possible. Its negative features include a single-use garage and an auto-oriented design with porte cochere entryway.

Potential Land Use Impacts

While the vacancy rates are low in nearby commercial buildings, several types of predatory businesses may locate nearby, including pawn shops and check cashing establishments. For reference, Atlantic City has approximately eight pawn shops and ten check cashing establishments. It is possible that some of the vacant land will be turned into parking lots, but most patrons would rather park on site at the location.

Vacant Foxwoods site and United Artists Riverview Movie Theater



Riverwalk Casino

Location: North Columbus Boulevard at Spring Garden Street, Philadelphia

Website: www.planethollywood.com

Owner/Operator/Developer

Riverwalk Casino has been proposed by a partnership of Planet Hollywood, Pennsylvania Partnership Group, Bay Harbor Management (BHM), and BHM Gaming. Planet Hollywood is a pop-culture, media, and Hollywood themed restaurant chain backed by Sylvester Stallone, Bruce Willis, and Arnold Schwarzenegger. Since the initial New York restaurant opened in 1991, four other locations have opened in America and 13 in other countries. BHM Gaming is a joint venture between Robert Earl, founder of Planet Hollywood, and Douglas Teitelbaum of BHM. Earl and Teitelbaum also have voting control of Aladdin Resort and Casino in Las Vegas, which will be re-named Planet Hollywood Casino and Resort later in 2006. It is the only application with majority control by minority owners.

Development Proposal

Riverwalk Casino will include 3,000 slot machines, 44,000 square feet of retail, a variety of dining options (coffee shop, food court, buffet and three fine dining facilities), and a 400-seat theater. A hotel is not planned at this time.

The estimated cost of development is \$380 million. Riverwalk Casino will produce over 1,740 full and part-time construction jobs, with a total operating employment of 2,284 full and part-time jobs.

A seven-story parking garage is proposed for the site, providing spaces for 3,200 vehicles, including self-park, valet, and charter buses. The garage will have signalized access via two driveways located on the east side of North Columbus Boulevard, one opposite Spring Garden Street and the other opposite Noble Street.

Riverwalk plans to be an entertainment-driven attraction, by hosting celebrity sporting events, concerts, charity galas, and tournaments, as well as having an in-house television and radio studio.

Riverwalk has the closest rail station of any of the eight proposals, as it is only two blocks from the Spring Garden Street station on SEPTA's Market-Frankford Elevated line. Riverwalk plans to work with SEPTA to enhance the station's appearance (though who will pay for the renovation is unclear).

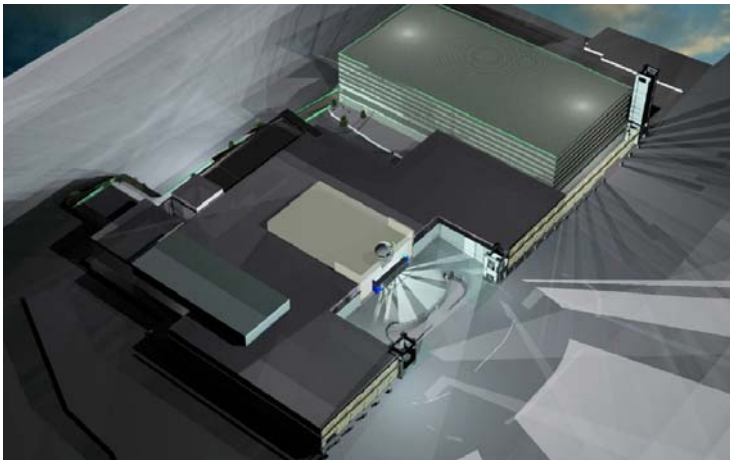
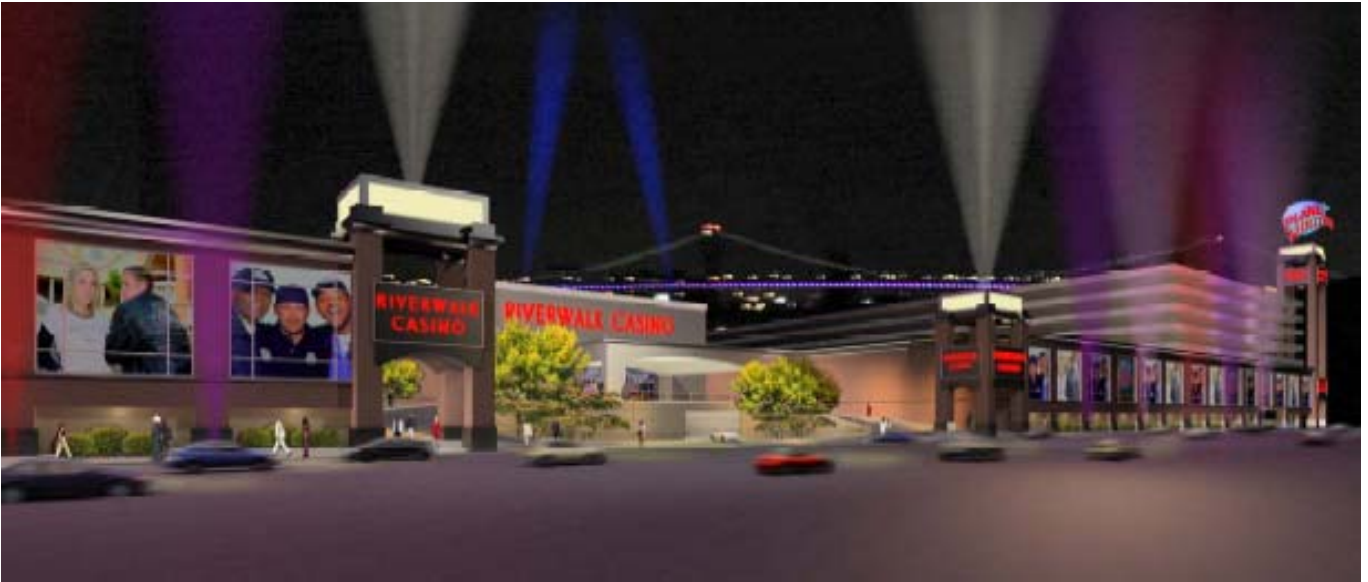
Existing Land Use

Riverwalk Casino is located next to the Northern Liberties neighborhood, though it is separated by I-95. See **Map 11: North Delaware Land Use**. More residential and neighborhood commercial establishments are located west of the highway, while industrial uses can be found to the east. With the employment centers and cultural amenities of Center City and Old City just a few blocks away, conversion, renovation, and new construction projects are all occurring in Northern Liberties. This formerly industrial area is transforming into one of Philadelphia more desirable neighborhoods. Many developers have converted industrial buildings into high-end condominiums.

Insert Map 11

Map 11 Legend

Renderings of Proposed Riverwalk Casino



Impacts of Gaming in Greater Philadelphia

According to *Forbes* magazine, the Northern Liberties zip code ranked 11th in the nation for increases in property values between 2003 and 2005. Over a dozen major developments have either occurred or are planned in this neighborhood ranging from smaller rehabilitations in the neighborhood to high-rise towers along the waterfront. As real estate prices have escalated, many industrial land owners have sold their land to developers, resulting in businesses with significant employment leaving the area. In 2005, the median single-family home sale price for Northern Liberties was \$285,000, based on 37 sales, according to the City's Board of Revision of Taxes. Census tracts for Northern Liberties include 126, 127, 128, 129, and 130.

Commercial uses, at 18 percent of the land surrounding the site, and industrial uses, at 11 percent, are the major land uses immediately surrounding Riverwalk. The main commercial corridor for the neighborhood is North 2nd Street between Spring Garden and Girard Avenue. Newer high-end restaurants, coffee shops, and boutique shops have begun to emerge along 2nd Street. Currently, streetscape improvements are underway, creating angled parking, brick-paved crosswalks, and bumpouts. Three schools can be found in this neighborhood as well as four churches.

Industrial uses include several warehouses and storage facilities. Acorn Iron Supply is located one block to the north. There are several waterfront restaurants (Dave and Busters, Rock Lobster and Cavanaugh's River Deck), a Greyhound bus storage lot, and an adult entertainment venue. The Philadelphia Marine Center, the largest marina in Philadelphia with 338 slips, is located south of Callowhill Street.

West of I-95, many small boutique shops can be found along North 2nd Street, including restaurants, art galleries, and salons. Very Bad Horse, a clothing store that also makes designer jeans, and REload, a shop that makes messenger bags and other bike-related merchandise, are also located here. Festival Pier is a music venue that offers summer concerts and other events. There are no community services in the immediate study area.

Homes and Businesses in the Northern Liberties Neighborhood





Currently, about ten percent of the land is a residential use, either a multi-family building or single-family attached units. Several rowhomes are located between I-95 and Columbus Boulevard. A new development at North Penn Street and Poplar Street is Waterfront Square, a five building, 951-unit gated condominium complex. This development is located adjacent to Riverwalk and just south of the possible SugarHouse Casino. Prices begin at \$400,000. Two of the five towers, both fully leased, opened in June 2006, while the other three are expected to be completed by 2009.

There is some surface parking and vacant land within the study area, most of which is directly adjacent to I-95.

Future Development

The North Delaware waterfront is also experiencing a residential building boom, similar to the South Delaware waterfront and Center City. These developments will have a significant effect on the surrounding neighborhoods. If all are built, over 6,000 residents may be added to the North Delaware waterfront. See **Map 9: Foxwoods and North Delaware Future Development**.

Trump Tower Philadelphia, at North Columbus Boulevard and Penn Street, is a proposed 45-story, 263 luxury unit condominium complex. Also included are a spa and fitness center, tennis courts, and an Olympic swimming pool, with retractable glass ceiling. Prices for one to three bedroom units will range from \$700,000 to \$3.5 million.

Bridgeman's View Tower, at North Columbus Boulevard at Poplar Street, will be a 66-story (915 feet) condominium building. If built it would be the tallest residential building in Philadelphia. It would include 40 stories of residential, ground floor retail, several floors of parking, several commercial floors, and a hotel.

Other proposed projects include Sky 101, 21-story, 57-unit condominium at North Columbus Boulevard at Spring Garden Street and Front Street. This tower will contain one and two bedroom units, secure parking, a fitness facility, and a third floor garden area. As of this writing, there is no timeline for opening. 700 Delaware, at North Columbus Boulevard and Brown Street, on the site of the existing Liberty Storage building and the Greyhound bus storage lot, will be two 45-story towers, with a park and ground floor retail. 700 Delaware will also include new townhomes along Front Street,

Impacts of Gaming in Greater Philadelphia

Poplar Street and Fairmount Avenue. There is also no timeline for this project. Penn's Point Condominiums, a 15-story, 67-unit tower, and 1101 North Delaware Avenue, with two 36-story towers, are also proposed at North Columbus Boulevard and Shackamaxon Street.

Marina View Towers, a mixed-use project proposed at the foot of the Ben Franklin Bridge at 230 North Columbus Boulevard, has been put on hold due to a softening real estate market. This development was to contain 15,000 square feet of retail on the first floor, four levels of parking, and 19 floors containing 147 condo units.

Also proposed is World Trade Square, a four-tower complex at North Columbus Boulevard and Callowhill Street. Three towers would be home to the Philadelphia World Trade Center, and one tower would be residential. The towers would be between 35 and 45 stories tall.

The Port Richmond PECO station, a beautiful neoclassical building located just north of Penn Treaty Park along the Delaware River, is a major redevelopment opportunity. Chester's former PECO plant was recently renovated into Class A office space, and a similar opportunity exists here. One option is to locate a museum here, such as the proposed Calder Museum of Sculpture.

Waterfront Square and Hancock Square, Both Under Construction



Beyond the Delaware waterfront, there has been major reinvestment in the Northern Liberties neighborhood. Tower Development has or will be developing the following: Liberties Walk; Boone Lofts (in the old Daniel Boone school); and Schmidt's, the former beer manufacturer, with 520 units and 150,000 square feet of retail in an 18-story building. Hancock Square, on North 2nd Street between Germantown Avenue and Laurel Street, has begun construction with four new buildings and two warehouse conversions, with retail on the first floor and 450 apartments above. American Lofts has begun construction and is an 11-story, 38-unit condominium (and two townhouse) complex at North American Street and Fairmount Street, with prices starting at \$260,000. This project will include a "grass-crete" green parking lot, a gym and a sauna. Also proposed nearby is the 15-story Q Condominiums.

Current Zoning

The following zones are located around this site: R-10 Residential (multi-family), R-10A Residential (single family), C-2 Commercial (neighborhood retail), C-3 Commercial (regional retail), C-4 Commercial (high density mixed-use), G-2 General Industrial, and L-R Least Restrictive Industrial. See **Map 12: North Delaware Zoning**. The majority of the land south of Spring Garden Street is zoned C-3 and C-4, while the majority of the land north is zoned G-2.

Comprehensive Plan

While the City of Philadelphia does not have an overall comprehensive plan, the Philadelphia City Planning Commission crafts studies focusing on specific areas of the city or single topics. As previously mentioned, the Philadelphia Planning Commission in partnership with Penn Praxis is currently working on a waterfront plan. The *North Delaware Riverfront, Philadelphia: A Long Term Vision for Renewal and Redevelopment (2001)* contains recommendations for the Riverwalk area.

Other Studies

Many Philadelphia neighborhoods have created their own plans to guide the orderly development of their community. The Northern Liberties Neighborhood Association created the *Northern Liberties Neighborhood Plan (2005)*.

Wallace, Roberts & Todd, along with the Center City District and the Citizen's Alliance for Better Neighborhoods have been working on the multi-year *Delaware River Waterfront Planning Study* since 2003. The study covers the area from Penn Treaty Park to the Columbus Commons Shopping Center at Snyder Avenue.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except when otherwise noted. The casino site lies within parts of three riverfront census tracts (129, 142 and 366). As there are few residential uses in the immediate area, the resulting population of 3,200 residents within these census tracts is the lowest around any site. The City of Philadelphia had a total of 1,517,550 residents.

Seventy two percent of the population in the three census tract is White, 15 percent is African-American, while less than one percent is Asian. The highest concentration of Hispanic residents, compared to the other seven sites, live here at 15 percent, which is twice the city average, as well as the highest concentration of "other" races at ten percent. In the City of Philadelphia, 45 percent of the population is White, 43 percent is African-American, and four percent is Asian. Eight percent of the population is Hispanic.

Seventy six percent of the population in the three census tracts speaks only English at home or at work, which is slightly lower than the City of Philadelphia (82 percent). The high Hispanic population also correlates with 15 percent of the population that speaks Spanish at home or at work.

Nineteen percent of the population use public transportation to get to work while ten percent walked, compared with the overall City of Philadelphia, where 25 percent of the population used public transportation to get to work and nine percent walked to work. This site also has the highest percentage of workers taking the subway to work at eleven percent, as well as highest of those who ride a bicycle to work at five percent. The unemployment rate for these census tracts in 2000 was two percent, which is much lower

Map 12

than the City of Philadelphia's 6.1 percent in 2000. In November of 2005, the City of Philadelphia had an unemployment rate of seven percent.

The proposed facility is in a census tract without any degrees of disadvantage, but this is misleading since there is very little population in this waterfront tract. The other two census tracts have respectively seven of eight degrees of disadvantage, and four of eight degrees of disadvantage. Thirteen census tracts are within one mile of the site, where four tracts contain seven or eight degrees of disadvantage and seven tracts contain five to six degrees of disadvantage. Please see Philadelphia Park's Demographics section for a more detailed degrees of disadvantage discussion.

Design

Positive aspects of this design include a smaller front setback, with the inclusion of sidewalks, which result in a less auto-oriented, more urban site design. Public amenities could include a waterfront promenade, local artwork and improvements to the SEPTA Market-Elevated Spring Garden station. Negative aspects include a single-use garage fronting both waterfront and the street, and a lack of windows or glass that results in a big box appearance. There is also no mention of LEED standards.

Potential Land Use Impacts

Future land use changes will be driven by two factors – increased demand and redevelopment in Northern Liberties and new riverfront residential tower development. As more residents with higher incomes locate in this area, retail and services catering to their needs will continue to emerge and replace existing light industrial businesses. Desire for more restaurants, small shops, and personal services will exert pressure on the existing vacant and underutilized land. The neighborhood has made a conscious effort to retain industry and encourage light industrial businesses in appropriate places. The addition of new residential towers along the waterfront will add significantly more residents, which will create mobility and accessibility challenges for all modes—automobile, transit, bicycle and pedestrian. Parking is already a concern for businesses along North 2nd Street, and the additional residents along the waterfront will compound this issue.

If the Riverwalk Casino is awarded a gaming license, additional development pressures will be placed on vacant land nearby. Conflicts may arise between the existing industrial uses' needs, versus those of the casinos and existing and new residents.

SugarHouse Casino

Location: North Columbus Boulevard between Frankford Avenue and Shackamaxon Street, Philadelphia

Website: www.sugarhousecasino.com

Owner/Operator/Developer

SugarHouse Gaming has proposed a casino on the old Jack Frost sugar refinery site along the North Delaware waterfront in Philadelphia. SugarHouse Gaming is controlled by Neil G. Bluhm, a Chicago billionaire and co-founder of JMB Realty Corporation. JMB built Water Tower Place in Chicago, and owns both the Ritz-Carlton and Four Seasons Hotels in Chicago. JMB was also a founding partner in the Niagara Fallsview Casino.

Development Proposal

SugarHouse Casino will offer 3,000 slot machines, nine dining facilities (including buffet, diner, fine dining), a 25,000-square foot entertainment venue, and a Turf Club for off-track betting. Future expansion could include a 20-story, 500 room hotel, a day spa, and additional dining options. The estimated cost of development is \$450 million. Employment projections were not available. Parking would be provided in a 2,350-space, eight-story parking garage, with an additional 865 spaces possible as part of future expansion.

Renderings and Site Plan of Proposed SugarHouse Casino





Existing Land Use

SugarHouse Casino lies at the nexus of both the Northern Liberties and Fishtown neighborhoods. For specific land use characteristics concerning Northern Liberties, please see the Riverwalk Casino section. See **Map 11: North Delaware Land Use**.

Fishtown is a very old neighborhood, named after the fisheries that once lined this section of the Delaware River. I-95 cut off Fishtown from its waterfront roots, but the neighborhood has retained a strong sense of character.

Interstate 95 is a block closer to this site than Riverwalk, resulting in more residential uses closer to the casino. About 20 percent of the land in the study area is residential, the highest among the three northern Delaware sites, and are located on either side of the highway. Most of the houses are single-family attached rowhomes. Several two to four-story rowhomes in this neighborhood date to the 1800s, but due to constant construction since that time, the neighborhood contains a mixture of styles, including several newer “green” buildings. The newly built Waterfront Square is also located in the study area. Four schools are located here as are at least eight churches, and there is a ballfield next to Kensington Adaire Elementary School. The Palmer Burial Ground, a large wooded cemetery, can be found in the middle of the neighborhood. The Neuman Medical Center is located on Frankford Avenue.

Housing prices have recently begun to escalate as development spills over from gentrifying Northern Liberties. Currently no major development projects are underway in the neighborhood, however, single family homes sales are very strong, and there appears to be demand for retail to serve the existing and new infill homes. In 2003, 410 residential parcels changed hands. In 2000, 57 percent of the residential units were owner-occupied. In 2005, the City’s Board of Revision of Taxes reported that the median single-family home sale price for Fishtown (West Kensington – Census Tracts 142, 144, 156, 157, 162, 163, and 164) was \$65,000, based on 144 sales. This represents an increase of \$13,000 since 2000. Significant increases in residential values have occurred since 2000.

Commercial uses, located on North Columbus Boulevard and Girard Avenue, encompass 11 percent of the land. Small shops and local eateries can be found along Girard and Frankford Avenues. Girard Avenue at Frankford Avenue has a Wachovia, McDonalds, KFC/Long John Silvers, and several small music venues, including Johnny Brenda’s, the M Room, and the Barbary. Other businesses include law and insurance offices, ethnic restaurants, a nightclub, a florist, an auto supply shop, a thrift shop, a UFO bookstore, and an adult entertainment venue, among others. On North Columbus Boulevard, a furniture store is one block north from the proposed site and an eight-story office building is across the street, while a meat wholesaler is one block to the south. An arts corridor is proposed along Frankford Avenue.

Industrial uses, such as the WBC ice-cream machine manufacturing company, comprise 13 percent of the land, and are mixed in with residential and commercial uses.

Penn Treaty Park, a two-acre park which commemorates the location where William Penn made his treaty agreement with the Lenni Lenape Indians, is located to the north of the SugarHouse site. Few community services are located in the immediate study area, other than a childcare center.

Impacts of Gaming in Greater Philadelphia

Of the 8,200 properties in Fishtown during 2004, 64 percent are residential, 11 percent are commercial, and six percent are industrial. Vacant parcels account for 21 percent of the total parcels, while six percent of the building stock is vacant.

Businesses and Residences in Fishtown Neighborhood



Future Development

For information on future development along the waterfront, see the Foxwoods and Riverwalk sections of this study. See **Map 9: Foxwoods and North Delaware Future Development**.

Current Zoning

The following zones are located around this site: R-10 Residential (multi-family), R-10A Residential (single family), C-1 Commercial (neighborhood retail), C-2 Commercial (neighborhood retail), C-3 Commercial (regional retail), L-4 Limited Industrial, L-5 Limited Industrial, G-2 General Industrial, and REC Recreational. See **Map 12: North Delaware Zoning**. The majority of land is zoned G-2 on both sides of Columbus Boulevard. The study area includes several blocks on the other side of I-95 that are zoned for industrial, commercial and residential uses.

Comprehensive Plan

While the City of Philadelphia does not have an overall comprehensive plan, the Philadelphia City Planning Commission crafts studies focusing on specific areas of the city or single topics. As previously mentioned, the Philadelphia Planning Commission in partnership with Penn Praxis is currently working on a waterfront plan. The *North Delaware Riverfront, Philadelphia: A Long Term Vision for Renewal and Redevelopment (2001)* contains recommendations for the SugarHouse area.

Other Studies

Many Philadelphia neighborhoods have created their own plans to guide the orderly development of their community. The Girard Avenue Coalition and Local Initiatives Support Corporation (LISC) have done multiple plans for Girard Avenue, including the *Girard Avenue Market Analysis Report (2003)*. In addition, the Northern Liberties Neighborhood Association created the *Northern Liberties Neighborhood Plan (2005)*.

Wallace, Roberts & Todd, along with the Center City District and the Citizen's Alliance for Better Neighborhoods have been working on the multi-year *Delaware River Waterfront Planning Study* since 2003. The study covers the area from Penn Treaty Park to the Columbus Commons Shopping Center at Snyder Avenue.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except otherwise noted. This site lies within portions of three census tracts within the Fishtown neighborhood (142, 143, and 366). As residential uses are more common in this area than near the Riverwalk site, the population is higher at 4,200 residents. The City of Philadelphia had a total of 1,517,550 residents.

Seventy seven percent of the residents in these census tracts are White, 12 percent are African-American while two percent are Asian. Fourteen percent are Hispanic. In the City of Philadelphia, 45 percent of the population is White, 43 percent are African-American, four percent are Asian, and nine percent are Hispanic.

Seventy nine percent of the population in the three census tracts speaks only English at home or at work, which is slightly lower than the City of Philadelphia (82 percent). The high Hispanic population also correlates with 12 percent of the population speaking Spanish at home or at work.

Twenty percent of the population in these census tracts uses some sort of public transportation, split evenly between bus and subway, to get to work, while seven percent walk to work. In the City of Philadelphia, 25 percent of the population used public transportation to get to work while nine percent walked to work. The unemployment rate for these census tracts in 2000 was 2.4 percent, which is much lower than the City of Philadelphia's 6.1 percent in 2000. In November of 2005, the City of Philadelphia had an unemployment rate of seven percent.

One census tract contains seven of eight degrees of disadvantage, while another contains five degrees of disadvantage. Fourteen census tracts are within one mile of the site, five of which contain seven or eight degrees of disadvantage and seven tracts contain five to six degrees of disadvantage. Please see Philadelphia Park's Demographics section for a more detailed description of degrees of disadvantage.

Design

Positive aspects of the SugarHouse design include public amenities such as a waterfront promenade, roof garden, and marina. There are also many windows and glass in the design, affording views of the river and city. The future garage expansion appears to be wrapped in retail on the ground floor, another positive. Negatives include its auto-oriented design and lack of LEED standards.

Potential Land Use Impacts

The impacts at the SugarHouse site would be similar in many ways to the impacts at the Riverwalk Casino, since they are close to one another. The potential for casino-generated redevelopment in the area is high. New residents along the waterfront and the presence of vacant or underutilized land will increase development pressures, and possibly cause some accessibility challenges in the area. Care should be taken to mitigate impacts on nearby neighborhoods.

Pinnacle Casino

Location: North Columbus Boulevard between Dyott and North Beach Streets, Philadelphia

Website: www.pnkinphilly.com

Owner/Operator/Developer

Pinnacle Entertainment Inc. owns or operates casinos in Nevada, Louisiana, Indiana and Argentina, and is currently constructing two casinos in St. Louis.

Development Proposal

Pinnacle Casino would be built in three phases. Phase one would include 3,000 slot machines in a single-level 80,000 square foot facility, with five dining options, 36,000 square feet of retail, a 12 to 14 screen multiplex theater, and a waterfront reflection pool that will double as an ice rink in the winter months. Phase two would include additional slot machines. Phase three could include a 500-room hotel, a residential and office tower, and additional dining and retail establishments. Pinnacle's development proposal offers more local market attractions, such as the ice rink and movie theater, which could draw neighboring residents and tourists beyond just what the casino would pull.

The estimated development cost for this project is between \$300 and \$400 million for phase one, and runs as high as \$800 million for phases two and three.

Over 1,200 full and part time construction jobs will be generated during the construction. Once open, the casino will employ 1,300 workers while the multiplex theater will employ 120 workers.

Parking for 3,000 vehicles would be provided in phase one, with an additional 2,000 spaces added in phase two, both in parking garages.

Renderings and Site Plan of Proposed Pinnacle Casino



Impacts of Gaming in Greater Philadelphia



Existing Land Use

This area has a diverse mix of land uses, with commercial (ten percent), industrial (eleven percent), residential (14 percent), utility (12 percent), and vacant land (25 percent). See **Map 11: North Delaware Land Use**. Most of this vacant land is part of the Pinnacle site.

The Pinnacle site was once part of Cramp Shipbuilding, one of the largest shipbuilding yards in Philadelphia, begun in 1830. Homes here are all located west of I-95 and are for the most part single family attached. Commercial uses are mostly located along East Girard Avenue, but there are several businesses along East Wildey Street and North Columbus Boulevard. Specific businesses here include a bike store, DiPinto Guitars (guitars made on site), a coffee shop, a bank, a television repair shop, and an antique shop. More auto-related uses, such as a gas station and a car dealership, are located here. A six-story office building is located on North Beach and East Palmer Streets. For a more detailed description of the Fishtown neighborhood, please see the SugarHouse section.

North of the site is a digital printer shop. Just outside of the study area to the north is the Port Richmond Shopping Center, a major strip shopping center consisting of three buildings and 32 stores. Anchors for this development include Thriftway, Pep Boys and Family Dollar.

Community services, including a police station, a community library, a community recreation center, and the historic First Presbyterian Church of Kensington, are all located at the corner of East Girard Avenue and East Montgomery Avenue. The utility land is occupied by the PECO Port Richmond Generating Station.

In 2003, 410 residential parcels changed hands. In 2000, 57 percent of the residential units were owner-occupied. In 2005, the City's Board of Revision of Taxes reported that the median single-family home sale price for Fishtown (West Kensington – Census Tracts 142, 144, 156, 157, 162, 163, and 164) was \$65,000 based on 144 sales. This marks an increase of \$13,000 since 2000. Significant increases in residential values have occurred since 2000. Of the 8,200 properties in Fishtown during 2004, 64 percent are residential, 11 percent are commercial, and six percent are industrial. Vacant parcels account for 21 percent of the total parcels, while six percent of the building stock is vacant.

Future Development

The Pinnacle Casino site is the farthest north on Columbus Boulevard, and farthest from Center City Philadelphia. Proposed developments include 1101 North Delaware and Penn's Point Condominiums. While there are fewer major proposals around this facility, many large vacant industrial parcels to the north have the potential to be developed. A gaming facility here could serve as a northern anchor to Columbus Boulevard and could spur redevelopment along the river. For more Center City/Old City development information, please see the Foxwoods section. For more Northern Liberties and North Delaware Waterfront development information, please see the Riverwalk Casino section. Also see **Map 9: Foxwoods and North Delaware Future Development**.

Current Zoning

The following zones are located around this site: R-10 Residential (multi-family), R-10A Residential (single family), C-1 Commercial (neighborhood retail), C-2 Commercial

(neighborhood retail), C-7 Commercial (neighborhood retail), L-4 Limited Industrial, G-2 General Industrial, and REC Recreational. See **Map 12: North Delaware Zoning**. Most of the land is zoned G-2 along North Columbus Boulevard, but as I-95 is closer to the river at this section, there is a significant amount of land zoned for residential and commercial uses along Girard Ave.

Comprehensive Plan

While the City of Philadelphia does not have an overall comprehensive plan, the Philadelphia City Planning Commission crafts studies focusing on specific areas of the city or single topics. As previously mentioned, the Philadelphia Planning Commission in partnership with Penn Praxis is currently working on a waterfront plan. The *North Delaware Riverfront, Philadelphia: A Long Term Vision for Renewal and Redevelopment (2001)* contains recommendations for the Riverwalk area.

Other Studies

Wallace, Roberts & Todd, along with the Center City District and the Citizen's Alliance for Better Neighborhoods have been working on the multi-year *Delaware River Waterfront Planning Study* since 2003. The study covers the area from Penn Treaty Park to the Columbus Commons Shopping Center at Snyder Avenue.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except otherwise noted. This site lies within parts of four Fishtown census tracts (142, 143, 158 and 159), and at 11,200 residents is the most populous of the three North Columbus Boulevard sites. The City of Philadelphia had a total of 1,517,550 residents.

With only a six percent African American population, one percent Asian population, and three percent "other race alone" population, these census tracts have the lowest total minority concentrations among all of the sites except for Limerick Township. Eight percent of the population is Hispanic. In the City of Philadelphia, 45 percent of the population is White, 43 percent are African-American, four percent are Asian, and eight percent are Hispanic.

Over 86 percent of the residents speak English only at home or at work while six percent speak Spanish either at home or at work, which is the lowest among all of the Columbus Boulevard sites.

Seven percent of the residents in these census tracts walk to work while 22 percent take public transportation. In the City of Philadelphia, 25 percent of the population use public transportation to get to work while nine percent walk to work. The unemployment rate of 4.3 percent in these census tracts in 2000 is higher than the other North Columbus Boulevard sites, but lower than the City of Philadelphia's unemployment rate of 6.1 percent. In November of 2005, the City of Philadelphia had an unemployment rate of 7.0 percent.

These census tracts contain five degrees of disadvantage. Eleven census tracts are within one mile of the site, where two contain seven or eight degrees of disadvantage and six tracts contain five to six degrees of disadvantage. Please see Philadelphia Park's Demographics section for a more detailed description of degrees of disadvantage.

Design

Positive aspects of the Pinnacle design include the public amenities of the ice rink, marina, movie theatre, and retail shops. The design includes many windows, and it appears the most “urban” of the designs in terms of its first and second story architecture, similar to a “festival marketplace” design. Negatives include its large suburban-style porte cochere entryway from Columbus Boulevard. There is no mention of LEED standards.

Potential Land Use Impacts

More than any other site along the Delaware River, Pinnacle is surrounded by the largest amount of undeveloped land. The industrial land is either underutilized or not currently occupied. All of the residential uses are on the other side of I-95, as are the majority of the commercial uses. This site is also the farthest away from the new residential development along the waterfront. The Pinnacle site may therefore have the least impact on neighborhoods, however it is also the farthest from a SEPTA Market-Frankford Elevated station, and would be the only attraction in the immediate vicinity. It could spur redevelopment in the area.

TrumpStreet Casino

Location: Fox Street between Roberts Avenue and Hunting Park Avenue, Philadelphia

Website: www.trumponline.com and www.goprea.com

Owner/Operator/Developer

Trump Entertainment Resorts led by Donald Trump, owns or operates three casinos in Atlantic City, including Trump Taj Majal, Trump Plaza and Trump Marina, as well as a casino in the Grenadines. Trump also owns or operates numerous high-end residential and commercial properties in cities all over the world. Keystone Redevelopment Partners L.L.C. is the development team, which is a joint venture between Trump Entertainment Resorts and local partners, including Preferred Real Estate Investments (PREI), a local Philadelphia developer specializing in office, industrial and mixed use properties in six states.

Development Proposal

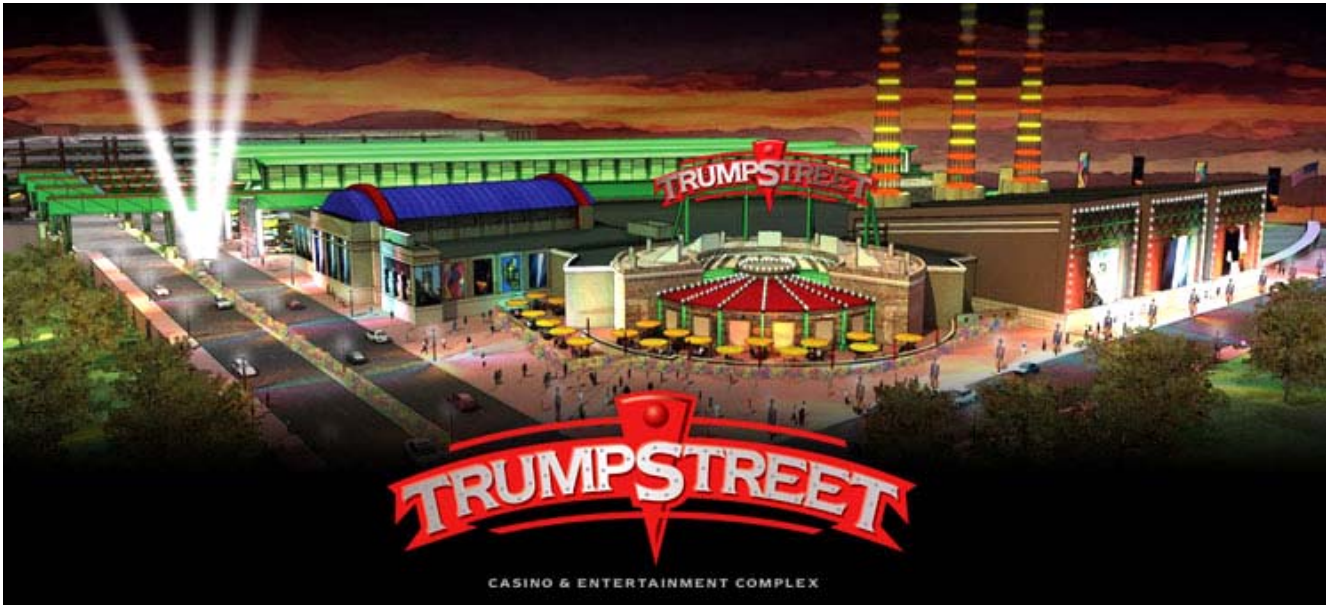
The \$350 million TrumpStreet Casino will be located on part of the old Edward Budd Manufacturing Company, which occupied a roughly 75-acre site in North Philadelphia, bounded by Henry, Roberts, Wissahickon and Hunting Park Avenues between East Falls and Nicetown. The Budd Company produced the Pennsylvania Railroad's first stainless-steel passenger cars in the 1930s and later, the original Market-Frankford Line trains. They were also innovators in automobile design, introducing the use of all-steel automobile bodies. The Budd Company merged with a German firm, ThyssenKrupp Budd, in the 1990s, and closed the North Philadelphia plant in 2002.

The site was subsequently designated a Keystone Opportunity Zone (KOZ) by the Commonwealth of Pennsylvania. A KOZ is a defined parcel-specific area with greatly reduced or no tax burden for property owners, residents and businesses. All tenants in the Budd Commerce Center are eligible for major tax exemptions through the year 2011. Projects in Keystone Opportunity Zones also receive priority consideration for state assistance under community and economic development programs. Projects in designated KOZ's that are approved for Pennsylvania Industrial Development Authority (PIDA) or Small Business Financing receive the lowest interest rate extended to borrowers. TrumpStreet will not apply for any KOZ benefits.

The site was purchased by Preferred Real Estate Investments in 2004, who have transformed the site into the Budd Commerce Center, an urban office park of twenty buildings offering Class A space for office, distribution, manufacturing, retail, and residential uses. Flagship tenants include the administrative offices of Temple University Health Systems (800 employees, consolidated from the administrative offices of Temple's six hospitals), GRM Information Management (information storage), and Fresenius Medical Care (dialysis facility). Preferred hopes to attract a residential developer to complete the 75-acre site. The TrumpStreet Casino would be located directly across Fox Street from the Commerce Center.

The parcel size for the casino is 18 acres. In July of 2006, the developer Keystone Development optioned 12 acres of adjoining land from the Tasty Baking Company (makers of Tastykake) for \$1.6 million. Keystone would have until June 30, 2008 to purchase the property for \$14.4 million. If this deal goes through, the total parcel size increases to 30 acres and becomes approximately the same size as the Foxwoods site.

Renderings of Proposed TrumpStreet Casino



Impacts of Gaming in Greater Philadelphia

The option on the Tasty Baking plant eliminates conflicts between patron and truck traffic at the site, as these could be better separated.

TrumpStreet will have 3,000 slot machines, 75,000 square feet of retail and dining, three movie screens, a 100-seat music venue, and a faux farmers market. Possible additional phases could include a small hotel and a 1,500-seat auditorium. Between 1,379 and 2,067 full and part-time construction jobs will be created, and once opened, the casino will employ between 905 and 1,005 workers. An eight-story parking garage is planned, initially with 1,680 spaces, with the possibility of additional spaces in future phases.

Existing Land Use

The TrumpStreet site is located in North Philadelphia, in the Allegheny West and Tioga neighborhoods, not far from the East Falls neighborhood. See **Map 13: TrumpStreet Land Use**.

Like many of the other sites, this site is surrounded by residential, industrial, and community service and commercial land uses. What sets this site apart from the other Philadelphia sites is the large amount of community services (ten percent of the land) and actual wooded land (seven percent). To the north is Abbottsford Homes, a public housing project built in 1943, and to the south are more single-family attached row homes.

Abbottsford Homes, Tasty Baking facility, and Allegheny West Businesses and Residences



Insert Map 13

Map 13 Legend

Roughly 15 percent of the land is residential single-family attached homes. Allegheny West has 8,100 properties, while Tioga has 12,300. Ninety percent of the parcels in Allegheny West are residential, three percent are commercial and one percent is industrial. Five percent of the parcels are vacant with a nine percent building vacancy rate in 2000. Sixty-four percent of units are owner-occupied. In 2003, 211 residential units were sold. In Tioga, 83 percent of parcels are residential, with a higher vacant parcel rate of ten percent. The median home value in Allegheny West in 2000 was \$25,000, the lowest among the Philadelphia sites, and \$30,000 in Tioga. In 2005, according to the City's Board of Revision of Taxes, the median single-family home sales price for the Nicetown-Tioga neighborhood (Census Tracts 170, 171, 172, 173, 200, 201, 202, 203, 204, and 205) was \$39,700, based on 228 sales.

The numerous community services nearby include the A. Philip Randolph Skills Center (a public high school), the Mercy Vocational Center, the closed Medical College of Pennsylvania Hospital, and the closed Eastern Pennsylvania Psychiatric Center. In early 2006, the Salvation Army announced plans to build a large \$38 million dollar community center (the "Kroc Center") in the Budd Commerce Center, near Crowell Street and Hunting Park Avenue. Scheduled for completion in 2008, the Salvation Army will provide emergency services, education, after-school learning, a gym, a computer center, and a summer day camp, among other services. Just outside of the study area to the south is an elementary school, a middle school, and a cemetery.

Commercial activities near the casino include offices for Tasty Baking Company, the Budd Commerce Center, Pep Boys, and a few restaurants. Just outside of the study area is Material Culture, a home furnishings outlet.

The Queen Lane Reservoir is north of the casino site along Henry Avenue. It treats an average of 70 million gallons of water a day.

Future Development

As already mentioned, the Salvation Army plans to build a large community center near the site, and the high school may be relocated into a new building nearby. The Budd Commerce Center continues to be redeveloped. TrumpStreet has pledged to relocate the adjacent Randolph Skills Center high school into a new building if the casino proposal is licensed.

Current Zoning

The following zones are located around this site: R-2 Residential (single family), R-4 Residential (single family), R-5 Residential (single family), R-9A Residential (single family), R-10A Residential (single family), R-11A Residential (group dwellings), C-1 Commercial (neighborhood retail), C-2 Commercial (neighborhood retail), L-4 Limited Industrial, G-2 General Industrial, and REC Recreation. See **Map 14: TrumpStreet Zoning**. Over half of the land around this site is zoned G-2 General Industrial. To the northwest above Roberts Avenue is a neighborhood zoned R-11A.

Comprehensive Plan

While the City of Philadelphia does not have an overall comprehensive plan, the Philadelphia City Planning Commission crafts studies focusing on specific areas of the city or single topics. There are no recent studies in the immediate area.

Map 14

Other Studies

Many Philadelphia neighborhoods have created their own plans to guide the orderly development of their community. The Allegheny West Foundation created the *Allegheny West Neighborhood Strategic Plan* in 2004.

Demographics

All demographic information for this study is based on information obtained from the US Census in 2000 except otherwise noted. The TrumpStreet site lies within portions of four census tracts (170,171,205 and 206) and has a population of 12,300 residents. The City of Philadelphia had a total of 1,517,550 residents.

The residents in these census tracts are 80 percent African-American, the highest at any site, six percent White, and one percent Asian. The Hispanic population is one percent. In the City of Philadelphia, 45 percent of the population is White, 43 percent are African-American, four percent are Asian, and eight percent are Hispanic.

At 94 percent, this site by far has the greatest number of residents who speak English only at home or at work. The Spanish speaking population is one percent while two percent speak an Asian language at home or at work. In the City of Philadelphia, 82 percent speak only English, nine percent speak Spanish, and four percent speak an Asian language at home or at work.

Thirty-five percent of this work force uses public transportation, overwhelmingly bus transportation, to get to work. This is the highest mass transit use of any site and ten percentage points higher than the City average of 25 percent. Eight percent of the population walked to work, which is comparable to the City of Philadelphia. The unemployment rate of 6.5 percent in these census tracts was slightly higher than the city average of 6.1 percent in 2000 (seven percent in November 2005). Additionally, this site had the highest number of residents that were not in the labor force (such as students, retirees, and those not employed but not actively seeking employment) among all of the Philadelphia sites at 47 percent.

The census tract TrumpStreet lies in contains five degrees of disadvantage. Eighteen census tracts are within one mile of the site, where one contains seven to eight degrees of disadvantage and thirteen contain five to six degrees of disadvantage. Please see Philadelphia Park's Demographics section for a more detailed description of degrees of disadvantage.

Design

The positive design aspects appear to include a less auto-oriented design than others, where the casino will have a street presence. Public amenities include an exterior plaza and movie theatre. Negatives include a street façade that does not contain windows, and no mention of LEED standards.

Potential Land Use Impacts

The Budd Commerce Center, and the proposed TrumpStreet Casino, will bring new employees into the area, some of whom may wish to live closer to work. As the Budd plant was once the economic engine of North Philadelphia, these recent developments represent a major infusion of jobs and daytime office workers into the neighborhood.

Impacts of Gaming in Greater Philadelphia

Future residential development on site will bring new residents and vitality, and fit nicely with the Salvation Army community center, which will serve both new and existing residents. If TrumpStreet does not receive licensure, this will leave an 18-acre site that no doubt Preferred would then market to other potential tenants. The closed Medical College of Pennsylvania hospital and closed Eastern Pennsylvania Psychiatric Center also represent large development opportunities nearby, for possible office, residential, or other uses. As part of a major brownfield redevelopment, the TrumpStreet Casino could bring about positive change in the area, but care must be taken to mitigate any adverse impacts on adjacent neighborhoods.

Land Use Recommendations

Following are a variety of recommendations that municipalities can implement to plan for the arrival of large gaming facilities. Some recommendations are general, while others are quite specific to the particular casino proposal and location. The highest level of specificity was attempted to provide the greatest benefit.

Zoning Recommendations

1. Update Zoning Ordinance to prohibit certain undesirable ancillary uses, such as check cashing establishments, pawn shops, and adult entertainment near the casinos. Economic impacts can be found in other studies, such as the Philadelphia Gaming Advisory Task Force reports.

While Philadelphia's gaming sites are mostly zoned G-2 General Industrial, the City would adopt the new Commercial Entertainment District (CED) for the two casino sites ultimately chosen, and this ordinance prohibits such undesirable uses.

2. Update Zoning Ordinance to allow certain desirable ancillary uses, such as restaurants, hotels, retail, and meeting space.

Philadelphia's new CED zoning district does allow such desirable uses, as do Chester and Bensalem. Limerick's zoning does not, though the casino and mall would prompt a zoning district change.

3. Update Zoning Ordinance to require site plan review for the casinos, to be able to better control automobile and bus access, pedestrian and transit connections, signage, design, and other details.

Philadelphia's new CED zoning district does require site plan review. Bensalem Township and the City of Chester require a land development review, and Limerick Township requires a Sketch Plan, both of which accomplish similar aims as a site plan.

4. Update Zoning Ordinance to require more urban site design, especially for the casinos in Philadelphia. Such urban site design basics include requiring build-to lines, masking of surface parking or garages, use of translucent windows, etc.

Philadelphia's new CED zoning district does require design review, though the specifics of these guidelines are unclear at this point. Bensalem does not require design review, and Limerick Township considers these issues during land development review. It is unclear if the City of Chester requires such specific urban design.

5. Update Zoning Ordinance to require shared parking, lower parking minimums if shared parking or transit nearby, and garages preferred over surface lots.

Philadelphia's new CED zoning district does not require or encourage shared parking or lower minimums if transit is nearby. It also allows surface parking lots and garages. The City staff may want to reconsider allowing surface parking, or allow it only as an interim use. Limerick Township does have a

shared parking option in their zoning ordinance, but it is not required. Chester and Bensalem's ordinances do not include shared parking. If these areas become more mixed-use, with different peak parking times for the variety of uses, shared parking should then be considered.

6. Update Zoning Ordinance to require public access to waterfront if on water, and/or other public realm uses like public plazas, marketplaces, and parks, depending on the community.

Philadelphia's new CED zoning district does require waterfront access, though no other public uses are mentioned. Waterfront access does not apply to the Bensalem and Limerick facilities, though some provisions for public uses could be added to those ordinances. Public access to the waterfront and preservation of scenic views to the river are encouraged in Chester's Waterfront Development District, though they should be required.

7. Update Zoning Ordinance or local Subdivision and Land Development Ordinances to require or encourage LEED standards.

Philadelphia's new CED zoning district does encourage but not require LEED. Chester, Bensalem, and Limerick's ordinances do not require or encourage LEED.

8. Update Zoning Ordinance through an amendment to the existing ordinance to create an overlay or by-right district, or through amending certain sections of existing zoning districts. Alternately, a community may want to revisit their entire zoning ordinance in light of increased development activity, and rewrite it or adopt a form-based code.

Comprehensive Plan Recommendations:

1. Update the community's comprehensive plan to articulate the community's vision for the casino and related development, and provide the rationale for changes to zoning to support ancillary development.

Philadelphia does need to create such a document, while Bensalem and Chester have addressed the issue of gaming in their comprehensive plans.

2. Prepare a Philadelphia waterfront master plan that integrates the casinos, and is the official adopted plan that developers and the City adhere to. Presently there are too many independent plans by various groups. The City needs an adopted plan for this area that public officials, developers, and citizens endorse. The amount of redundant planning and energy expended by many concerned citizens and agencies is counterproductive. The final plan created by Penn Praxis and the City Planning Commission should be adopted by the City, and the City Planning Commission should be heavily involved in its implementation.

Other Land Use Recommendations:

1. Support neighborhoods in their quest for Community Investment Agreements with Casinos, to provide some funding stream to compensate for the increased impacts brought on by the casinos and related development. Such agreements could be similar to the City of Philadelphia's Sports Complex Special Service

District established near the sports stadia in South Philadelphia, as they are close to several neighborhoods.

This recommendation would make the most sense for the Philadelphia and Chester casinos, which are adjacent to several neighborhoods, and less so for the Bensalem and Limerick casinos, which have fewer residences nearby. The Community Investment Agreement or special services district would mitigate as much as possible the impact of the operations of the casinos on the surrounding neighborhoods, through traffic control, police protection, security, maintenance, and street cleaning. In addition to the mitigation efforts, the agreement should improve the quality of life in adjacent neighborhoods through beautification projects, streetscaping, increased city services, provision of recreational facilities, or other such improvements.

2. Ensure public access to the Delaware waterfront from the casinos/racinos. Continuous access along the waterfront, either through a promenade or linear waterfront park, should be a priority of the casino developer and the municipality. Neighbors should be able to access the waterfront and any other public amenities within the development easily and without having to negotiate a confusing interior layout.

Chapter 3: Transportation Impacts

The Philadelphia metropolitan region has the highest population and employment density in Pennsylvania. This has translated into high vehicle-miles-traveled (VMT), congested roadways and poor air quality. Introducing gaming, a land use which is widely dominated by car use, to the region will impact the mobility of the existing transportation network. The level of impact is currently uncertain.

Since the scope of this study did not include collection of traffic data, measures of regional transportation impacts for this section of the report were determined through existing technical analyses and field observations. Throughout this section are references to the traffic impact studies/assessments (the studies) which were included in the applications/proposals for gaming licenses in the region. These impact studies were produced by consultants hired by the casinos themselves.

This section of the report has two main components: the broad and the detailed. The broad is a general discussion of the potential impact of gaming on the regional transportation network followed by general recommended transportation planning issues to be considered in site development. The detailed entails site specific transportation issues – access, traffic conditions, transportation improvement projects, regional and local impacts, and recommendations. Philadelphia Park and Harrah's Chester are considered in more detail than the others because their development is advanced. The Philadelphia sites adjacent to North Columbus Boulevard (formerly known as Delaware Avenue)—Pinnacle, SugarHouse, and Riverwalk—are discussed together because travel patterns are similar.

Regional Issues

Regional Transportation Impact

The regional transportation impact from gaming cannot be adequately gauged given the available information. First, although geographic sites have been identified, the final approvals were made in December 2006, after this study finished, therefore the accurate combined regional impact of the facilities could not be measured. Second, the ITE Trip Generation Manual does not include trip generation data for casino land uses, therefore innovation, professional judgment and data from similar facilities were used to drive the trip generation process. Third, sites will incorporate more than one entertainment type in the facilities. Therefore, depending on geographic area and type of entertainment, trip generation, assignment and mode split may be affected.

Utilizing data from similar facilities in other regions to get trip generation numbers may be appropriate as a starting point but taking these numbers verbatim can be misleading. The effects of population and employment densities, mass transit availability, potential water access, car/household ratios, multi-purpose trips and hours of operation need to be considered in judging relative impact.

The casino impact studies imply that the regional transportation impacts should be minimal. Given the proposed number of trips generated and the capacity of the regional roadway network, the number of expected trips would be spread over a number of highways. In the case of Philadelphia Park and Harrah's Chester, gaming peaks are said

to be different from daily commuting peaks. But the cumulative impact needs to be considered, not only of the proposed gaming facilities but also of the ancillary land uses.

I-95 plays an important role in access to all of the sites except for Limerick. Given that portions of this highway are at or near capacity during weekday peak periods, proposed casino trips will add to saturation. Additionally, many of the other regional highways are also already congested according to the recently updated DVRPC Congestion Management Process (CMP). Additional trips will exacerbate congested conditions increasing time of delay and extending peak periods.

Transportation safety in the region is also a concern which needs to be addressed. An examination of Pennsylvania Department of Transportation (PENNDOT) crash clusters for the region indicates several areas with a high number of crashes. This correlates closely with areas well traveled. The number of crashes will be impacted by the increase in trips due to increased exposure.

Transportation Planning Policy Issues

The following are some recommended transportation planning policy issues that should be addressed during the development or redevelopment of all the proposed sites. Applying these as appropriate will allow for safe access to and from the facilities by all users and efficient mobility in and around the areas which should be most affected by potential trip generations.

Context Sensitive Design (CSD) should be pursued before initiating a transportation improvement project. This is a collaborative, interdisciplinary approach that involves all stakeholders to develop a facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which a transportation improvement project will exist. The project should be designed and built with minimal disruption to the community and have added lasting value to the community.

Traffic calming methods should be employed, especially on the local street network. Traffic calming involves a combination of techniques to reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users. Engineering, education, and enforcement measures can be employed to reduce traffic speeds and cut-through traffic.

The safe and efficient ***mobility of bicyclists and pedestrians*** should be given priority in the design of new, or the improvement of existing, transportation facilities. Such pedestrian facilities as sidewalks, crosswalks and bus shelters should be available and should be compliant with the Americans with Disabilities Act (ADA). Such facilities should also be included in parking lots and garages and internal circulation systems. Bicyclist mobility needs to be considered, through dedicated bicycle paths and bicycle lanes and/or the use of roadway shoulders with adequate width. The gaming facilities should also provide bicycle parking for visitors and employees.

Pavement quality and markings that support smooth traffic flow need to be considered. Poor pavement quality can lead to safety and mobility issues. Pavement quality should be properly maintained to avoid these consequences. Pavement markings should be used and maintained where appropriate and can be used as supplement to signs where appropriate.

Directional signage should be available for wayfinding. These signs should be legible for all road users to eliminate confusion in getting to destinations. Confusion has the potential to translate into unsafe conditions. In an effort to make directional signs unique, legibility should not be compromised.

Provide **adequate and efficient access/egress points** for the gaming facilities. This will enable the efficient flow of traffic to and from the facility, reducing adverse impacts on the local community, like noise and air pollution.

Adequate parking should be available as well as an efficient internal circulation network. Lack of parking can impede traffic flow compounding congestion in an area which is already congested. This also has the potential to cause illegal parking which can reduce mobility within the area and create unsafe conditions. When considering parking, larger spaces for bus and truck traffic should also be considered.

The Southeastern Pennsylvania Transportation Authority (SEPTA), the respective Transportation Management Association (TMA) and developers should work together to provide **adequate, efficient transit service and amenities**. SEPTA has begun working on plans to provide service to the gaming areas.

DVRPC's Congestion Management Process

The recently completed Congestion Management Process as documented in the publication *DVRPC Congestion Management Process – Limiting Traffic Congestion and Achieving Regional Goals* will be used in the discussion of congestion and site-generated trips. The following is a brief synopsis of the CMP.

The Congestion Management Process (CMP) is a multi-faceted ongoing approach that facilitates the movement of people and goods through analysis, stakeholder participation, and enhanced coordination.

A CMP does the following with guidance from federal transportation regulations:

- It is a systematic process for managing congestion and making efficient and effective use of existing and future transportation facilities.
- It connects the region's long range plan, *Destination 2030*, with short-range efforts such as the Transportation Improvement Program (TIP) and corridor studies.
- It enhances coordination of transportation and regional planning, including land use, environmental and economic development efforts.
- It identifies congested corridors and strategies to minimize congestion, enhance the mobility of people and goods, and advance regional goals.

Ten common types of sub-corridors were defined for the Delaware Valley region with descriptions, examples, and sets of Very Appropriate and Secondary Appropriate strategies to address congestion. The CMP uses eight analysis points to determine congested corridors – current daily congestion, current peak hour congestion, heavily used roads and intermodal facilities, future daily congestion, future peak hour congestion, frequent crash related congestion, intermodal importance and land use.

The following area-wide strategies are included in DVRPC's CMP as appropriate for all sub-corridor types:

Impacts of Gaming in Greater Philadelphia

- Safety Improvements and Programs
- Pedestrian and Bicyclist Improvements
- Signage
- Basic Upgrades of Signals
- Intersection Improvements of a limited scale
- Bottleneck Improvements (vehicle or rail)
- Access Management, both engineering and policy strategies
- Marketing (including outreach, education, and planning) of Transportation Demand Management (TDM) and transit options, including carpool, vanpool, and ridesharing programs, alternate work hours, guaranteed ride home, and TransitCheck where applicable
- Review of Existing Land Use/Transportation Regulations
- Growth Management and Smart Growth

Gaming Facilities

Philadelphia Park

Access

Highway

Several interstate, state, and municipal roadways provide access and mobility to this area. The main entrance is located on Street Road (PA 132) with secondary entrances on Richlieu Road and Byberry Road. The following is a brief description of some of the main highways that influence circulation in the area. **Map A1: Philadelphia Park Roadway Network** depicts many of these roadways.

Interstate 95 is one of two interstate highways that serve the area. This roadway travels in a north-south direction from Maine to Florida. In Pennsylvania, it travels from the state of Delaware in the south through the easternmost section of Delaware, Philadelphia and Bucks Counties before entering New Jersey in the north. In the vicinity of the study location the highway is three lanes in each direction separated by a grass median with a speed limit of 55 miles per hour. The closest interchange to the study location is Exit 25 at Street Road (PA 132) which is approximately 3.5 miles from the site.

I-276 (Pennsylvania Turnpike) is an interstate highway which bisects Pennsylvania in an east-west direction. From New Jersey, it connects with the New Jersey Turnpike Extension, travels in a westerly direction where it becomes I-76 in King of Prussia and continues to Ohio and other points west. In the vicinity of the study location it has two lanes in each direction separated by “jersey” barriers with a speed limit of 55 miles per hour. There is not direct access to the site from I-276. The closest interchange to the study location is Exit 351 at Lincoln Highway (US 1) approximately 2 miles from the site. Therefore, coming from I-276, US 1 will have to be utilized to gain access to Street Road and the site. Due to the close proximity of the on-ramps of US 1 from the Turnpike and the on and off ramps between US 1 and Street Road, there are enormous conflicts in this area on US 1 from weaving and lane drops. The proposed turnpike on and off ramps which will provide eastbound traffic with direct access to Street Road west of Richlieu Road, and traffic on Street Road direct access to the eastbound turnpike, will lessen this conflict.

US 1 (Lincoln Highway) is functionally classified in this area as a freeway or expressway. It runs in a north-south direction from Maine to Florida. In Pennsylvania, it travels from Trenton, New Jersey to the north through Bucks, Philadelphia, Delaware and Chester counties to the state of Maryland to the south. In the vicinity of the study location the highway width varies to accommodate interchanges with Street Road and I-276. Southbound and northbound travel lanes are separated by a concrete median. There is a full grade-separated interchange with Street Road but as described previously there are conflicts with various traffic movements at this location. The proposed Street Road/turnpike interchange will divert eastbound turnpike traffic, destined to/from Street Road from this interchange. The US 1 interchange is less than two miles from the site.

US 13 (Bristol Pike) is functionally classified as a principal arterial highway. It runs north-south in the easternmost section of Bucks County where it begins at US 1 in

Morrisville, traveling through Philadelphia and Delaware counties to the state of Delaware and points south. There is a grade-separated interchange at Street Road with all movements. This interchange, approximately 3 miles from the Park entrance, is two lanes in each direction, narrowing to one in each direction as it moves north and south. Due to this interchange's close proximity to the I-95/Street Road interchange, there are conflicts with traffic movements on Street Road.

PA 132 (Street Road) is also functionally classified as a principal arterial highway. It travels in a northwesterly direction from where it begins at State Road in Bensalem Township to where it ends at Lower State Road in Warrington Township. The number of lanes varies throughout its length but mainly it is a roadway which carries two lanes in each direction with additional turning lanes at intersections. The main entrance of Philadelphia Park is located on Street Road.

Street Road at I-95 Interchange, Exit 25



PA 513 (Hulmeville Road) is functionally classified as a minor arterial and runs from PA 413 in Hulmeville in a southeasterly direction to where it ends at Bristol Pike in Cornwells Heights. It is mainly a two-lane roadway with one lane in each direction. It intersects with Street Road approximately one mile from the Park entrance.

Other minor arterial roadways that affect the circulation pattern around the study location are Bensalem Boulevard (northwest-southeast), Bristol Road (northwest-southeast), Knights Road and Philmont Avenue (north-south). Philmont Avenue and Knights Road intersect Street Road to the west and east of the Street Road entrance to the Park respectively, while travelers on Bensalem Boulevard would use Byberry Road, while those on Bristol Road would use Richlieu Road to access the Park.

Some of the urban collector roadways providing access and mobility in the area are Mechanicsville Road (north-south), Richlieu Road (north-south), Galloway Road (northwest-southeast), and Old Lincoln Highway (parallels US 1). Mechanicsville Road, Richlieu Road and Old Lincoln Road intersect Street Road while Galloway Road intersects Mechanicsville Road and Richlieu Road.

Mass Transit

SEPTA Regional Rail provides rail service in close proximity to the study location via the R3 and R7 lines. The R7 line, from Trenton, New Jersey to Philadelphia, serves this area via the Eddington and Cornwells Heights stations. Cornwells Heights is served by 30 trains in each direction on a weekday, 19 in-bound trains Saturday and Sunday, and 18 out-bound trains on Saturday and Sunday. The R7 line also serves the Eddington station with 17 trains southbound and 21 trains northbound on a weekday; and 10 trains northbound and 9 southbound on Saturdays and Sundays. The R3, from West Trenton in New Jersey to Philadelphia, serves the area via the Trevoise station. During the week there are 26 trains in each direction which serve this station and 18 trains in each direction on Saturdays and Sundays. Transit service is depicted on **Map A2: Philadelphia Park Transit**.

SEPTA R7 Eddington Station



SEPTA Route 130 bus service is the only bus that provides direct service to the study location. This bus goes from Newtown to Franklin Mills via Street Road directly in front of the facility and Richlieu Road on which the secondary entrance/exit to the facility is located. Additionally, this bus service is connected to other transit at strategic locations: R3 Regional Rail service at the Langhorne station; bus routes 20, 67, 84, and 129 at Franklin Mills; 127, 14, 129 at Lincoln Highway and Bellevue Avenue; 14, 58, 127 and 128 at Neshaminy Mall.

In 2005, the SEPTA board approved a major service expansion to Philadelphia Park as part of its Fiscal Year Annual Service Plan. City Transit bus Routes 1 and 20/50 are to be extended from their present northern terminals (Byberry East and Franklin Mills Mall) to Philadelphia Park. As part of this initiative, a new Route 50 (a limited stop version of Route 20) was created to operate between Frankford Transportation Center, Northeast Philadelphia, and Philadelphia Park. These routes will be implemented in February 2007 using a Job Access grant. In the interim, SEPTA plans to operate a Route 20 shuttle service connecting Franklin Mills Mall with Philadelphia Park, with the expected opening of slot gaming in mid-December 2006.

In addition to suburban Route 130 serving Philadelphia Park, SEPTA plans to extend suburban Route 127 a short distance from Neshaminy Mall to Philadelphia Park. Route

127 presently operates from Trenton, New Jersey to Neshaminy Mall via Morrisville, Oxford Valley and Pennel. In February 2007, SEPTA will begin a new, limited service initiative, suburban Route 150, connecting Plymouth Meeting with Philadelphia Park via the Pennsylvania Turnpike.

The Street Road RUSH also serves the study location. This is a jitney transit service provided by the Bucks County Transportation Management Association, linking Bensalem and the Southamptons with the R3 regional rail line at the Trevoise station. There are six trips serving Philadelphia Park—two in the morning peak, one at midday and three during the afternoon peak. This service is used by Park employees.

Bicycle and Pedestrian

Bicycle and pedestrian facilities are inconsistent throughout the area, making it difficult for both bicyclists and pedestrians to travel safely. There are sidewalks and a bus shelter, but no crosswalks, on the south side of Street Road near the Park. There is also a shoulder on the south side which allows for bike travel, but the shoulder terminates to provide for a turning lane. There are no sidewalks on the north side of Street Road near the Park, though one begins after the Applebee's driveway and continues past Richlieu Road. On Richlieu Road, a sidewalk is available on both sides of the street past the hotel entrance, but then is only available on one side of the street. Galloway Road, Mechanicsville Road and Byberry Road all have limited bicycle and pedestrian facilities.

According to the Bicycle Coalition of Greater Philadelphia's regional bicycle map, Mechanicsville Road was rated below average for all bicycling conditions. Below average streets are those that are least suitable for on-road cycling. While riding on these roads might not be pleasant, they may be the most direct route between two points. Galloway Road and Byberry Road are rated average for all bicycling conditions. Average roads are those that are moderately suitable for on-road cycling. Cyclists of lesser skill and experience riding in traffic may find conditions unfavorable. Street Road was not rated. These cycling-condition ratings are determined using a combination of traffic volumes, roadway geometry, and field observations.

Traffic

Traffic Counts

According to the Pennsylvania Department of Transportation's (PennDOT) Bureau of Planning and Research, the estimated Average Annual Daily Traffic (AADT) volumes on Street Road in 2005 ranged from 37,583 vehicles at Richlieu Road to 34,834 vehicles at Hulmeville Road in both directions. I-95 in the vicinity of Street Road recorded AADT of 89,860 in the same year. PA 513 (Hulmeville Road) in 2004 had AADTs totaling 18,997 for both directions between Street Road and Byberry Road while US 1 experienced total AADTs of 59,945 south of the Street Road interchange. **Map A3: Philadelphia Park Traffic Counts** shows additional traffic volumes and year counted.

Philadelphia Park Traffic Impact Study, prepared by consultant Pennoni Associates, indicates the existing (2004) Level of Service (LOS) for all study intersections operates at acceptable levels overall, except for the Street Road/I-95 southbound ramp which is failing (LOS F) during weekday PM peak hour. Additionally, many of the secondary approaches of the study intersections on Street Road operate at deficient LOS during the

weekday PM peak. Although traffic on Street Road may not experience excessive delays, many of the side streets do. During the Saturday evening peak hour, the intersection of Street Road and Tillman Drive/Philadelphia Park Entrance suffers from a LOS F for the southbound through/left. The Street Road/I-95 southbound ramp also operates at LOS F for the southbound left/through/right movement at the Saturday peak.

Level of service (LOS) is a measure used by transportation engineers, and is defined in the Federal Highway Administration's *Highway Capacity Manual*. LOS characterizes the operating conditions of a roadway by speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. As defined, LOS A is free flow, LOS B is reasonably free flow, LOS C is stable flow, LOS D is approaching unstable flow, LOS E is unstable flow, and LOS F is forced or breakdown flow. LOS A allows motorists to drive at or above the speed limit and have complete mobility between lanes. LOS B is more congested, though with no impingement on speed. LOS C is more congested than B, but the road is close to capacity, though speed and efficiency are maintained. LOS D is more congested than C, with speeds often reduced because of traffic volumes. LOS E is even more congested, where speed limits are rarely reached and flow is impeded. LOS F is the lowest measure of efficiency, and represents a road with frequent traffic jams and bumper to bumper traffic.

In urban areas, a LOS D in peak periods is considered acceptable, as increasing capacity on such roadways to attain a higher LOS would require costly widenings or bypasses, for instance. Thus, achieving the highest LOS is not always the best solution. LOS should be considered in context with surrounding land uses and the overall goals of the community. Mobility is only one aspect of a roadway's performance.

Safety

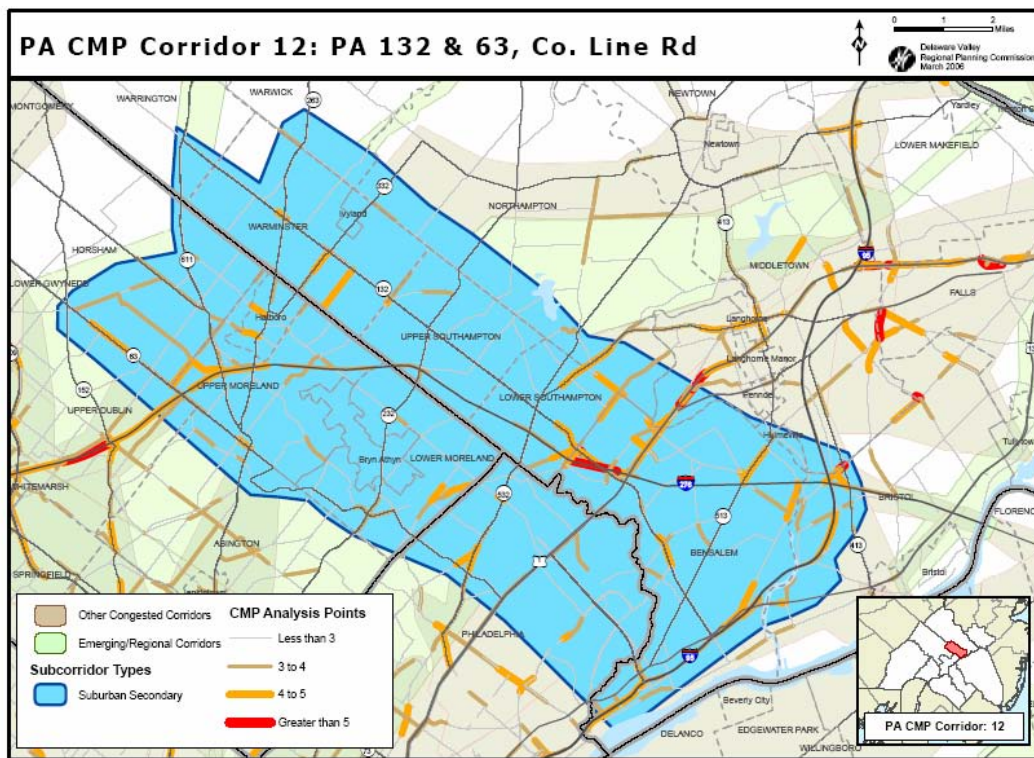
PennDOT's crash clusters, using the most recent available data from 2000, 2001, and 2003, are shown on **Map A4: Philadelphia Park PENNDOT Crash Clusters**. The crash clusters represent continuous areas of crashes on the highway network. As indicated on the map, there are several areas in the vicinity of the Park with a large number of crashes during the three-year period. The majority of the crashes in the study area occur around intersections/interchanges. Of note are the crash clusters on Street Road adjacent to Philadelphia Park and on Richlieu Road. There were two crash-related fatalities during this period in the crash cluster on Richlieu Road and two on Street Road adjacent to the Park.

Congestion Management Process (CMP)

This section of Street Road falls within the identified congested corridor *PA Corridor 12* in the CMP update. This sub-corridor type is Suburban Secondary. As seen in the graphic, several areas in the vicinity of Philadelphia Park have four or more congestion analysis points. Of note is the Pennsylvania Turnpike interchange with US 1 and Street Road between Knights Road and Richlieu Road.

See the document *DVRPC Congestion Management Process – Limiting Traffic Congestion and Achieving Regional Goals* for the sets of Very Appropriate and Secondary Appropriate strategies to address congestion in the sub-corridor type Suburban Secondary. These include: computerized traffic signals, park and ride lots, shuttle service to stations, transit amenities and safety, community friendly transportation planning and county and local road connectivity.

Pennsylvania Congestion Management Process Corridor 12



Future Transportation Projects

PennDOT has recently issued a Phase 1 Highway Occupancy Permit for Philadelphia Park. Transportation improvements that have been approved are upgrading the single left turn lane from Street Road into the facility into dual left turn lanes, upgrading the right deceleration turn lane from Street Road into the facility, upgrading signal equipment, and restriping and repaving near the entrance to the facility.

Several projects are currently programmed on DVRPC's FY2007 Transportation Improvement Program (TIP) for FY2007-FY2010 that have the potential to affect access and mobility in the specific study area. The TIP operates on a federal fiscal year which starts on October 1 and ends on September 30. For example, the first day of FY2007 is October 1, 2006, ending on September 30, 2007. Funding programmed in a particular year of the TIP indicates that a phase is expected to advance sometime during that fiscal year, and does not reflect if that phase has begun or if it is complete. The Multimodal Project Management System (MPMS) number is used by the Pennsylvania Department of Transportation to identify the project.

MPMS# 13347: I-95/I-276 (PA Turnpike) Interchange project connects I-95 and I-276 in Pennsylvania. Additionally, this project will relocate toll plazas, widen I-95 between PA 413 & US 1 to three lanes in each direction and widen I-276 between US 13 & US 1 from two lanes in each direction to three. Total remaining project cost is estimated at over \$675 million in current dollars. Currently, this project is scheduled for multiple phases

Impacts of Gaming in Greater Philadelphia

between FY2007 and FY2009 including preliminary engineering, final design, and right-of-way acquisition.

MPMS# 13549 US 1 Bridges project will rehabilitate bridge decks on US 1 between PA 413 and PA Turnpike and will include interchange upgrades. Right-of-way phases were scheduled for FY2005 and FY2006. Construction has not been scheduled.

MPMS# 57617: Galloway Road Extension project will extend Galloway Road to Bridgewater Road at Byberry Road with a new three-lane roadway with upgraded traffic signals at each end of the project. This project was scheduled for construction in FY2006.

MPMS #47131: PA 13 at PA Turnpike Safety Improvements project will provide interim safety improvements with regard to truck traffic in Bristol Township. Potential for long term improvements will also be studied. Construction is expected to advance in FY2010.

MPMS# 13727: Bristol Road Intersection Improvements project will include the upgrade and interconnection of traffic signals with a closed loop system at seven intersections between Hulmeville Road and Old Lincoln Highway, and a center left turn lane will be added. This project is scheduled for construction in FY2008.

MPMS# 60655: Intermodal Facility Improvements project provides bus shelters, signage and facility improvements at the Croydon and Levittown SEPTA Regional Rail stations, and parking expansion at Croydon. This project is scheduled for construction in FY2007, FY2008 and FY2009.

MPMS# 46948: I-95/Street Road Interchange Improvement project has been approved under the new Interstate Management program. This project will reconfigure the interchange into a 'tight urban diamond' and reconfigure the adjacent interchange with US 13/Bristol Pike. Other improvements will include widening of three main bridges and pedestrian connections to the existing SEPTA R7 Eddington Station. This project has been approved for Preliminary Engineering and Utility funding in FY2007.

MPMS# 13745: US 13/Bristol Pike Signals project will install a closed loop traffic signal system for approximately 16 intersections along US 13 from the Pennsylvania Turnpike to the Bucks County line. This improvement is intended to help accommodate additional traffic that is anticipated during the rehabilitation of I-95. Funding has been scheduled for construction in FY2007 and FY2008.

Impacts

Philadelphia Park Traffic Impact Study, by consultant Pennoni Associates, Inc., implies that regional transportation impacts should be minimal, given that the facility peak periods are different from daily commuting peaks.

The greatest transportation impact from the facility will be to the local communities and infrastructure. As noted earlier, there are problems with congestion and safety on local roadways in the area, and with additional traffic the problems will be exacerbated. The intersection of Street Road and Tillman Drive/Philadelphia Park Entrance suffers from a

level of service (LOS) F for the southbound through/left, which will force traffic to use other entrances/exits from the park. This will put more traffic on local streets, many of which are residential. The proposed I-276 ramp to Street Road will lessen the traffic impact on US 1 and its associated issues but will do little for the local road network.

Impact Report Recommendations

Philadelphia Park Traffic Impact Study recommends:

- Additional through lane in each direction on Street Road
- Dual southbound left turn lanes from Philadelphia Park
- Right turn lane from southbound Richlieu Road at Street Road
- Access on Richlieu Road
 - Turning lanes
 - Interconnected traffic signal with Street Road and Rockville Drive
- Left turn lanes for all approaches at the Mechanicsville Road/Byberry Road site access location
- Signal Timing Modification
 - All signalized intersections in study area
 - Event timing plans for Street Road Corridor

Richlieu Road at Street Road and Intersection of Mechanicsville and Byberry Road



Harrah's Chester Racetrack and Casino

Access

Highway

The area boasts a dense transportation network. Several interstate, state, and municipal roadways provide access and mobility to the area in which the facility is located. The following is a brief description of some of the main highways that influence circulation in the area. **Map A5: Harrah's Chester Roadway Network** depicts the highway network in the region.

I-95 is one of two interstate highways that serve the area. This roadway travels in a north-south direction. In the vicinity of the study location the highway is three lanes in each direction separated by a concrete median with a speed limit of 55 miles per hour. I-95 southbound has two exits in the City of Chester at Highland Avenue (Exit 3) and Chestnut Street (Exit 6) while I-95 northbound has three exits at Highland Avenue (Exit 3), Kerlin Street (Exit 5), and Avenue of the States/Edgemont Avenue (Exit 6). None of these exits have direct access to the site. Exit 6 is the closest exit to the site via Chestnut Street and Morton Avenue, approximately three quarters of a mile. Additionally, there are two other interchanges in bordering municipalities with easy access to the facility via PA 291. These are Stewart Avenue (Exit 8) and PA 420 (Exit 9).

I-476 (Blue Route) is an interstate highway which travels in a north-south direction from I-95. It meets the Pennsylvania Turnpike at Plymouth Meeting, becoming the Pennsylvania Turnpike Northeast Extension, ending at I-81. The highway varies from four lanes to six lanes but before it meets I-95, it is two lanes in each direction with a grass median. The speed limit in this area is 55 miles per hour.

US 322 is functionally classified as a freeway or expressway. It runs in a northwest-southeasterly direction. It goes from the New Jersey Shore in Atlantic City, crosses the Commodore Barry Bridge into Pennsylvania, where it joins with I-95 over a short distance before branching. This highway continues across Pennsylvania and enters Ohio. This highway is two lanes in each direction on both sides of the Delaware River. Access to the site from US 322 eastbound would be via I-95 northbound. Cars traveling across the Commodore Barry Bridge from New Jersey would be via US 13 (9th Street) or I-95 northbound.

US 13 is functionally classified as a principal arterial highway. In the City of Chester and vicinity it runs in a north-south direction and has several names: Chester Pike, Morton Avenue, 9th Street and Post Road. The number of lanes also varies.

There are several state routes serving the area. PA 320 is functionally classified as a principal arterial highway and travels in a northwest-southeasterly direction from PA 291 to PA 23 in West Conshohocken. PA 352 is functionally classified as principal arterial highway and travels in a northwest-southeasterly direction from PA 291 to US 30 in East Whiteland. PA 252 is functionally classified as principal arterial highway and travels in a northwest-southeasterly direction from PA 320 in Nether Providence to PA 23 at the Valley Forge National Historical Park. PA 452 is a principal arterial roadway which begins at US 13 in Marcus Hook and travels in a northwesterly direction to PA 352 in Lima. PA 420 travels northwesterly from Essington to PA 320. It is functionally

classified as a principal arterial roadway from I-95 to PA 320 but minor arterial from I-95 south.

PA 291 (Industrial Highway) will play a pivotal role in access to the site. It travels in a north-south direction from the City of Philadelphia to the City of Chester. It is functionally classified as a minor arterial between Morton Avenue in Chester and Island Avenue in Philadelphia. All other sections of the road are classified as principal arterial. In the vicinity of the site, PA 291 is five lanes—two lanes in each direction with a center turn lane. Between 1997 and 2003, PA 291 was widened from two lanes to five lanes to accommodate increases in truck traffic.

A dense network of local roadways complement the interstate and state routes mentioned above to provide access and mobility to the facility.

Harrah's Chester does not require a Highway Occupancy Permit by PennDOT, however, the City of Chester has issued their own Highway Occupancy Permit for this facility.

Mass Transit

The Chester Transportation Center at 6th Street and Avenue of the States is served by SEPTA's R2 Regional Rail line and seven bus routes, all of which are described below. The Transportation Center is approximately a mile from the facility. The transit service to the area is shown on **Map A6: Harrah's Chester Transit**.

The R2 Wilmington and Newark line provides service between those Delaware points and Center City Philadelphia (continuing to Norristown), with its primary service corridor running through southeastern Delaware County. In addition to serving the Chester Transportation Center in downtown Chester, it also serves the Eddystone Station, at PA 291 and Saville Avenue in Eddystone Borough, which is also close to the racetrack. Chester is served by 26 trains northbound on a weekday between the hours of 5:56 a.m. and 12:46 a.m., and 27 trains southbound between the hours of 5:21 a.m. and 12:03 a.m. On Saturdays 17 trains serve the station in both the northbound and southbound direction between 6:23 a.m. and 11:24 p.m.; and on Sundays, 14 trains in each direction between the hours of 8:03 a.m. and 9:43 p.m.

There are seven bus routes which currently serve the City of Chester. Route 37 begins its southbound trip in South Philadelphia and ends at the Chester Transportation Center serving Girard Estates, Elmwood, Eastwick, Lester and Essington along the way. The Route 113 bus goes from 69th Street Terminal to Marcus Hook serving Upper Darby, Darby, Lansdowne, Collingdale, Holmes, Folsom, Woodlyn, Chester and Trainer. Both routes provide direct service to the Harrah's facility.

Bus Route 114 operates approximately five blocks from the site. It begins its southbound run from Darby Transportation Center along US 13, Concord Road and PA 452 then Baltimore Pike before it ends at the Granite Run Mall.

Bus Route 109 is the only route within the area that currently operates on a 24 hour schedule. This bus runs from 69th Street Terminal to Chester Transportation Center serving East Lansdowne, Lansdowne, Clifton Heights, Springfield, and Swarthmore.

Route 117, 118 and 119 also serve the Chester Transportation Center. Route 117 begins its southbound run from Penn State – Lima Campus, serves Chester, and then goes on to

Feltonville. Routes 118 and 119 both terminate their southbound run in Chester but begin at Newtown Square and Cheyney University, respectively.

Bicycle and Pedestrian

Pedestrian amenities around the City of Chester for the most part are available but may need some improvement, such as restriping pedestrian crosswalks and fixing sidewalks. Sidewalks and crosswalks are in good condition on PA 291 and Morton Avenue. Melrose Avenue has drainage issues, and due to the limitations of its width by the railroad bridge structure, adequate pedestrian amenities may not be feasible.

According to the Bicycle Coalition of Greater Philadelphia's regional bicycle map, PA 291 is rated below average for bicycling conditions. Below average streets are those that are least suitable for on-road cycling. While riding on these roads might not be pleasant, they may be the most direct route between two points. These cycling-condition ratings are determined using a combination of traffic volumes, roadway geometry, and field observations. PA 291 is a proposed connector for the East Coast Greenway, however, so improvements may be made in the future. Heavy truck traffic and narrow shoulders on PA 291 probably contributed to this low bike-friendly rating.

Bridge

The Commodore Barry Bridge carries traffic to and from New Jersey into Pennsylvania at the City of Chester. There is direct access from the bridge to the facility via Flower Street and PA 291. The bridge carries US 322 connecting to I-295 and the New Jersey Turnpike in New Jersey, and to I-95 in Pennsylvania.

Commodore Barry Bridge



Credit: www.northeastroads.com

Traffic

Traffic Counts

According to Pennsylvania Department of Transportation's Bureau of Planning and Research, the estimated Average Annual Daily Traffic (AADT) volumes on I-476, north of the interchange with I-95, were over 61,000 vehicles in each direction, northbound and southbound in 2005. I-95 near Highland Avenue experiences AADTs of over 84,000 vehicles in each direction. Counts performed by Orth-Rodgers Associates, Inc., during the Traffic Analysis in November 2004 showed PA 291 carrying 5,000 vehicles daily on a weekday in the vicinity of the site, and 3,000 vehicles on a Saturday. Morton Avenue carries 6,000 vehicles daily on a weekday. **Map A7: Harrah's Chester Traffic Counts** shows additional traffic volumes and year counted.

Safety

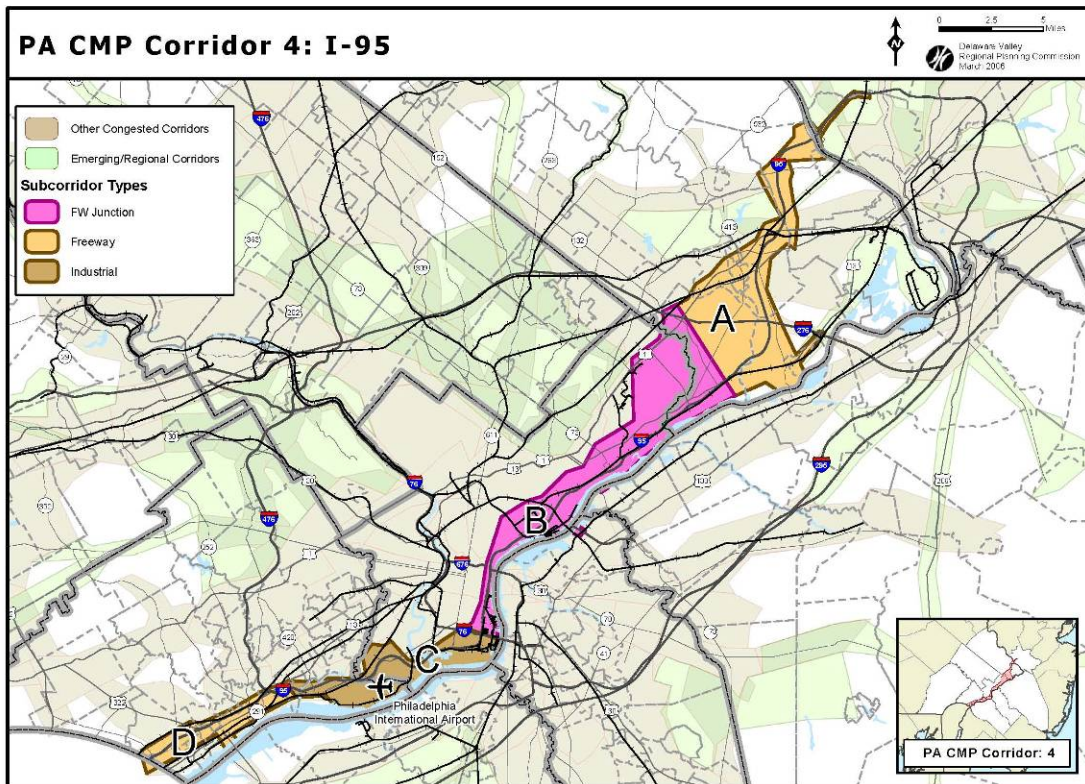
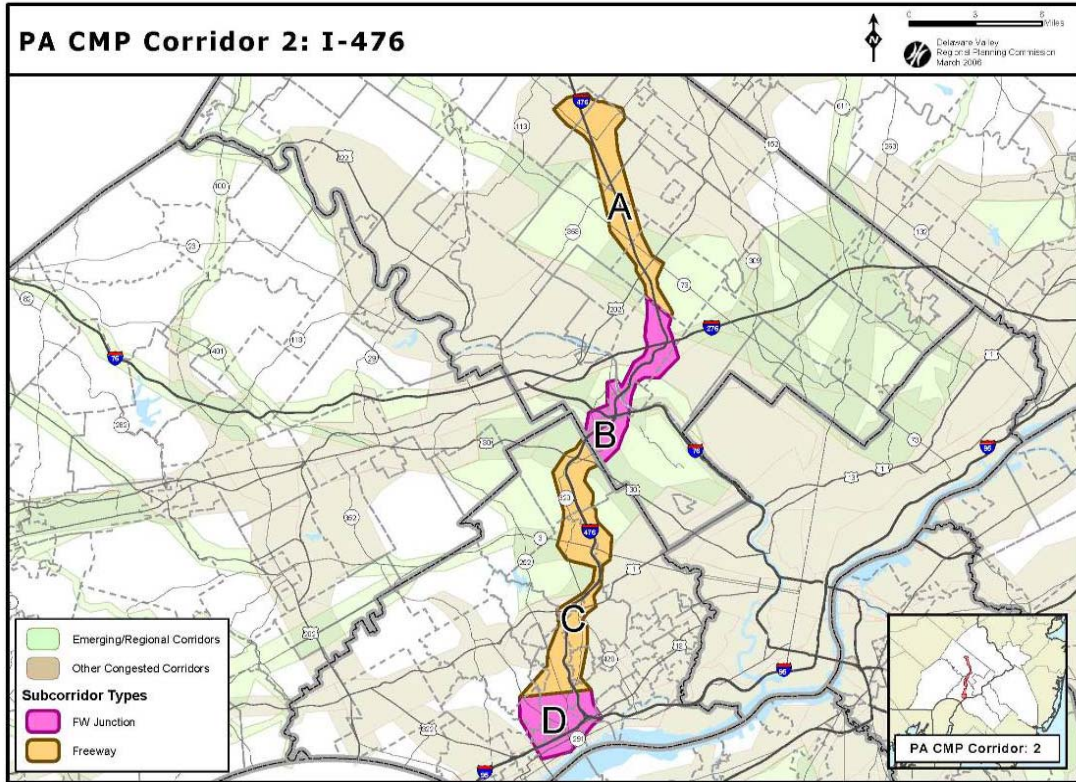
Map A8: Harrah's Chester PENNDOT Crash Clusters shows PennDOT's crash clusters using 2000, 2001, and 2003 data. As indicated on the map, there are several areas with more than 24 crashes during the three-year period. The majority of the crashes in the study area occur around intersections/interchanges. Of note are the crash clusters on PA 352 between Providence Avenue and 18th Street which recorded 103 crashes over the analysis period and 14th Street between PA 352 and PA 320 recording 68 crashes. US 13 boasts two crash clusters, with 64 crashes occurring on this roadway between Walnut Street and PA 352 over the study period, while the other cluster had 68 crashes recorded between Sproul Street and Lincoln Street. PA 291 between Saville Avenue and Eddystone Avenue in Eddystone had more than 13 crashes over the three-year period. There were three crash-related fatalities during this period in crash clusters on I-95. One occurred on southbound I-95 in the vicinity of Kerlin Street and two on northbound I-95 around Exit 6.

Congestion Management Process

The area falls within the identified congested *PA Corridor 2: I-476*, *PA Corridor 4: I-95*, and *PA Corridor 6: US 13/McDade Boulevard/PA 291*, in the DVRPC CMP (described previously). The sub-corridor type for each is Freeway Junction, Freeway, and Grid respectively. As seen in the graphics on the following pages, surrounding this congested corridor are several other congested corridors as well as emerging/regional corridors. The CMP identifies strategies which are appropriate for alleviating congestion within the corridors.

DVRPC's report, *Congestion Management Process – Limiting Traffic Congestion and Achieving Regional Goals*, defines Very Appropriate and Secondary Appropriate strategies to address congestion in the sub-corridor types Freeway Junction, Freeway, and Grid. These include: incident management, integrated corridor management (using intelligent transportation systems), interregional transportation coordination, general purpose lanes, major reconstruction with minor capacity change, park and ride lots, county and local road connectivity, inter-modal enhancements and economic development-oriented transportation policies.

Pennsylvania Congestion Management Process Corridors 2, 4, and 6



Impacts of Gaming in Greater Philadelphia

MPMS# 47993: 7th Street Bridge over Chester Creek project will rehabilitate or replace the superstructure of the bridge. This is a county-owned bridge in downtown Chester and serves SEPTA bus routes 117 and 119 and currently has a 12-ton weight limit. Utility and right-of way have been scheduled for FY2007 with construction scheduled in FY2009 and FY2010.

MPMS# 57773: Lloyd Street Bridge project will replace this bridge over the Amtrak/SEPTA R2 rail line, due to structural defects. The bridge's weight limit is currently signed for five tons, which is inadequate to serve trucks accessing the industrial waterfront. The pedestrian walkways have been closed due to holes in the decking. This project was scheduled for preliminary engineering in FY2005 and final design is expected to be scheduled for FY2008.

MPMS# 15299: Concord Road Bridge project is a bridge removal and replacement project over SEPTA's Chester Creek Branch line. Funding has been scheduled in FY2007 for final design, utility and right-of-way.

MPMS# 15396: US 13, 9th Street Bridge project will replace the 9th Street bridge over Chester Creek in Chester City. Funding has been scheduled in FY2007 for final design, utility and right-of-way; and construction is scheduled for FY2008 and FY2009.

MPMS# 57780: Route 322/Commodore Barry Bridge/I-95 2nd Street Interchange project will include new on and off ramps. Construction of the new 2nd Street Interchange from the Commodore Barry Bridge/US 322 to Route 291/2nd Street in the City of Chester will provide more direct access to the Chester waterfront, including Harrah's Chester, and will include new lighting, signing, drainage, and traffic signal installations. This project also includes the recently completed construction of Seaport Drive south of, and parallel to, 2nd Street with access points at Highland, Engle, and Flower Streets. Construction funding for various portions of this project are scheduled each year from FY2007 to FY2010.

MPMS# 47990: US 13 Signals project will install a closed loop signal system covering 23 signalized intersections from Morton Avenue/12th Street to 9th Street/Clover Lane. The signals will be completely modernized with fiber optic cable and a central computer monitor. Preemption for emergency vehicles will be incorporated into the system. The project will also include three signals on Kerlin Street in the three blocks adjacent to US 13 between US 13 and I-95. This project was scheduled for construction in FY2006 and FY2007.

MPMS# 65127: Chester Waterfront Development/Streetscape project funds streetscape improvements and enhancements along Highland Avenue and Flower Street, in support of the Wharf at Riverton brownfield redevelopment project along the Delaware River. Construction has been scheduled for FY2007.

MPMS# 70245: Chester City Access Improvements II—I-95 Exit 6 to PA 291 project will widen Chestnut Street from 10th Street to 12th Street without adding additional travel lanes, and reconfigure the intersection at Chestnut Street/10th Street/Morton Avenue. This project is scheduled for preliminary engineering in FY2007.

MPMS# 71202: East Coast Greenway/Chester Riverfront Phase II project connects portions of the East Coast Greenway/Riverwalk with PA 291 along Flower Street and

Impacts of Gaming in Greater Philadelphia

Highland Avenue. \$517,500 in TE funds were approved during the FY2004 project selection process, to be programmed at the appropriate time, drawing funds from MPMS #64984 Highway Transportation Enhancements project. Companion projects also include MPMS #65912 Chester City Riverwalk and MPMS #65923 Chester City East Coast Greenway. These projects are expected to advance to construction in FY2007.

MPMS# 65912: Chester City Riverwalk project creates a bike and pedestrian facility along the Delaware River from Flower Street to the end of the old Chester Generating Plant near Highland Avenue, adjacent to Seaport Drive. This facility will be a part of the East Coast Greenway. This project was scheduled for construction in FY2006.

MPMS# 65128: Chester I-95 Exit 6 Streetscape Improvements project is an earmarked award of the National Corridor Planning and Development Program for streetscape improvements and enhancements along Exit 6 of I-95 in the City of Chester. This project is currently scheduled for construction in FY2007.

MPMS# 72913: Chester Commercial Business District project is a streetscape improvement project that helps establish safe walking routes for children when traveling to school. It is funded by the Home Town Streets/Safe Routes to School program. Funding will be drawn down at the appropriate time for the construction phase of this project.

Impacts

Traffic Analysis Harrah's Chester Downs, prepared by consultant Orth-Rodgers & Associates, considered other similarly proposed facilities in the region when determining trip distribution for the facility, but the effects of other proposed facilities were not shown in determining trip generation. According to the *Orth-Rodgers* study, approximately 1,900 vehicle trips will be generated during the evening peak hour, which does not coincide with the normal commuting peak. Thirty percent of these trips will be from I-95 southbound, 35 percent from I-476, 15 percent from I-95 northbound, and 20 percent from PA 320, PA 352 and US 322. According to the study, these peak trips will show minimal impact on the interstate system since they are generated outside of the peak rush periods.

The most significant transportation impact from the facility will be to the local communities and infrastructure. As noted earlier there are problems with congestion and safety on local roadways in the area, and with additional traffic the problems will be exacerbated. Traffic using any of the exits in the City of Chester from I-95 to the facility will have to traverse local streets; some of which are residential and stop sign-controlled at intersections. Additionally, direct access to the site from PA 320, PA 352, US 322 and Morton Avenue/Chester Pike are via neighborhood streets.

The City of Chester is seeking to minimize the impact on local streets by directing Harrah's traffic to existing (I-95, Exit 8) and future (I-95, Exit 4) interstate interchanges with the four-lane PA 291, where there is capacity to deal with such volumes of traffic.

The future transportation projects shown in the previous section will impact mobility and access to, from and within the City of Chester. Of note are the US 322/Commodore

Barry Bridge/I-95 2nd Street Interchange project and the I-95 Exit 6 to PA 291 project which will improve access from the Commodore Barry Bridge and I-95 to the city.

Impact Report Recommendations

Traffic Analysis Harrah's Chester Downs recommends:

- Re-stripe the northbound approach to the Morton Avenue/PA 291 intersection to provide three northbound lanes (left turn, through and a through and right turn lane) and change the signal timing to give Morton Avenue more green time.
- The driveway to the State Correctional Institution Parking Lot on Morton Avenue should be made entry only to prevent conflict with southbound Morton Avenue traffic and relocate the crosswalk to the intersection.
- With Melrose Avenue providing the main entrance to the facility and given the expected volume, a traffic signal should be added to the intersection with PA 291 to improve level of service.
- Re-stripe PA 291 to merge the two westbound lanes into one and develop a long turning lane extending over Ridley Creek Bridge approaching Melrose Avenue. This would allow a greater queue storage length (400 feet). This should be coupled with advance directional signage.
- Clear distinct directional signage should be provided to lead patrons to and from the facility.

Limerick Casino, Hotel, and Conference Center

Access

Highway

Map A9: Limerick Casino Roadway Network depicts the highway network in the area of the proposed Limerick site. The following is a brief description of some of the main roadways that influence circulation in the area.

US 422 (Pottstown Expressway) is functionally classified as a freeway or expressway. It runs in a northwesterly direction beginning at US 202 in Chester County, traveling through Montgomery, Berks, Lebanon, and Dauphin Counties and ending where it meets US 322 just east of Harrisburg. In the vicinity of the study area it is two lanes in each direction separated by a grass median, with the closest interchange at Evergreen Road. The main access to the site will be from Evergreen Road.

Ridge Pike is functionally classified as a principal arterial highway. It runs in a northwesterly direction from Philadelphia through Montgomery County to Limerick Township, becoming High Street as it continues west into Pottstown. It is generally a two-lane roadway but carries four lanes where it intersects with Evergreen Road and US 422, just north of the study area.

PA 724 (Schuylkill Road) is functionally classified as a minor arterial. Running in a northwesterly direction through the northern section of Chester County, it begins at PA 23 in East Pikeland Township and ends where it meets PA 222 in Berks County, southwest of Reading. Running on the opposite side of the Schuylkill River, it comes closest to the study area at two points. One, where it interchanges with US 422 as that highway bridges the river approximately 1.5 miles west of the site, and another where it intersects with Linfield Road which crosses the river approximately one mile directly south of the site.

Evergreen Road is functionally classified as a local road and runs south-west from the interchange of Ridge Pike and US 422 to the Exelon Limerick Nuclear Power Plant where it intersects with Sanatoga/Linfield Road. Apart from the section that constitutes the interchange, it is one lane in each direction.

Sanatoga/Linfield Road is functionally classified as a local road and is one lane in each direction. It winds from Center Road near Linfield in a northwesterly direction passing the Limerick Nuclear Power Plant, then turns north to cross over US 422 and intersect with Ridge Pike in Sanatoga.

Pleasantview Road is functionally classified as a local road from where it begins, running northwest from Sanatoga/Linfield Road to where it crosses Ridge Pike. Its classification changes to Rural Major Collector as it heads northeast to Swamp Pike in New Hanover Township. It is one lane in each direction.

Limerick Center Road is functionally classified as a collector road. It runs northeast from Main Street in Linfield to Ridge Pike in the township of Limerick. It is one lane in each direction.

Lightcap Road



Possum Hollow Road



Possum Hollow Road, Lightcap Road and Airport Road are local roads which are functionally unclassified, but play an important role in the local roadway network. Possum Hollow Road runs east-west connecting Sanatoga Road and Lightcap Road and is one lane in each direction. Lightcap Road is a narrow road that runs northwest between Airport Road and Possum Hollow Road. Airport Road begins at Limerick Center Road and heads northeast along the Pottstown Limerick Airport to Ridge Pike and is one lane in both directions.

Mass Transit

SEPTA provides regional bus service to the area. Route 93 goes from the Norristown Transportation Center (with connections to Routes 90, 91, 93, 96, 97, 98, 99, 100, 131 and the R6 train) to the Montgomery County Community College West Campus in Pottstown via Ridge Pike, which is less than a half mile to the site. It is a one hour trip, each way, with departures approximately every hour, with increased frequency during peak. It operates between 5 a.m. and 10 p.m. daily. Less than one percent of Limerick residents used public transit to get to work.

Pottstown Urban Transit (PUT) also provides bus service to the communities around the study area. It is publicly owned and privately operated. It connects to SEPTA bus route 93 at Montgomery County Community College and its eastern most stop is on Ridge Pike near Evergreen Road. It operates between 6 a.m. and 10 p.m. Monday through Saturday. **Map A10: Limerick Casino Transit** depicts the mass transit service in the area.

Bicycle and Pedestrian

It is difficult to bike or walk in the study area. In the immediate vicinity of the site, the roads tend to be rural with no shoulders or sidewalks. The exceptions are Ridge Pike, Evergreen Road, and Limerick Center Road, which have shoulders along some limited portions, and Lightcap Road, which has sidewalks in some areas.

According to the Bicycle Coalition of Greater Philadelphia's regional bicycle map, Possum Hollow Road, Limerick Center Road, and Linfield Road are rated average for all bicycling conditions. Average roads are those that are moderately suitable for on-road cycling. Cyclists of lesser skill and experience riding in traffic may find conditions unfavorable. These cycling-condition ratings are determined using a combination of traffic volumes, roadway geometry, and field observations. Evergreen Road was not rated.

Traffic

Traffic Counts

The 2002 Average Annual Daily Traffic (AADT) volume for both directions of US 422 was approximately 48,000 to the east of Evergreen Road and 44,000 to the west. The 2001 AADT for Ridge Pike ranged from 14,800 to 16,600, and the volume on Evergreen Road was 5,721 in 2004. Sanatoga Road has a 2006 AADT of 1,787, while Limerick Center Road had a 2004 volume of 4,458 on the portion going towards Ridge Pike and a 2003 volume of 1,664 moving toward Linfield. An AADT of 15,553 was recorded on PA 724 (Schuylkill Road) in 2005. **Map A11: Limerick Casino Traffic Counts** shows the traffic volumes and the year counted.

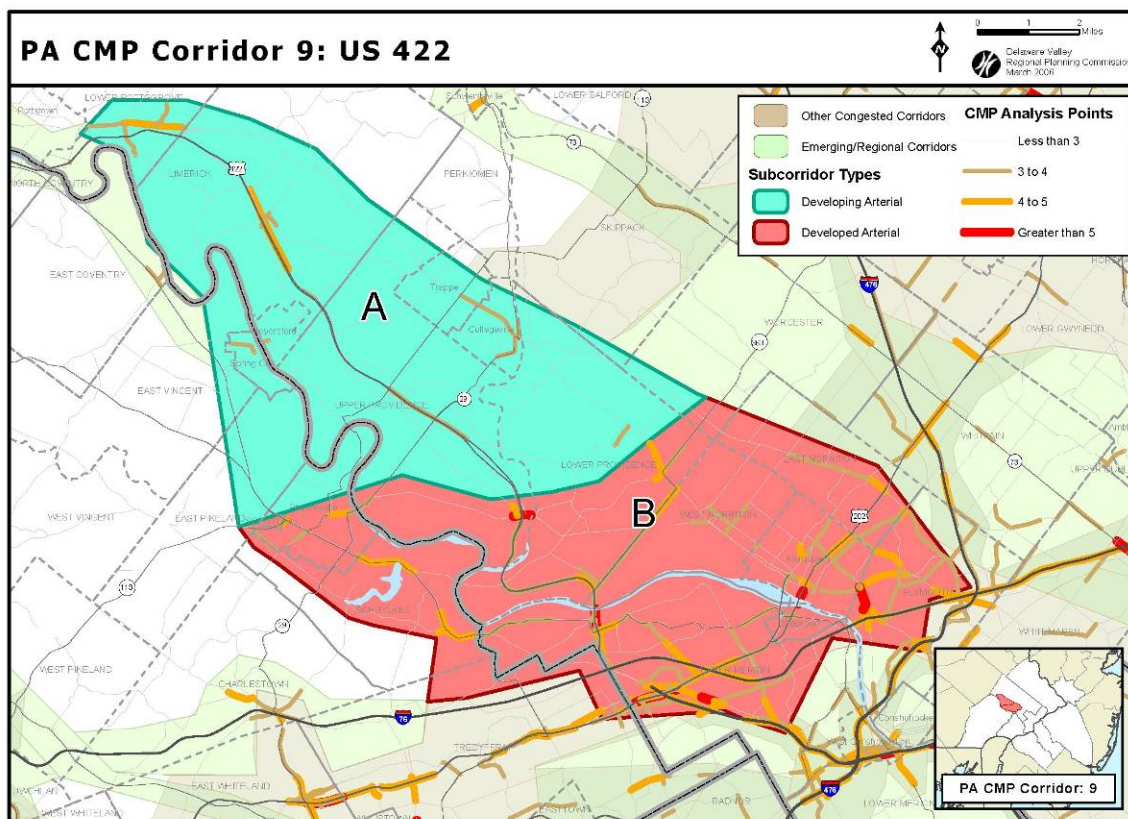
Safety

Map A12: Limerick Casino PENNDOT Crash Clusters shows PennDOT's crash clusters using 2000, 2001, and 2003 data. As indicated on the map, there are two areas in the vicinity of the site with more than 13 crashes during the three-year period. Though there were no fatalities, there were notable clusters at three intersections along Ridge Pike that feed into the area around the site, and one at the intersection of Evergreen Road and Sanatoga Road at the entrance to the Nuclear Power Plant.

Congestion Management Process

This area falls within the identified congested corridor covered by *PA Corridor 9* in the DVRPC CMP (previously described). This sub-corridor type is Developing Arterial. As seen in the graphic, several areas in the vicinity of the site have four or more CMP points, including Ridge Pike near the US 422/Evergreen Road interchange. The CMP identifies strategies which are appropriate for alleviating congestion within the developing arterial sub-corridors.

Pennsylvania Congestion Management Process Corridor 9



See the document *DVRPC Congestion Management Process – Limiting Traffic Congestion and Achieving Regional Goals* for the sets of Very Appropriate and Secondary Appropriate strategies to address congestion in the sub-corridor type Developing Arterial. These include: computerized traffic signals, center turn lanes, enhanced transit amenities and safety, expanded parking and improved access to transit stations, more frequent or more hours of transit service, and county and local road connectivity and short connections.

Future Transportation Projects

Several projects are currently programmed on DVRPC's FY2007 Transportation Improvement Program (TIP) for FY2007-2010 that have the potential to affect access and mobility in the specific study area. The TIP operates on a federal fiscal year which starts on October 1 and ends on September 30. For example, the first day of FY2007 is October 1, 2006, ending on September 30, 2007. Funding programmed in a particular year of the TIP indicates that a phase is expected to advance sometime during that fiscal year, and does not reflect if that phase has begun or if it is complete.

MPMS# 60565: The Schuylkill Valley MetroRail (SVM) project is a 62-mile proposed transit system between Philadelphia and Wyomissing/Reading, Pennsylvania. The corridor extends from Philadelphia and continues northwest through portions of Chester and Montgomery Counties. A total of 34 stations are planned along this rail line including 52nd Street, Conshohocken, Norristown, Valley Forge, King of Prussia,

Phoenixville, Royersford, Pottstown, Douglassville, and Reading. The Schuylkill Valley Metro concept is in response to suburban growth and regional decentralization that significantly increased travel demand along the Schuylkill Valley corridor, resulting in highway congestion, poorer air quality, suburban sprawl and the reduction of open space. The existing freight railroad rights-of-way offer the potential for passenger rail service. A special task force, convened by Governor Ed Rendell and Congressman Jim Gerlach, is reviewing the Schuylkill Valley Metro project. This task force will recommend the best approach for project phasing, funding, and implementation.

MPMS# 16738: US 422 Expressway Section M1B project will reconstruct approximately 1.7 miles of expressway (from just west of Porter Road to just east of Park Road) , including two bridges carrying 422 over Porter Road and Sanatoga Road and Creek, and two bridges carrying Pleasantview Road and Park Road over 422. One culvert at Sprogels Run, located just east of Porter Street, will be replaced and extended. The expressway will be reconstructed on both existing and new alignment, meeting current design standards for horizontal radii, shoulder widths, and vertical clearance. The acceleration lane for the westbound on-ramp from the Sanatoga Interchange will be improved to meet current design standards. The project is in pre-construction phases and will not advance to construction until after FY2010.

MPMS# 59434: Schuylkill River Trail project includes the construction of a 12.7 mile section of a 14.6 mile multi-use trail between Phoenixville Borough in Chester County and the Montgomery/Berks County boundary that will eventually connect to the current trail terminus at Betzwood, Valley Forge National Historic Park. The right-of-way phase is scheduled for FY2009.

MPMS# 16652: The Ridge Pike Bridge project entails the rehabilitation of the bridge carrying Ridge Pike over the Sanatoga Creek. This project is scheduled for final design in FY2007 with the utility and right-of-way phase in FY2008.

MPMS# 16699: Linfield Road Bridge project entails the replacement of the culvert over a tributary of the Schuylkill River in Limerick Township. This project is scheduled for the utility and right-of-way phase in FY2008.

Impacts

Boyd Gaming Facility Traffic Assessment, prepared by consultant Traffic Planning and Design, Inc, estimates the casino will generate 2,410 trips during the weekday PM peak hour and 3,338 trips during Saturday PM peak hour. Eighty-five percent of the trips will use US 422 to access the site while the remaining 15 percent will use the local roadway network (Ridge Pike, High Street, Lightcap Road, Rupert Road, Linfield Road and Sanatoga Road). Currently, the westbound US 422 off ramp experiences a level of service (LOS) F during the PM peak period. Other planned developments in the area and their associated trip generation were considered in determining future traffic volumes and levels of service. The study stated that given the close proximity of the proposed site to the US 422 interchange with Evergreen Road, most of the site-generated traffic would be oriented to that highway, minimizing the impact to the local network and communities.

As noted in DVRPC's CMP, there are areas within this corridor which are congested, notably Ridge Pike near the US 422/Evergreen Road interchange and US 422 from north

of Country Club Road to Airport Road. With additional volumes resulting in added congestion, traffic will be forced from the regional highway to traverse local roads to get to destination points. Additionally, transportation safety is a major concern for the communities. A number of the local roads are not built for high volumes of traffic and high speed. Many are narrow roads with no shoulders, no pedestrian or bicycle facilities, poor sight distance, and substandard alignment (Possum Hollow Road, Sanatoga Road).

Impact Report Recommendations

Boyd Gaming Facility Traffic Assessment by Traffic Planning and Design, Inc.

recommends:

- Eliminate left turns at off-ramps from both eastbound and westbound US 422.
 - Construct additional exit ramp from eastbound US 422 to Evergreen Road
 - Construct additional exit ramp from westbound US 422 to Evergreen Road
 - Construct additional entrance ramp from northbound Evergreen Road to westbound US 422
- Utilize proposed Lightcap Road extension for access to gaming facility.
 - Develop design of this roadway to facilitate anticipated traffic volume.

Foxwoods Casino Philadelphia

Access

Highway

The area has a dense transportation network. Several interstate, state, and municipal roadways provide access and mobility to the area in which the facility is located. **Map A13: Foxwoods Roadway Network** shows the highway network in the area. The following is a brief description of some of the main highways that influence circulation in the area.

I-95 is one of three interstate highways that serve the area. In the vicinity of the study location the highway is three lanes in each direction separated by a concrete median with a speed limit of 55 miles per hour. The most immediate access to the site from I-95 southbound is the Columbus Boulevard/Penn's Landing exit. This exit is a left side exit and traffic enters Columbus Boulevard north of Washington Avenue. There is also an entrance ramp at this location for northbound I-95 from Columbus Avenue. A few blocks south of these ramps is an exit ramp from I-95 northbound but also north of the site. There is an entrance ramp for southbound I-95 at Morris Street, three blocks south of Reed Street.

I-76 is an interstate highway that bisects Pennsylvania in an east-west direction. From New Jersey it crosses the Delaware River on the Walt Whitman Bridge. It then moves around southern and western Philadelphia and becomes the Pennsylvania Turnpike in King of Prussia continuing west to the state of Ohio and beyond. In the vicinity of the study area it has three lanes in each direction, separated by a concrete median and has a speed limit of 55 miles per hour. To and from the Walt Whitman Bridge, travel can be accommodated via I-95. Additionally, Front Street provides local site access and egress for New Jersey I-76 travel. Access to the site from eastbound I-76 can be accommodated from the Broad Street or Packer Avenue exits via local roadways.

I-676 is an interstate highway that bisects Philadelphia in an east-west direction. From New Jersey it begins at I-76, travels through Camden and crosses the Delaware River on the Ben Franklin Bridge connecting with I-76 on the west side of Center City and I-95 on the east. It is generally three lanes in each direction, separated by a concrete median, for its entire stretch. Immediate access to the site from this highway will be via I-95.

Columbus Boulevard is functionally classified as a principal arterial highway. It runs along Philadelphia's waterfront from Oregon Avenue in the south to Aramingo in the north. In the vicinity of the study area, it is three lanes in each direction separated by an island which carries two railway tracks. The site fronts this roadway.

Oregon and Washington Avenues are functionally classified as principal arterial highways. Both run east-west across South Philadelphia from Columbus Boulevard and are generally two lanes in each direction.

A dense network of local roadways provide access and mobility to the facility complemented by Snyder Avenue, a minor arterial; and Tasker and Morris Streets, both urban collectors.

Mass Transit

Four SEPTA bus routes serve the study area—the 25, 29, 64, and 79. **Map A14: Foxwoods Transit** illustrates the transit service in the area.

Route 25 operates north-south along the waterfront from the Frankford Transportation Center to Columbus Commons Shopping Center. It serves the area with 33 bus trips northbound between the hours of 6:38 a.m. and 11:16 p.m. on weekdays, and 28 bus trips southbound between the hours of 6:26a.m. and 11:01 p.m. On weekends, 28 bus trips serve the area in each direction between the hours of 8:46 a.m. and 12:09 a.m.

Route 64 runs from Pier 70 west and north to University City and Parkside connecting with both the Broad Street and Market Frankford subway lines and the R3 Regional Rail line. Route 64 serves the area with 58 bus trips westbound and 59 bus trips eastbound between the hours of 5:50 a.m. and 12:39 a.m. on weekdays. On Saturdays, 36 buses serve the area in each direction between the hours of 6:00 a.m. and 12:55 a.m., while on Sundays, 34 buses serve the area westbound and 33 eastbound between the hours of 6:00 a.m. and 10:54 p.m.

Route 29 runs east-west along Tasker and Morris Avenues. It serves the area with 90 bus trips eastbound and 94 bus trips westbound between the hours of 5:19 a.m. and 2:54 a.m. on weekdays. On weekends, 38 bus trips serve the area in each direction between the hours of 5:19 a.m. and 2:16 a.m.

SEPTA Route 29 Bus at Tasker Avenue and South Columbus Boulevard



Route 79 runs east-west along Snyder Avenue. This is one of SEPTA’s “Owl” service routes, with service 24 hours per day. There are 94 bus trips eastbound and 91 bus trips westbound on weekdays. On Saturdays, there are 55 bus trips in each direction and 40 bus trips in each direction on Sundays.

Route 29 and 79 are trackless trolley routes currently operated by buses. At its October 2006 Board meeting, the SEPTA Board voted not to exercise the option to purchase new trackless trolley vehicles for these routes, against the wishes of several neighborhood associations.

The Delaware River Port Authority, which operates the PATCO Hi-Speed Line from Lindenwold, New Jersey to Center City Philadelphia, is currently studying a possible extension of PATCO to the Delaware waterfront. The alternatives are part of a larger study on PATCO expansion, titled *Southern New Jersey to Philadelphia Transit Study*, which also looks at extending PATCO farther into Camden and/or Gloucester counties. There are two Philadelphia alternatives: a trolley/streetcar from Franklin Square Station to the waterfront along Columbus Boulevard, or an extension of the subway/surface line to the waterfront along Columbus Boulevard.

The first alternative would begin at PATCO's currently closed Franklin Square station, north to Spring Garden Street and south to the Pier 70 shopping plaza (near Snyder Avenue). The second alternative would extend SEPTA's subway/surface light rail system underground along Market Street to Columbus Boulevard, with service extending at-grade north to Spring Garden Street and south to Pier 70 shopping plaza. Both alternatives have the possibility of future extensions to the redeveloping Philadelphia Navy Yard and South Philadelphia stadium complex. Such a system would directly serve the Foxwoods Casino and the Riverwalk Casino, and provide an important transit link from Center City and South Jersey to the waterfront.

Bicycle and Pedestrian

Sidewalks and bike lanes are continuous immediately surrounding the casino, but may need improvement overall in the study area. Crossing Columbus Boulevard can be hazardous for pedestrians in this area, due to the number of lanes and volumes of traffic.

Bike Lane on South Columbus Boulevard adjacent to Foxwoods Site



According to the Bicycle Coalition of Greater Philadelphia's regional bicycle map, South Columbus Boulevard is rated bicycle-friendly for all bicycling conditions. Bicycle-friendly streets are those most suitable for on-road cycling. Some roads may have heavy traffic but also have wide shoulders, making them preferred routes. South Columbus Boulevard will also eventually be part of the East Coast Greenway. Washington Avenue is rated average for all bicycling conditions. Average roads are those that are moderately suitable for on-road cycling. Cyclists of lesser skill and experience riding in traffic may find conditions unfavorable. These cycling-condition ratings are determined using a combination of traffic volumes, roadway geometry, and field observations.

Traffic

Traffic Counts

According to the Pennsylvania Department of Transportation's (PennDOT) Bureau of Planning and Research, the Average Annual Daily Traffic (AADT) volumes in 2003 on I-95 in the vicinity of the study area were over 90,000 with a count of approximately 20,000 on the ramps at Columbus Boulevard. The 2005 AADT volume on Columbus Boulevard ranged between 27,000 and 32,000. **Map A15: Foxwoods Traffic Counts** shows additional traffic volumes and year counted.

Safety

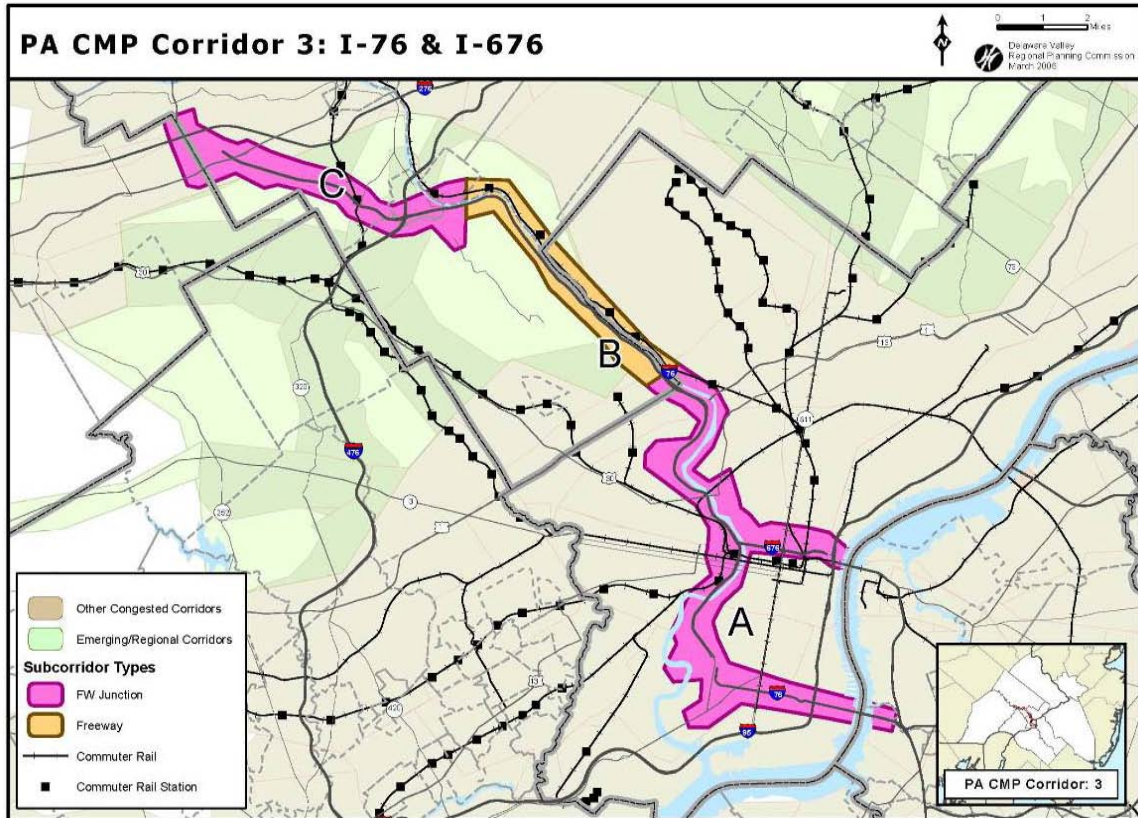
Map A16: Foxwoods PENNDOT Crash Clusters shows the PennDOT crash clusters for this area. It uses data from 2000, 2001, and 2003. It indicates three areas along Columbus Boulevard with more than five crashes, one adjacent to the site. Snyder Avenue shows a crash cluster from Dilworth Street to 24th Street with 170 crashes over the three-year period and Broad Street shows a cluster of 304 crashes from Center City to Oregon Avenue. The Broad Street cluster includes two fatalities.

Congestion Management Process

The site and its vicinity falls within two identified congested corridors, *PA Corridor 3: I-76 & I-676* and *PA Corridor 4: I-95* in the DVRPC CMP (previously described). These sub-corridor types are Freeway and Freeway Junction. As seen in the graphics for these corridors, surrounding these congested corridors are several other congested corridors as well as emerging/regional corridors. The CMP identifies strategies which are appropriate for alleviating congestion within the corridors.

See the document *DVRPC Congestion Management Process – Limiting Traffic Congestion and Achieving Regional Goals* for the sets of Very Appropriate and Secondary Appropriate strategies to address congestion in the sub-corridor types Freeway Junction, and Freeway. These include: incident management, integrated corridor management (ITS), interregional transportation coordination, general purpose lanes, major reconstruction with minor capacity change, park and ride lots, county and local road connectivity, and inter-modal enhancements.

Pennsylvania Congestion Management Process Corridor 3



Future Transportation Projects

Several projects are currently programmed on DVRPC's FY2007 Transportation Improvement Program (TIP) for FY2007-2010 that have the potential to affect access and mobility in the specific study area. The TIP operates on a federal fiscal year which starts on October 1 and ends on September 30. For example, the first day of FY2007 is October 1, 2006, ending on September 30, 2007. Funding programmed in a particular year of the TIP indicates that a phase is expected to advance sometime during that fiscal year, and does not reflect if that phase has begun or if it is complete.

MPMS# 70231: Swanson Street project will reconstruct Swanson Street from Snyder Avenue to Oregon Avenue, with new or upgraded footway, medians, curbs, drainage, street lighting, pavement markings, landscaping and traffic signal at Snyder Avenue. This project is scheduled for construction in FY2008 and FY2009.

MPMS# 72597: The Ben Franklin Bridge Philadelphia Operational Improvement project aims to reduce congestion by providing several improvements to the area in proximity to Vine Street between the Ben Franklin Bridge and 9th Street and the Broad Street off-ramp from I-676 westbound. As this project has not advanced to an implementation phase, improvements may include a wide range of short-term and long-term solutions. This project is currently scheduled for the utility and right-of-way phases in FY2008 and the construction phase in FY2009.

MPMS #64804: Delaware Avenue Signal project will improve existing traffic signals at 15 intersections along Columbus Boulevard from Oregon Avenue to Race Street, by installing fiber optic cable and new solid state traffic controllers. This project is scheduled for final design in FY2009.

Impacts

Preliminary Traffic Impact Assessment for Proposed Slot Parlor/Casino on Columbus Boulevard between Reed and Tasker Streets, produced by consultant, Orth-Rodgers & Associates, Inc., estimated that 60 percent of the trips arriving and 50 percent of trips departing the site will use the interstate system (I-95, I-676). The number of trips generated during the Friday evening peak hour will be approximately 650 in phase one. The site's Friday evening peak generation coincides with the evening commuting peak. Additionally, a new ramp from I-95 southbound is recommended near the casino site. This could involve a ramp which would begin at Carpenter Street and drop down in the vicinity of Reed, Dickinson, or Tasker. This ramp would be immediately adjacent to the residential neighborhood of Pennsport, including homes along Front Street and along the blocks between Front and 2nd Streets of the above east-west residential streets.

Although the proposed site is within close proximity to the regional highway system, there will be adverse impacts to the local communities and infrastructure. According to the Traffic Impact Study, 40 percent of casino-generated traffic will use local roadways. Surrounding this site are mixed use (residential, commercial, industrial) neighborhoods with varying hours of travel. Additionally, the many retail establishments, including big box stores along Columbus Boulevard, contribute to the congested nature of this area. The proposed traffic generation from this site will increase these problems.

Impact Report Recommendations

The *Preliminary Traffic Impact Assessment* study recommends:

- Provide safe and efficient site access, adequate on-site parking and convenient internal circulation.
- Improve traffic signalization along Columbus Boulevard to increase capacity and improve traffic flow.
- Modify traffic lane configurations to help increase intersection capacity and reduce delay along Columbus Boulevard.
- Consider new I-95 on/off ramps for better access to retail and entertainment establishments to the south of the current ramp. This would divert some of the southbound Columbus Boulevard traffic onto I-95.
- Use directional signage, marketing and other programs to direct traffic from Columbus Boulevard onto alternate routes.
- Consider water taxi service between Pier 60 and other entertainment activities along the Delaware River Waterfront.
- Consider providing off-site parking with shuttle bus service.
- Increase or improve public transit service.

Philadelphia's North Delaware Waterfront Casinos

The three proposed sites adjacent to the Delaware River, on North Columbus Boulevard, are discussed together because travel patterns are similar. These include the Pinnacle, SugarHouse, and Riverwalk proposals.

Access

Highway

The area has a dense transportation network. Several interstate, state, and municipal roadways provide access and mobility to the area in which the proposed facilities will be located. **Map A17: North Delaware Roadway Network** shows the transportation network. The following is a brief description of some of the main highways that influence circulation in the area.

I-95 is one of two interstate highways that serve the area. This roadway travels in a north-south direction. In the vicinity of the study location the highway is three lanes in each direction separated by a concrete median with a speed limit of 55 miles per hour. There is no direct access to the sites from I-95 but there are several options which include the use of the local roadway network.

The use of the Callowhill Street exit from southbound I-95 would lessen the traffic impacts on local neighborhoods. Traffic can access North Columbus Boulevard via eastbound Callowhill Street. Access to the sites from northbound I-95 should be from the South Columbus Boulevard/Penn's Landing exit and via northbound South Columbus Boulevard. The I-95 northbound exit for Girard Avenue could also be used, with cars traveling northbound on Columbus Boulevard to southbound Dyott Street/North Beach Street to southbound Columbus Boulevard. The routing is complex because southbound Columbus Boulevard cannot be accessed directly from the Girard Avenue exit, and there are conflicting traffic movements at the bottom of the Girard Avenue exit ramp of cars going to either Aramingo Avenue or North Columbus Boulevard.

I-676 is an interstate highway that bisects Philadelphia in an east-west direction. It is also designated US 30 (Vine Street Expressway). It starts at I-76 in New Jersey, crosses the Delaware River on the Ben Franklin Bridge and connects again with I-76 on the west side of Center City and I-95 on the east. It is generally three lanes in each direction, separated by a concrete median, for its entire stretch. This highway has an at grade signalized section between 7th and 8th Streets. Access to these sites from this highway is via North 6th Street and Race Street to North Columbus Boulevard, or alternately via I-95 northbound or southbound.

Columbus Boulevard is functionally classified as a principal arterial highway. It runs along Philadelphia's Delaware waterfront from Oregon Avenue in the south to Aramingo in the north. In the vicinity of the study area it is three lanes in each direction separated by an island. The main entrances to two of the proposed sites (Riverwalk and SugarHouse) would be on this road. The third, Pinnacle, fronts Dyott Street/North Beach Street, just east of North Columbus Boulevard.

Callowhill Street, Spring Garden Street, and Girard Avenue are functionally classified as principal arterial highways and run east-west from Columbus Boulevard to West Philadelphia. For most of their lengths they are two lanes in each direction with

expanded intersections. Callowhill has an expanded section west of the I-95 northbound off ramp to 7th Street varying from three to five lanes westbound. From the I-95 northbound off ramp to Columbus Boulevard, Callowhill Street is one way eastbound.

A dense network of local roadways and urban collectors provide access and mobility to the facility, complemented by the diagonal Frankford Avenue, a minor arterial.

Ben Franklin Bridge from Proposed SugarHouse Site



Mass Transit

Two SEPTA bus routes, the 25 and the 43, serve the study area. **Map A18: North Delaware Transit** shows the transit service in the area. Route 25 goes north-south along the waterfront from the Frankford Transportation Center to Oregon Avenue. It serves the area with 55 bus trips northbound between the hours of 5:35 a.m. and 11:33 p.m. on weekdays, and 52 bus trips southbound between the hours of 5:25 a.m. and 11:45 p.m. On weekends 33 bus trips serve the area in each direction between the hours of 6:29 a.m. and 12:09 a.m. Route 25 connects to the Market-Frankford line at Spring Garden Station.

Route 43 runs from the Port Richmond Shopping Center west to the Parkside neighborhood, along Columbus Boulevard and Spring Garden Street. On weekdays, 48 bus trips serve the area in each direction between the hours of 5:38 a.m. and 10:55 p.m. but continue to service Spring Garden and Front Streets in both directions until 1:37 a.m. On Saturdays, service is limited to 29 bus trips in each direction between 5:40 a.m. and 10:42 p.m., but service continues until 1:29 a.m. to Spring Garden and Front Streets. Sunday service only terminates at Spring Garden and Front Streets. Route 43 connects to the Market Frankford line at Spring Garden station.

The Market-Frankford Elevated rail, with stops at Spring Garden Street and Girard Avenue, runs from Frankford Transportation Center through Center City to the 69th Street Terminal. These stops are a few blocks away from the sites. However, bus Route 25 and Route 43 connect with the Market Frankford Line at Spring Garden Station. Girard Avenue also has the SEPTA Route 15 restored trolley service, which runs the length of Girard Avenue.

Bicycle and Pedestrian

Sidewalks and bike lanes are continuous along Columbus Boulevard, though North Beach and Dyott Streets near the proposed Pinnacle casino site have no pedestrian or bicycle facilities.

Pedestrian Amenities on North Columbus Boulevard near proposed Riverwalk Casino



According to the Bicycle Coalition of Greater Philadelphia's regional bicycle map, North Columbus Boulevard is rated bicycle-friendly for all bicycling conditions. Bicycle-friendly streets are those most suitable for on-road cycling. Some roads may have heavy traffic but also have wide shoulders, making them preferred routes. North Columbus Boulevard will also eventually be part of the East Coast Greenway. Frankford Avenue and Girard Avenue in the study area are rated average for all bicycling conditions. Average roads are those that are moderately suitable for on-road cycling. Cyclists of lesser skill and experience riding in traffic may find conditions unfavorable. These cycling-condition ratings are determined using a combination of traffic volumes, roadway geometry, and field observations.

Traffic

Traffic Counts

According to Pennsylvania Department of Transportation's Bureau of Planning and Research the estimated Average Annual Daily Traffic (AADT) volumes in 2005 on I-95 in the vicinity of the study area were approximately 87,000 in each direction. Estimated volumes for I-676 ranged between 57,767 and 64,496 in each direction. The 2003-2005 AADT volume on North Columbus Boulevard in this area ranged between 7,000 and 12,000, while the volume on Spring Garden Street was approximately 23,000 in 2004. **Map A19: North Delaware Traffic Counts** shows additional traffic volumes and year counted.

Safety

Map A20: North Delaware PENNDOT Crash Clusters shows the PennDOT crash clusters in the area. Data is used from 2000, 2001, and 2003. There are two clusters shown along Columbus Boulevard with two fatalities each. The largest crash cluster shown on Spring Garden Street has 45 crashes over the three-year period with one fatality included. Crash clusters shown along Girard Avenue, I-95 and Columbus Boulevard all have over 80 crashes over the three year period. Crash clusters on I-95 tend to concentrate around the interchanges.

Congestion Management Process

The site and its vicinity falls within two identified congested corridors, *PA Corridor 3: I-76 & I-676* and *PA Corridor 4: I-95* in the DVRPC CMP (described previously). This sub-corridor type is Freeway and Freeway Junction. As seen in Figures 6 and 3 (previously), surrounding these congested corridors are several other congested corridors as well as emerging/regional corridors. The CMP identifies strategies which are appropriate for alleviating congestion within the corridors.

See the document *DVRPC Congestion Management Process – Limiting Traffic Congestion and Achieving Regional Goals* for the sets of Very Appropriate and Secondary Appropriate strategies to address congestion in the sub-corridor types Freeway Junction, and Freeway. These include: incident management, integrated corridor management (Intelligent Transportation Systems), interregional transportation coordination, general purpose lanes, major reconstruction with minor capacity change, park and ride lots, county and local road connectivity, and inter-modal enhancements.

Future Transportation Projects

Several projects are currently programmed on DVRPC's FY2007 Transportation Improvement Program (TIP) for FY2007-2010 that have the potential to affect access and mobility in the specific study area. The TIP operates on a federal fiscal year which starts on October 1 and ends on September 30. For example, the first day of FY2007 is October 1, 2006, ending on September 30, 2007. Funding programmed in a particular year of the TIP indicates that a phase is expected to advance sometime during that fiscal year, and does not reflect if that phase has begun or if it is complete.

MPMS# 57874: The I-95 Girard Avenue Interchange from Race to Vine Streets project will provide for the reconfiguration of this interchange to improve access, operation and safety. An additional auxiliary lane will be provided to connect the ramps at the Girard Avenue Interchange to the adjacent interchanges at Vine Street and Allegheny Avenue, in effect forming a five-lane directional section between the interchanges. Other improvements, including ramp replacements and relocations, are part of this project. The right-of-way phase is scheduled for FY2008 and FY2009 with the construction phase scheduled for FY10.

MPMS# 72597: The Ben Franklin Bridge Philadelphia Operational Improvement project aims to reduce congestion by providing several improvements to the area in proximity to Vine Street between the Ben Franklin Bridge and 9th Street and the Broad Street off-ramp from I-676 westbound. As this project has not advanced to an implementation phase, improvements may include a wide range of short-term and long-term solutions. This project is currently scheduled for the utility and right-of-way phases in FY2008 and the construction phase in FY2009.

MPMS# 73864: I-95, Girard Point Bridge to Girard Avenue Modification Resurfacing project will address pavement condition along portions of I-95. Current pavement conditions have deteriorated to the point where immediate attention is needed. Concrete patching, milling, crack seal, and overlay will be included in the project and should extend the life of the roadway for approximately ten years. This project was scheduled for construction in FY2006.

MPMS# 17659: Harbison Avenue/Aramingo Avenue project includes signal improvements to 27 signals along six miles from I-95 to Roosevelt Boulevard. Proposed improvements on Harbison Avenue include removing the medians at the intersections for the painting of left turn standby lanes, and providing overhead signals that will be interconnected with new controllers. Proposed improvements on Aramingo Avenue include the addition of overhead signals and left turn standby lanes from Butler Street to Bridge Street. This project is scheduled for construction in FY2007 and FY2008.

MPMS# 17782: I-95 & Aramingo Avenue/Adams Avenue Connector project extends Adams Avenue east of Tacony Street, to provide a connection between Torresdale Avenue (east of Frankford Avenue) and I-95. This project is scheduled for the utility phase in FY2007.

MPMS# 46956: North Delaware Avenue from Lewis Street to Bridge Street project will construct a new roadway and bridge across Frankford Creek to improve access to I-95 and the Betsy Ross Bridge. The project has been identified as the first of a multi-phased project to construct a "River Road" along the north Delaware Riverfront amidst planned residential and recreational facilities including the North Delaware River Greenway trail. The new road will extend between Lewis Street where it currently ends, further north approximately a mile and 1/2 to Buckius Street. This project is scheduled for construction in FY2008 and FY2009.

MPMS# 57893: Lehigh Avenue East project will modernize signals at 23 intersections. Minor roadway improvements, including pavement markings and related work from Richmond Street to Broad Street, are also a part of this project. This project is scheduled for construction in FY2009.

MPMS# 70243: American Street Streetscape Improvements project will install streetscaping on American Street from Girard Avenue to Lehigh Avenue. This project is scheduled for the final design phase in FY2007 and construction phases in FY2008 and FY2009.

MPMS# 61712: North Delaware Riverfront Greenway project, otherwise known as the North Delaware River East Coast Greenway, will create a bike/pedestrian trail along the Delaware riverfront, with four major sections. The trail will roughly run from the most southern portion (Section 1) near Allegheny Avenue and the Tioga Marine Terminal to the most northern portion (Section 4) near Pleasant Park and Linden Avenue in Northeast Philadelphia, with hopes of ultimately connecting to other East Coast Greenway projects in Bucks County. While this project has not yet been scheduled for construction, the City of Philadelphia expects to advance the design of several sections in FY2007.

MPMS# 64804: Delaware Avenue Signals project will coordinate existing traffic signals at 15 intersections along the corridor between Oregon Avenue and Race Street. Final design for this project is scheduled for FY2009.

Impacts

The traffic impact studies for the three proposed North Columbus Boulevard casinos reported 70-80 percent of the trips generated will use the Interstate system (I-95, I-676) to access the site. The number of generated trips during the evening peak range from 1,430 to 1,790 trips. The sites weekday evening peak trip generation coincides with commuting evening peak. The potential for crashes will be exacerbated with the increased number of trips generated.

Pinnacle Delaware Riverfront Site Transportation Impact Study, produced by consultant Pennoni Associates, Inc., found that the casino would generate 1,790 trips during the weekday PM peak hour, while Saturday PM peak hour would generate 2,385 trips, and Saturday midday peak hour would generate 1,260 trips. The study estimates that 80 percent of the casino-generated traffic will use I-95 to access the site (requiring the use of local roads for short distances) and the remaining 20 percent will utilize Columbus Boulevard, Richmond Street, Girard Avenue and Aramingo Avenue to access the site. Most of the local trips will be generated from within the local and surrounding neighborhoods within the City of Philadelphia. The proposed Girard Avenue Interchange Improvement project will improve I-95 northbound and southbound access to the site, thereby reducing traffic impact to local communities.

Traffic will need to traverse local roads to access the sites from the regional highway system because there is no direct connection. Although the proposed sites are within close proximity to the regional highway system there will be adverse impacts to the local communities and infrastructure. Accessing the site from the improved Girard Avenue interchange also creates circulation issues. The volume of traffic on these local roadways, albeit short distances, can potentially have a more adverse impact than over longer distances. Surrounding these sites are mixed use (residential, commercial, industrial) neighborhoods. The Girard Avenue interchange project, when completed, will alleviate some of the local impact but not all.

Traffic Impact Analysis Report for SugarHouse Site, prepared by consultant Gannett Fleming, estimated trip generation for phases one and two in the AM peak at 906 trips and PM peak at 1,511 trips. The Girard Avenue exits, north of the casino, will be used for both northbound and southbound I-95 travel. From I-95 southbound, Aramingo Avenue will be used to access Columbus Boulevard and the site. From northbound I-95, northbound Columbus Boulevard, Richmond Street and Beach Street will be used to access southbound Columbus Boulevard and the site. Local traffic from the west will utilize Frankford Avenue and Shackamaxon Street. The SYNCHRO analysis for the intersections (Shackamaxon Street, Frankford Avenue and North Penn Street with Columbus Boulevard) studied shows existing conditions at a level of service (LOS) C or better for all intersections and approaches except for the westbound Penn Street approach which shows LOS E. With signal timing modification and access to the casino from Shackamaxon Street, all intersections and their approaches will operate at a LOS D or better in 2021. As mentioned earlier in the discussion of LOS ratings, a LOS D in peak periods in urban areas is considered favorable, as increasing capacity on such roadways

to attain a higher LOS would require costly widenings or bypasses, for instance. Thus, achieving the highest LOS is not always the best solution.

Traffic Impact Study Riverwalk Casino, prepared by consultant Pennoni Associates Inc., found that the casino, after completion of both phases, would generate 24,210 trips on weekdays and 32,450 trips on Saturday. The weekday peak hour will produce 1,790 trips, while the Saturday peak hour will produce 2,390 trips. The consultant estimated that 20 percent of the trips will be via public transit. It is estimated that the trips will be 70 percent regional (using I-95, I-76 and I-676) and 30 percent local (distributed over local roadways such as Spring Garden Street, Race Street and Fairmont Avenue). The intersection of Spring Garden Street and Columbus Boulevard currently operates at an overall LOS E during weekday PM peak hour. This same intersection's left turn movements on the eastbound and northbound approaches currently operate at LOS F. The report further states that although there will be added delay time caused by the casino-generated traffic, the proposed mitigation efforts will address these concerns.

Impact Report Recommendations

Several recommendations were made to improve traffic flow and minimize the impact of additional traffic on the community.

Pinnacle Delaware Riverfront Site Transportation Impact Study recommends:

- Implement a shuttle bus service from the nearest stop of SEPTA's Route 15 Girard Avenue trolley, and/or the Girard Avenue Station of SEPTA's Market-Frankford Line.

Traffic Impact Analysis Report for SugarHouse Site recommends:

- Modify the signal timing.
- Add a dedicated right turn lane at the Frankford Avenue/Columbus Boulevard intersection eastbound approach.
- Eliminate the proposed access to the casino from Frankford Avenue, to improve traffic movement at this intersection.

Traffic Impact Study Riverwalk Casino recommends:

- Modify the signal timing, to allow for increased cycle lengths and adjustments for weekday PM peak and Saturday peak.
- Modify the lane configuration at the intersections of Columbus Boulevard and Spring Garden Street and Columbus Boulevard and Noble Street.

TrumpStreet Casino

Access

Highway

The area has a dense transportation network. Several interstate, state, and municipal roadways provide access and mobility to the area in which the facility is located. **Map A21: TrumpStreet Roadway Network** shows the highway network in the area. The following is a brief description of some of the main highways that influence circulation in the area.

I-76 and US 1 are the two major highways serving this area, though neither provides direct access to the site. Apart from these, a number of smaller roadways provide access and mobility in the area.

I-76 in the vicinity of the study area has four lanes in each direction, separated by a concrete median and has a speed limit of 55 miles per hour. It interchanges near the study area with US 1. Access to the TrumpStreet site from I-76 is via US 1.

US 1 in the vicinity of the study location has three lanes in each direction separated by a concrete median. It is a grade-separated highway in the study area. Access to the site from US 1 northbound is via Abbottsford, Wissahickon and Roberts Avenues and from southbound is via Fox Street and Roberts Avenue. The most recent site plan shows the main casino entrance will be on Fox Street.

There is a dense network of streets serving this region outside of the major highways. US 13 (Hunting Park Avenue) and Henry Avenue are two principal arterials adjacent to the proposed site. US 13 runs in a southwesterly direction from where it separates from US 1 north of the study area, traveling past the study location to Ridge Avenue, with connection to Kelly Drive. For the most part it is two lanes in each direction, expanding at intersections. Henry Avenue runs perpendicular to Hunting Park Avenue where it begins and travels to points west. Henry Avenue for the most part is two lanes in each direction with added turning lanes at intersections.

Germantown Avenue and Broad Street (PA 611) are also principal arterials in the vicinity of the study location. Both roadways run generally in a north-south direction and carry regional as well as local traffic to and from the City of Philadelphia.

Wissahickon Avenue, Roberts Avenue, Allegheny Avenue and Fox Street are minor arterials adjacent to the site. These roads are important contributors to access and mobility in this area. Roberts Avenue runs from Henry Street to Germantown Avenue and fronts the site. It is a two-lane roadway with one lane in each direction and additional turning lanes at intersections. Allegheny Avenue runs from the east of I-95 to Ridge Avenue. For the most part it has two lanes in each direction with additional intersection turning lanes. It forms a five-legged intersection with Hunting Park and Henry Avenues. Fox Street also fronts the proposed site. It runs from Schoolhouse Lane to Ridge Avenue in a north-south direction. It is a two-lane roadway with additional turn lanes at some intersections. Wissahickon Avenue has two lanes in each direction in the areas closest to the proposed site. It has an entrance ramp to US 1 southbound and exit

ramp to US 1 northbound. It runs from Hunting Park Avenue where it begins to points northwest. It becomes an urban collector after Lincoln Drive.

Mass Transit

SEPTA's R6 and R8 Regional Rail lines serve the area, but are not within easy walking distance from the proposed site. The R6 goes from 30th Street Station in Philadelphia to Elm Street in Norristown. On a weekday it operates from 5:43 a.m. until 12:26 a.m. Allegheny station, located at North 22nd Street and West Allegheny Avenue, is approximately a half mile from the casino. East Falls station, located at Midvale Avenue and Cresson Street, is approximately one mile from the casino, though pedestrians must cross US 1.

The R8 Line provides service between Chestnut Hill West, Center City Philadelphia, and Fox Chase. On a weekday, it operates from 5:49 a.m. until 12:06 a.m. The Queen Lane station, located at Queen Lane and Wissahickon Avenue, is a little over a mile away from the station, though pedestrians must cross US 1.

SEPTA bus routes operating around the proposed site are Route 32 between Roxborough and Center City; Route 1 between Northeast Philadelphia and the Wissahickon Transfer Center; Route R between the Wissahickon Transfer Center and the Frankford Transportation Center; Route 60 between Port Richmond and East Falls; and Routes H and HX between West Oak Lane and Tioga.

The 60 and R are part of SEPTA's "Owl" service network, operating 24 hours per day. Bus Route 1 operates 31 bus trips southbound and 27 northbound on weekdays between the hours of 5:11 a.m. and 1:08 a.m. On Saturdays on 12 trips operate each way while no Sunday service is provided. Route 32 operates 69 trips southbound and 77 northbound on weekdays between the hours of 5:15 a.m. and 3:08 a.m. On Saturdays, 48 bus trips southbound and 51 northbound operate between the hours of 5:15 a.m. and 1:50 a.m. while on Sunday there are on 29 bus trips in each direction between the hours of 6:06 a.m. and 1:50 a.m. The H and HX buses operate 130 buses southbound trips and 140 northbound trips on weekdays between the hours of 5:47 a.m. and 2:34 a.m. On Saturdays 87 buses southbound and 88 northbound operate between the hours of 5:44 a.m. and 2:34 a.m. while on Sunday 68 buses southbound and 69 northbound operate between the hours of 6:32 a.m. and 1:23 a.m. **Map A22: TrumpStreet Transit** shows the mass transit service in this area.

Bicycle and Pedestrian

Pedestrian facilities around the proposed site are available but may need some improvement, such as restriping crosswalks and fixing sidewalks. Some roadways have narrow shoulders which could allow limited bicycle travel.

According to the Bicycle Coalition of Greater Philadelphia's regional bicycle map, Fox Street, Allegheny Avenue, Ridge Avenue, and Hunting Park Avenue (US 13) all rated average for all bicycling conditions. Average roads are those that are moderately suitable for on-road cycling. Cyclists of lesser skill and experience riding in traffic may find conditions unfavorable. These cycling-condition ratings are determined using a combination of traffic volumes, roadway geometry, and field observations. Roberts Avenue and Henry Avenue were not rated.

Traffic

Traffic Counts

According to the Pennsylvania Department of Transportation's Bureau of Planning and Research, the 2005 Average Annual Daily Traffic (AADT) volume for I-76 was over 87,000 in each direction in this area. In 2004, Fox Street recorded AADT of 11,263 while Wissahickon Avenue recorded 16,492 vehicles in 2003. Additional AADTs are shown on **Map A23: TrumpStreet Traffic Counts**.

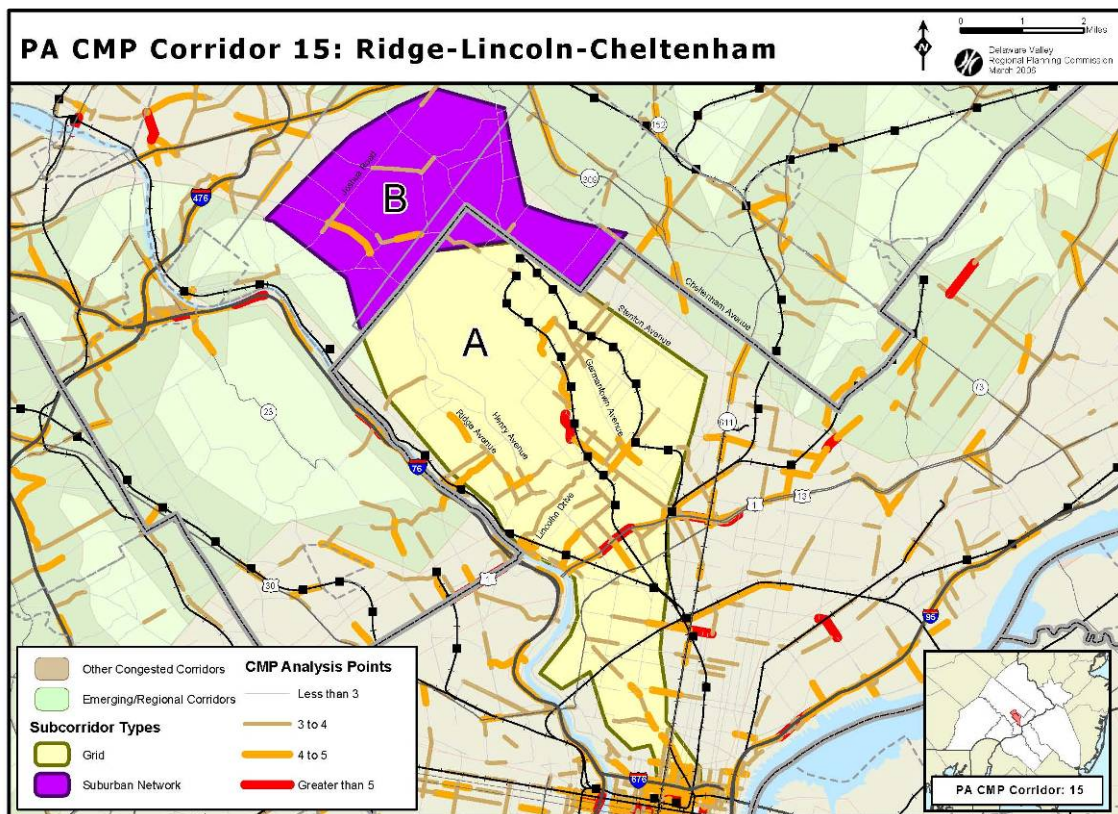
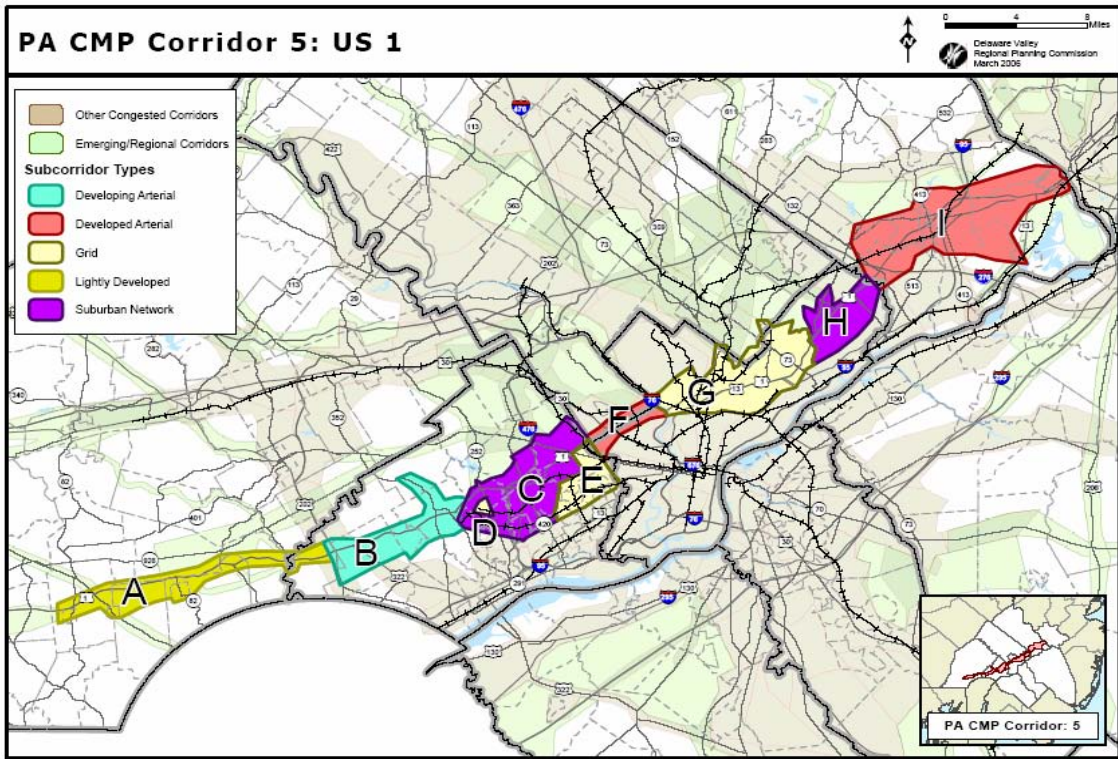
Safety

Map A24: TrumpStreet PENNDOT Crash Clusters uses PennDOT crash clusters data from 2000, 2001, and 2003. There are many crash clusters shown in the area of the proposed site. There is a concentration of clusters around intersections and highway interchanges. A number of fatalities are also associated with these clusters. The crash cluster on Clarissa Street has 183 crashes over the three-year period, including one fatality. Southbound US 1 had 111 crashes over the study period with four fatalities recorded. Hunting Park Avenue had a cluster with 123 crashes. Other clusters with fatalities are Henry Avenue with 52 crashes including two fatalities; Midvale Avenue with 24 crashes including two fatalities; and the Roberts Avenue cluster with one fatality.

Congestion Management Process

The site and its vicinity falls within three identified congested corridors: *PA Corridor 3: I-76 & I-676*; *PA Corridor 5: US 1*; and *PA Corridor 15: Ridge-Lincoln-Cheltenham* in the DVRPC CMP. These sub-corridor types are Freeway Junction, and Grid. As seen in the graphics for these corridors, surrounding these congested corridors are several other congested corridors as well as emerging/regional corridors. The figures show the area on US 1 adjacent to the proposed site has more than five of the analysis points whereas Wissahickon Avenue, Midvale Avenue and I-76 at the interchange with US 1 carries between three and four of the CMP analysis points. The CMP identifies strategies which are appropriate for alleviating congestion within the corridors.

Pennsylvania Congestion Management Process Corridors 5 and 15



See the document *DVRPC Congestion Management Process – Limiting Traffic Congestion and Achieving Regional Goals* for the sets of Very Appropriate and Secondary Appropriate strategies to address congestion in the sub-corridor types Freeway Junction and Grid. These include: incident management, integrated corridor management (ITS), interregional transportation coordination, general purpose lanes, major reconstruction with minor capacity change, enhanced transit amenities and safety; intelligent transit stops, computerized traffic signals, community friendly transportation policies, and inter-modal enhancements.

Future Projects

Several projects are currently programmed on DVRPC's FY2007 Transportation Improvement Program (TIP) for FY2007-2010 that have the potential to affect access and mobility in the specific study area. The TIP operates on a federal fiscal year which starts on October 1 and ends on September 30. For example, the first day of FY2007 is October 1, 2006, ending on September 30, 2007. Funding programmed in a particular year of the TIP indicates that a phase is expected to advance sometime during that fiscal year, and does not reflect if that phase has begun or if it is complete.

MPMS# 70247: Henry Avenue Congested Corridor Improvement project aims to reduce peak hour delay on the improved corridor by 20 percent. The corridor is Henry Avenue from US13 (Hunting Park Avenue) to Ridge Avenue to Ayrdale Road. This project was studied under the PENNDOT Congested Corridors Program.

MPMS# 17350: Henry Avenue Bridge over Wissahickon Creek Bridge Rehabilitation project will address the existing bridge structure and related work. Construction on this project is scheduled for FY2007.

MPMS# 69915: Roosevelt Expressway (Twin Bridge) over Schuylkill River project will address parapet work and minor rehabilitation to the bridge will take place. Final design, utility, and right-of-way phases are scheduled for this project in FY2008.

MPMS# 17817: Henry Avenue Bridge over SEPTA's R6 Regional Rail line project will address bridge rehabilitation of the existing structure and related work. This project is scheduled for the construction phase in FY2008 and FY2009.

MPMS# 69664: Clarissa Street Bridge over Conrail project includes the replacement of the existing bridge. This project is scheduled for final design in FY2008 with utility and right of way phases in FY2009.

MPMS# 17796: PA 611, Broad Street at I-95 (Signals) Vine Street to Olney Avenue project will include arterial improvements related to I-95. This project involves upgrading and interconnecting the traffic signals for approximately 37 intersections within the project limits. The improvement is intended to help accommodate the additional traffic that is anticipated during the rehabilitation of I-95. Construction on this project is scheduled for FY2007 and FY2008.

MPMS# 48185: Intelligent Transportation System (ITS) for Schuylkill Expressway project will improve safety and mitigate traffic congestion for motorists along the Schuylkill Expressway corridor, through the strategic deployment of advanced technologies and enhanced inter-agency coordination. An integrated traffic management/traveler information system will be developed to facilitate the coordination

of traffic and enhance public safety through reliable incident information along the Schuylkill Expressway and Route 1 corridor. Construction for this project has been scheduled for FY2007, FY2008 and FY2009.

MPMS# 50931: 1-76 / US 1 Bridges project will provide for the replacement of 5 structures that form a series of loop ramps and bridges known as the Gustine Lake Interchange, which carries and connects several avenues and drives to each other and to the nearby Schuylkill Expressway (Interstate 76) and the Roosevelt Expressway (US Route 1), both located on the opposite side of the Schuylkill River. The interchange is located within the boundaries of Fairmount Park. Final design, utility, and right-of-way phases are scheduled for this project in FY2007. Construction phases are scheduled for FY2008, FY2009, FY2010 and later years.

Impacts

Trump Casino at the Former Budd Plant Site – Traffic Impact Study, prepared by consultant Vollmer Associates, concluded that 1,226 trips will be generated during the weekday PM peak hour and 1,906 trips during the Saturday peak hour. Forty percent of the trips generated will use the regional roadway network for access and egress. The weekday peak hour coincides with the regular commuting peak and the regional roadways (US 1 and I-76) are already congested as documented by the DVRPC CMP.

The greatest transportation impact from the facility will be to the local communities and infrastructure. As noted earlier there are problems with congestion and safety on local roadways in the area, and with additional traffic the problems will be exacerbated. Traffic accessing the facility will have to traverse local streets, some of which are residential. Additionally, forty-five percent of the site-generated traffic will be using the local street (Hunting Park Avenue, Roberts Avenue, Henry Avenue, Wissahickon Avenue, Fox Street, and Allegheny Avenue) network.

Impact Report Recommendations

Trump Casino at the Former Budd Plant Site – Traffic Impact Study recommends:

- Improve the operation and safety of the Allegheny Avenue/Hunting Park Avenue/30th Street/Henry Avenue intersection.
- Consider traffic signals at site entrances.
- Improve several other intersections with revised signal timings, protected permitted left turn phase, and addition of turning lanes.
- Relocate US 1 southbound ramp to provide additional storage on the ramp to prevent queuing on the mainline.
- Modify the slip ramp from US 1 northbound to Abbottsford Avenue to provide a direct connection to Stokley Street for a more direct connection to the site, reducing the traffic impact on residences on Roberts Avenue. *TrumpStreet has since announced that primary access will be from Fox Street not Roberts Avenue, which will have fewer impacts on the residences on Roberts Avenue.*

Transportation Recommendations

Following are a variety of recommendations that municipalities can implement to plan for the arrival of large gaming facilities. Some recommendations are general, while others are quite specific to the particular casino proposal and location. The highest level of specificity was attempted to provide the greatest benefit.

Bensalem:

1. Apply traffic calming techniques to the entrance driveways at Philadelphia Park. This would ensure slower speeds and a safer environment for all users, especially pedestrians.
2. Provide efficient and frequent mass transit to Philadelphia Park. This is especially important for both current and potential employees to access available jobs. SEPTA, the TMA, and casino management need to coordinate to provide equitable mass transportation services (bus, train, shuttle service) to those who depend on it for mobility. The TMA should consider extending RUSH service for SEPTA R7 commuters.
3. An overall “road diet” should be considered for Street Road, by reducing the overall width of the travel-way, especially in those areas where the roadway is six lanes wide. Street Road would be converted into a boulevard, with a landscaped median, sidewalks, crosswalks, bike lanes, street furniture, a narrower travel-way, and fewer lanes. Excess right-of-way can be used for wider sidewalks and bike lanes. The boulevard design will calm traffic by encouraging slower speeds, thereby making the road safer for all users. The median will serve as a refuge for pedestrians who cannot cross multiple lanes of traffic at once. Adding pedestrian and bike infrastructure will help “complete the street” for all users. This context-sensitive design solution treats Street Road as a destination rather than just a through route. Traffic operations and capacity must be considered fully before implementing lane reduction measures. This would be a long-term project of PENNDOT.

Street Road at the Entrance to Philadelphia Park, and Rendering of Street Road as a Proposed Boulevard, showing “Complete Streets” Concept



Chester:

4. Provide gates and appropriate signals at the Morton Avenue rail crossing in Chester, for the Harrah's Chester Racetrack and Casino, to prevent motorists from entering the tracks when there are oncoming trains.

Melrose Avenue Under Conrail Tracks



5. Investigate setting lower speed limit on Melrose Avenue near Harrah's Chester, given the geometry of the street, and apply traffic calming techniques to aid in enforcing speeds. The proposed visitor's main entrance is from Melrose Avenue, a grade-separated road traveling under the Conrail tracks. The underpass has supports for the railroad tracks that restrict any widening of the roadway, and have the potential to become a safety hazard for motorists. Place height restriction sign for Melrose Avenue on PA 291 in advance. Also, address drainage issues on Melrose Avenue, as there is an existing problem.
6. Investigate the use of 4th Street via Eddystone Avenue as an alternate access route to Harrah's Chester. It is noted that Eddystone Borough opposes use of this street for any casino traffic at this time; however, opportunities exist for this street to be used for access to this facility under special circumstances.
7. Direct southbound I-95 traffic to use PA 291 from Exit 8 (Ridley Park) at Stewart Avenue to access Harrah's Chester. This will relieve congestion on I-95 and decrease the number of additional conflicting movements at the I-95/I-476 junction. PA 291 currently has the capacity for the efficient movement of additional traffic.

Limerick:

8. Consider a full cloverleaf interchange at US 422/Evergreen Road in Limerick Township near the Limerick Casino. This would eliminate left turns entering and exiting US 422 to Evergreen Road.
9. Evaluate the proximity of the proposed Lightcap Road/Evergreen Road intersection and US 422 eastbound entrance ramp near the Limerick Casino. There may be conflicts with turning movements and queuing.

Impacts of Gaming in Greater Philadelphia

10. Consider traffic signal warrants for the proposed Evergreen Road/Lightcap Road extension intersection near the Limerick Casino.
11. Provide efficient and frequent transit service to the Limerick Casino. SEPTA, the TMA and the developer should work together to provide shuttle services from existing bus and rail stations, and the diversion of the existing bus route to serve the facility. Special consideration should be given to potential employees who are transit dependent.

Philadelphia:

12. Improve the flow of traffic on South Columbus Boulevard in Philadelphia through signal coordination, longer left turn lanes, an access management plan, advance warning signs, and possible roadway capacity increases. South Columbus Boulevard currently experiences heavy traffic volumes. As traffic volumes increase, resulting in congestion, there will be a tendency for traffic accessing this area to use the adjacent smaller local residential streets. This could potentially have a negative impact on these stable and redeveloping neighborhoods near Foxwoods.
13. Improve transit frequency and options along all of Columbus Boulevard (north and south) in Philadelphia through a possible dedicated bus lane or rail option (such as the possible PATCO extension), greater frequency of existing bus routes, improvements to bus shelters and overall transit infrastructure. These improvements could serve whichever casinos are licensed on Columbus Boulevard.
14. Improve pedestrian and bicycle facilities along all of Columbus Boulevard through bike lanes, wider and/or improved sidewalks, longer pedestrian crossing cycles on traffic signals, bike parking, and other infrastructure or signage elements to make these trips safer and more pleasant.

Dyott Street and North Columbus Boulevard Intersection



15. Consider reconfiguring the intersection of Dyott Street and North Columbus Boulevard near the Pinnacle site. The intersection is skewed, and motorists entering North Columbus Boulevard from Dyott Street will have trouble seeing oncoming

traffic. With additional traffic generated by Pinnacle, there could be a safety problem at this intersection.

16. Consider realigning Frankford Avenue to meet North Columbus Boulevard at a right angle. The current geometry of this intersection makes the left turn movement from eastbound Frankford Avenue to northbound Columbus Boulevard difficult.
17. Consider directing southbound I-95 traffic to the Callowhill Street exit. Callowhill Street eastbound provides direct one-way access to North Columbus Boulevard, unlike the current Girard Avenue exit. The intersection of Callowhill Street and North Columbus Boulevard also has a traffic signal. This could be an interim measure until the reconfigured Girard Avenue exit is complete.
18. Implement traffic calming techniques in the vicinity of TrumpStreet, to prevent cut-through traffic and speeding in adjacent neighborhoods.
19. Improve bicycle and pedestrian facilities in the TrumpStreet area, especially given the high school located adjacent to the site.
20. Improve timing and coordination between traffic signals at the Fox Street off-ramp from southbound US 1 and signals on Fox Street and Abbottsford Avenue, to accommodate increases in overall traffic near TrumpStreet, and to prevent queuing on the US 1 southbound mainline.
21. Consider modifying the access and egress to US 1 near TrumpStreet. Traffic exiting northbound US 1, as well as traffic along Abbottsford Avenue (both through and exiting to US 1 northbound) is in constant conflict due to the short distance between the exit and entrance ramps for US 1 and the speeds of traffic exiting the highway. Modifying the access points here is especially difficult because the area is well developed and US 1 is below-grade at this point.
22. Direct automobile traffic from northbound US 1 to TrumpStreet to use the Roberts Avenue interchange. This will potentially result in local traffic impacts but not exacerbate the conflicts at the Wissahickon Avenue interchange.
23. Provide efficient and reliable transit service to TrumpStreet. SEPTA, the TMA and the developer should work together. This service could include shuttle services from nearby bus and rail stations and downtown hotels. Special consideration should be given to potential employees who are transit-dependent.

General:

24. Improve streetscapes surrounding all the casinos, through improved lighting, sidewalks, street furniture, paving, and signage. Funding may be possible through the casino, DVRPC's Congestion Management Air Quality (CMAQ) or Transportation Enhancement (TE) grants, or some combination of both. Casinos should bear the brunt of financing public improvements surrounding their facilities.
25. Require or strongly incentivize the use of structured parking over surface parking at all casino sites. Structured parking uses less land and creates a more walkable environment near the facilities. Ensure structured parking will be built in later phases if not built in phase one or with a temporary casino facility.

26. Encourage or require Philadelphia casino developers to dedicate several parking spaces to the PhillyCarShare program, which would be quite useful for area residents and casino employees. Likewise, provide casino employees with bike parking, on-site showers, TransitChek vouchers, and/or other transportation demand management (TDM) measures.

Conclusion

Whereas the individual traffic impacts to the interstate system may not be significant given the trips generated, the collective impact is uncertain, but has the potential to increase congestion in the region and elevate safety risks. Like the degree of impact, the geographical extent of the impact cannot be accurately assessed.

The local roadways will bear the brunt of the impacts. Although some are better than others, none of the casinos have direct access to the regional roadway network. Local roads have to be used to access the sites. It is imperative that the increased traffic flow through established residential neighborhoods be mitigated, for accessibility and safety concerns, particularly pedestrian safety.

A comprehensive regional transportation impact study should be conducted when the licenses are granted, and the exact locations of the facilities are known. This detailed study should include specific recommendations aimed at minimizing local and regional impacts resulting from the gaming facilities.

Chapter 4: Signage and Visual Quality Impacts

Outdoor signs are an integral part of the built environment. They perform many functions: telling drivers where to park or how fast they can drive; identifying names of streets, highways, cities and businesses; and advertising for new products and services. It is in the best interest of business to communicate their products or messages to the market, and signs are important for economic growth. Local and regional attractions and businesses should be well signed to direct tourists and residents to patronize these businesses. National and local companies should be able to advertise their wares. Governments need to be able to regulate traffic flow, parking, and wayfinding.

At the same time, signs can cause clutter and distract drivers. They can impact the visual quality of a community or corridor. As Scenic America, a national organization devoted to removing billboard blight, among other issues, states in their motto: “Change is inevitable. Ugliness is not.” While undoubtedly the gaming facilities will bring new and different types of signs into the region, these signs need not be “ugly” or a nuisance if certain best practices are followed. The affected communities must balance the need for economic growth with concerns over community aesthetics and traffic safety.

In this chapter, types of signs, regulations (such as local ordinances and billboard legislation), wayfinding, and signage impacts will be discussed.

Types of Signs

There are numerous types of advertising signs. Common classification systems based on location, duration, and content, are as follows:

Location:

- *Freestanding*: These are signs that are not attached to a building or structure other than their own support. Billboards are the main freestanding signs. Pole signs along highways are another common freestanding sign.
- *Building-Attached*: Any sign that is attached to a building or structure. Most signs fall into this category.

Duration:

- *Permanent*: Permanent signs are fixed in location to either the ground or to a building, and are intended to remain for a long period of time. Signs painted on buildings are also considered permanent.
- *Temporary*: Temporary signs are one of the more difficult categories to define and regulate. They include posters, banners, stickers on windows, pennants and inflatable balloons. Many have time-sensitive characteristics. Political and construction signs are also temporary.

Content:

- *Commercial/Advertising*: Commercial signs contain messages that are either logos or lettering that directly or indirectly advertise a commercial activity. Most signs in this category are typically advertisements for a business, service or product.

Impacts of Gaming in Greater Philadelphia

- *Non-Commercial:* Non-commercial signs include address and historical markers, government flags, and political signs, among many others. Regulatory signs, such as a speed limit or a no parking sign, warning signs informing of hazards like a rail crossing or falling rocks, and guide or wayfinding signs that illustrate distances, places, and destinations, are all examples of non-commercial signs.
- *On-Site:* Specific type of sign content portraying information found at that location, such as the businesses name or logo.
- *Off-Site:* Content advertises information that is not found at another location or venue. Traditional billboards with advertising campaigns fall into this category, as do some wallwraps and street furniture.

Temporary, Non-Commercial Sign & Freestanding, Commercial, Off-Site Sign



Building-Attached and On-site Advertising Signs



Billboards are just one sign type, and can usually be classified as an off-site sign as well as a freestanding sign. Many signs can be classified as several different types, depending on location, duration, and content. For example, the “Golden Arches” of McDonald’s is a permanent sign, as it will be up as long as that store is in business (or longer), and a freestanding sign as it is not attached to the actual building, and a commercial sign. This sign also qualifies as an on-site sign, as the advertising is for this specific business at this location.

There are numerous specific types of signs that may or may not be regulated, including pole signs, ground signs, wall signs, roof signs, canopy and awning signs, projecting signs, suspended signs, marquee signs, and window/door signs.

Current Trends in Sign Design

Marketing companies are constantly finding new ways and places to advertise. Like zoning codes, sign ordinances need to be updated to include current trends in new sign types, such as those on-site and off-site signs listed below.

Transit Shelter and Bench Signs: Recently, several outdoor advertising companies have started a program where they will erect transit shelters and benches in a municipality. In return, the municipality will permit advertising on the outdoor furniture.

Variable Message Signs: These signs contain LED lights capable of changing a message. Some of these signs are static while others can have animated images. Some examples include signs with the time and temperature, or a stock market report.

Wallscape/Wallwraps: These signs are very large building wraps, where the sign is made from a cloth-like material. They are attached to a wall of a building and may be as large as the building itself. These signs can function as either an off-site billboard or an on-site sign.

Transit Shelter, Variable Message, Wallscape and Digital Video Signs



Rotary Billboards: These billboards act like regular billboards in size and function, but gain an advantage in providing several interchangeable sign faces. One sign face will slide or rotate to reveal another one at a given rate, usually one or more times per minute. Advertising companies find these signs advantageous, as they can have several contracts for one location.

Digital Video Display: Similar to other billboards in size and content, these signs are the next step up from a Rotary Sign. These signs have a digital face similar to a television screen, and the sign face can change messages or images as often as the company wishes. Images can also be static or moving, or even feature a full-length video. Images are loaded onto a computer, and changes can easily be made to the image rotation, a much easier process than manually changing a sign face. The number of contracts here are limitless, and companies can target display different ads at different times of the day. Digital signs can be distracting to drivers, and they often are as large as a billboard. Some digital billboards can also download their advertisement or even video game to cell phones traveling by the billboard.

Billboards

Traditionally, billboards are free standing, off-site advertising signs. Billboards today tend to be either 30-sheet posters (10.5 x 22.8 feet), eight-sheet posters (5 x 11 feet), or bulletins (14 x 48 feet). Most structures that support billboards today are metal, as opposed to older wooden materials. Sign faces can exist on both sides of the structure, therefore permitting two billboard faces per structure, while some billboard structures have two double-sided faces. As previously mentioned, newer types of billboards include rotary billboards and digital video displays.

Regulations: Local Sign Ordinances

Each and every community has different needs when it comes to regulating signs. What is appropriate for the Las Vegas strip and Times Square would be out of context in smaller towns and rural locations. Philadelphia has different needs than West Chester or Cherry Hill. Looking even closer, Center City Philadelphia, the areas around I-95, and residential neighborhoods all have different needs at specific locations.

As governments can regulate and enforce zoning, so too can they enforce sign regulations under the police power. The police power must advance the health, safety, and general welfare for the public while advancing the public interest. Sign regulations are challenged under two separate constitutional issues. As they are a form of communication, they are protected as free speech under the First Amendment. At the same time, they are a form of property and can be challenged as a 'taking' under the Fifth Amendment.

All courts hear sign cases, from the local level to the United States Supreme Court. Regulations that can cite clear correlations with safety and aesthetics tend to hold up better in court than regulations that prohibit specific content. Aesthetic challenges can become more difficult as that particular issue is subjective. The challenge for municipalities is to draft an ordinance that regulates signs for the good of the public while upholding the rights of an individual sign owner.

Sign regulation is controlled at the local level through a single sign ordinance, or can be located in various sections of a zoning code. The local ordinance is much more detailed than national and state signage laws, and sets regulations for all types of signs including billboards.

In general, the local sign ordinance is similar to a land development ordinance or a zoning ordinance, as it specifically outlines what types of signs are permitted and where. Dimensions are usually included in the ordinance, such as height and size, along with content, color, lettering size, lighting, and movement. The ordinance may designate some signs to be permitted only as a conditional use, or not at all. Permits and associated fees may be required for some signs. Finally, the ordinance may describe how signs that are not conforming, not functioning, or out of date should be removed. Some communities regulate content, or what types of messages can be placed on signs. Content regulations are one of the most important obstacles in defending a local ordinance and will be discussed further.

The strength of a local sign ordinance rests on its ability to legally regulate all types of signs, enforce signs that are not in compliance with the ordinance, and adapt to new types of signs that may arise over time.

Billboards can be easily regulated, and most sign ordinances have a specific section devoted to billboards. Many sign ordinances differentiate between off-site and on-site advertising signs, but several problems may arise with this language. Political and personal belief signs may be considered an off-site sign, as these signs can advertise for something that is not found at that location. Conversely, on-site advertising signs traditionally used by highway-oriented commercial businesses can be very large themselves, almost the same size as billboards. The more appropriate distinctions should be made between *freestanding signs* and *building-attached signs*.

Many ordinances will have separate content-based distinctions for off-site versus on-site signs such as construction signs, real estate signs, gas price signs, yard sale signs, logo signs, and directional signs. Any content-based distinction will increase the difficulty of defending the ordinance. It is important that a sign ordinance be content-neutral. Types of signs can be restricted or banned all together, but the actual content should not be discussed.

The American Planning Association (APA) recommends the following rules when analyzing a sign ordinance for content:

- 1) Non-commercial speech has greater protection than commercial speech.
- 2) Distinctions between off-premise and on-premise messages are permitted.
- 3) Sign permitting systems must have objective standards and firm time-limits for decisions.
- 4) Exceptions are risky.

Sign Permits

One method of regulating signs is requiring a permit. Permits are issued when certain signs are erected, and then renewed on an annual basis. Ordinances can permit some signs to be allowed with a permit and some allowed without a permit, while others would not be allowed at all. Non-commercial message signs, address signs, and flags are examples of signs without permits. A window sign, banner, or a rotating sign might need a permit. Just like zoning, certain kinds of signs can be permitted in one area but not permitted in another. Residential areas and locations with more pedestrians can permit more or fewer types of signs depending on the area's character. Sign specifications can therefore correspond to specific zones in a zoning code. Institutions like schools should not have their own school sign ordinance, but institutional zones or buildings could rather have bonuses for size and illumination of school signs. Spinning, rotating, flashing, changing, animated, or video display signs should have permits. Banning these signs outright may cause difficulty if the ordinance can not link them to definite safety or aesthetic concerns, but they can be confined to certain zones in a town. Permit fees are used to fund sign enforcement.

Sign Enforcement

A sign ordinance is only effective if the community has the power to enforce the provisions in the code. While zoning enforcement is tied to the permitting process, there are many signs that do not need to be permitted. The more complex the sign ordinance, the more difficult it is to regulate. To mitigate this issue, the sign ordinance should be easy to interpret by the individual and simple to administer. Staff should be hired to approve the permits and enforce the ordinance. Permit fees should go towards the administration costs. This permitting process can be incorporated into general business license processes and forms.

Sign Removal

Signs that do not fit into the existing sign ordinance are considered non-conforming, and appropriate measures should be taken to remove them.

Several methods exist for removal and control of billboards. One method frequently used is to pass a temporary moratorium on new billboard construction. Another option is to cap the number of billboards allowed in the municipality, using the permitting process, and then only allow new billboards to be erected if an older one, or one in a less desirable

market, is removed. Other methods employed with success include raising annual billboard permit fees, and establishing protected areas, such as historic districts, where billboards are not allowed.

Removal of traditional off-site advertising signs (billboards) on federally aided highways is more difficult. Under current Pennsylvania legislation, the only permissible way to remove a billboard is through compensation. While this method is costly for municipalities, Transportation Enhancement (TE) federal funds, administered through DVRPC, may be used. Amortization, or the forced removal of a sign within a period of time, was previously permitted. While this method of sign removal is effective in other parts of the country for removing signs on other roadways, it is currently not legally authorized in Pennsylvania.

Working with land owners may also yield beneficial results. If a property owner does not renew their lease with an advertising company, then that sign can be removed without compensation.

City of Philadelphia's Sign Regulations

The local sign ordinance for the City of Philadelphia is found in several places within the City's Code. Each zoning district contains a sign section describing type, height, size, illumination, projection, and permits required. Overlay districts contain additional sign regulations, and regulated uses have stricter sign requirements. Fewer sign types are permitted in residential districts than in commercial districts, but the types and regulations are fairly uniform throughout residential districts. Commercial and industrial districts vary with types permitted and regulations on size, height and illumination. Outdoor advertising signs are only permitted in G-1 General Industrial, G-2 General Industrial, LR Least Restrictive Industrial, and PI Port Industrial districts.

In terms of on-site advertising, Foxwoods, located in a C-3 Commercial District, has the most signage restrictions, not permitting revolving signs or flashing signs. SugarHouse, Pinnacle, and TrumpStreet are located in G-2 zones, where sign areas can be slightly larger, flashing signs are permitted with certain limitations, while revolving signs are permitted with a certificate from the Zoning Board of Adjustment. Riverwalk Casino is located in the LR District, where the sign regulations are similar to the G-2 district.

The City of Philadelphia has enacted a new zoning district, the Commercial Entertainment District (CED), which will replace the existing zoning for the land where the gaming facilities will be built. New signage regulations in the CED include:

- Lots facing the street are permitted between two and five square feet of sign area for every lineal foot of street line, depending on the number of street lines.
- Non-accessory or outdoor advertising signs are not permitted.
- Freestanding signs can not exceed 40 feet in height.
- Signs can be illuminated or animated, but cannot be within 150 feet of a residential district or face within 300 feet of a residential district.
- Revolving signs that cause intermittent flashes of light are not permitted.

The following signs are allowed with permission from the Art Commission:

- Freestanding accessory signs, not to exceed 50 feet in height; two sign faces are permitted, not to exceed 1,200 square feet.

- One additional freestanding sign is permitted for each 80,000 square feet of district area.

Outdoor advertising signs (commercial, non-accessory signs) have their own section in the Philadelphia City Code. Outdoor advertising signs must be spaced with a minimum of 500 feet between them; can be no more than 25 feet from the road surface; and the sign top can be no more than 25 feet from the bottom sign edge. Sign area is dependent upon roadway width. For roads less than sixty feet wide, a sign's area may be no more than 1,000 square feet. For roads over 60 feet wide, a sign's area may be no more than 1,500 square feet. Billboards are not permitted within 660 feet from several specific locations, including: any I-95 or I-76 ingress or egress ramps; any public or private school; any park under the jurisdiction of the Fairmount Park Commission, the Commonwealth of Pennsylvania, or the National Park Service; or any park, playground, recreation center, play lot or other recreational facility under the jurisdiction of the City Department of Recreation. Other areas where billboards are not permitted relevant to the gaming facility locations are:

- Between South Sixth Street and South Columbus Boulevard from South Street to Washington Avenue
- Within 660 feet of the outer edge of the right-of-way lines as defined by the Department of Streets, of I-95 between Washington Avenue and Oregon Avenue
- Within 660 feet of the outer edge of the right-of-way lines as defined by the Department of Streets, of Roosevelt Boulevard/US 1
- Within any area of the City designated as a local or national Historic District

In August 2006, an agreement between the City of Philadelphia and Clear Channel Outdoor Inc., CBS Outdoor Inc., and HA Steen Industries Inc., resulted in changing the billboard fee structure. Under this agreement, Clear Channel and other companies agreed to pay \$350,000 to remove 900 non-conforming smaller eight-sheet billboards that are owned by another company, PNE Media LLC. Under the agreement, the City of Philadelphia will lower the annual fee of \$650 per sign face to \$300 this year, \$125 for 2007 and 2008, and then \$50 for 2009 through 2013. Permits for new billboards are only available if an existing billboard is removed of equal or greater size, thus limiting the number of billboards in the city. Accessory sign permits are currently \$100 per sign.

City of Chester's Sign Regulations

The City of Chester's sign ordinance is contained in Article 1373 of their City Code, and covers all sign types. It covers signs allowed with and without a permit and in which zoning districts, regulations for outdoor advertising signs, and permit fees. It is condensed and very user friendly.

Several signs do not require a permit, including address or owner signs, government safety signs, many temporary signs (including political, free expression, contractor, real estate, yard sale or garage sale signs). The ordinance does regulate the number and size permitted for each type.

Signs requiring a permit are listed by zoning district, which lists the sign type, size and number. Any sign permitted in residential zones is also permitted in a commercial zone, just as signs permitted in commercial zones are also permitted in industrial zones. More signs are permitted in each successive higher intensity use. Spinning, flashing or

blinking signs are not permitted in the city, nor are animated signs. Most illuminated signs must be turned off one half hour after the closing of the related business. No more than two off-premise signs are permitted per use or development.

Outdoor advertising signs, such as billboards, are only permitted as a special exception and can be located only in industrial zones. Their area can not be greater than 300 square feet and must have at least a 15-foot setback from the right-of-way or property line. The height can not be higher than thirty feet from the ground to the bottom of the sign. Outdoor advertising signs must be spaced fifty feet from other outdoor advertising signs, while no sign exceeding 300 square feet can be within 3,000 feet of another 300 square-foot sign.

Harrah's Chester is located in the Waterfront Overlay District (WOD), and the original zoning is industrial. As there are no additional signage regulations in the WOD overlay, on-site advertising would be regulated by signs permitted in industrial zones. Identification signs can only be 25 square feet and only one sign per street.

Business engaging in outdoor advertising must pay a business license fee of \$100, plus file a \$10,000 bond with the City of Chester. Permit fees are based on construction value, at a \$5.00 fee for each \$1,000 worth of construction value, up to \$1 million, and then \$1 for each additional \$1,000. There is a \$10 fee for each billboard, sign board or wall bulletin.

Bensalem Township's Sign Regulations

Bensalem Township's sign ordinance is more detailed than the City of Chester's. Many more sign types are prohibited, including banners, pennants, flashing and animated signs. Signs can not be placed on trees or utility poles. Pornographic images on signs are not permitted. Signs that attempt to direct traffic, resemble any official traffic signal or sign, or have green or red illumination are not permitted within 75 feet of a right-of-way or 200 feet from a traffic control signal.

Bensalem organizes signs into temporary and permanent categories. Each lot can have only one temporary sign, with content relating to real estate, mechanics, artisans, subdivision development, political and promotions/special events. Signs are also regulated by type in each zoning district. Height for freestanding signs, not including outdoor advertising signs, varies depending on the zoning district.

Outdoor advertising signs, such as billboards, are only permitted in Highway Commercial (H-C) zones. They can not be within 100 feet of the right-of-way or any other lot line, and can not be with 500 feet of a residential lot. Spacing between outdoor advertising signs can not be less than 1,000 feet. Sign area can not be greater than 160 square feet on each side while height, measured from the ground to the highest point on the sign, can not be more than 20 feet.

The Convention Stadium District zoning district, where Philadelphia Park is located, regulates signs similar to a commercial zone, with no additional regulations. Outdoor advertising signs are not permitted in this district, but on-site advertising signs in the form of freestanding or fascia signs are permitted.

Some signs require a permit, and multiple types of permits exist. For initial permanent signs, non-electric signs are \$85 while electric signs are \$125. Annual permanent

renewals range between \$25 to \$75 depending on the size and type. Any sign over 100 square feet is charged \$35 per additional 100 square feet.

Limerick Township’s Sign Regulations

Limerick has a self-contained sign ordinance. It is easy to read, clearly defines which signs are permitted in each zone, as well as the number allowed per lot or street face, and the size and height of such signs. In comparison to the other municipalities in this study, Limerick’s sign ordinance is the most progressive and up to date. Freestanding signs have to be set back at least ten feet from the roadway, and building-attached signs cannot be taller than the building’s cornice. While political signs are included as a sign category under temporary signs, the ordinance does not include a time provision for erection and removal of such signs. Multi-tenant properties have additional sign regulations depending on the specific land use, such as a shopping center or industrial park. The Village Commercial zoning district also requires a sign review for all signs greater than ten square feet.

Off-premise signs are only permitted in Highway Industrial and Limited Light Industrial zoning districts. Maximum sign area is 300 square feet and maximum height is 25 feet above ground level. Off-premise signs must be at least 500 feet from any residential district and be at least 1,000 feet from any other off-premise signs. Two sign faces are permitted per sign pole, but only if they are back to back.

Signs in the Limited Light Industrial zoning district, where the Limerick Casino would be located, fall under the commercial, office, and industrial district sign provisions, as well as the multi-tenant sign regulations. A maximum of 300 square feet is permitted per street frontage, to be divided between identification signs, wall signs, and window signs. Freestanding signs can not be taller than 25 feet and can up to 75 square feet. Wall signs can not exceeded twenty percent of the building face, up to a maximum of 250 square feet.

Permits are required for all signs, except temporary signs smaller than six square feet, residential nameplates, incidental signs smaller than four square feet, official signs, and “No Trespassing” signs. Fees are based on the size of the sign. The fee for signs up to 20 square feet is \$30.00, with every additional square foot priced at \$1.25 each.

Regulations: Billboard Legislation

Legislation targeted specifically at billboards has existed for almost 100 years. Governments are interested in billboards because of traffic safety and aesthetic concerns. Billboards are a use, not of private property, but of the public road. Regulations are therefore determined by the type of road (or road class) that the billboard is located on. Though billboards are primarily a state and local concern, the federal government does set minimum signage standards for Interstate, Federal-aid primary highway, and National Highway Systems roadways that a state or local sign ordinance must meet. In turn, states can also have stricter (but not weaker) regulations for Interstate, Federal-aid primary highways, and National Highways than the federal government, while also setting minimum standards for state roadways that local ordinances must meet. Local governments can set stricter standards for those federal highways mentioned above, but these cannot be weaker than any state standards and can set any sign standards on local roadways. Local billboard regulation is located either in a separate sign ordinance or within the larger zoning code.

In 1995, Scenic America reported that the Commonwealth of Pennsylvania contained 14,127 permitted billboard structures, ranking fifth out of all the states in the nation for number of billboards. This averages out to be 12.4 billboard structures for every ten miles of federal-aided highways.

Many court cases have been introduced for the removal, limitation, or content of billboards on one side while protecting property rights and free speech on the other. Early cases include *Thomas Cusack Company v. City of Chicago*, 242 US526 (1917), which upheld the city's valid use of its police power in requiring residential majority consent before a billboard can be erected, while *St. Louis Poster v. City of St. Louis*, 249 US 269 (1919), upheld the regulation of billboards as their own sign class, as well as prohibiting them in residential neighborhoods.

Billboard regulation begins at the national level with the Bonus Act in 1958 and the Highway Beautification Act (HBA) of 1965. The HBA was aimed at prohibiting new construction of billboards on scenic and rural federal-aid highways, including interstates and national highways, and to require the removal of those that are non-conforming. A line of 660 feet from the right-of-way was established, dictating the types of signs that can be erected within or beyond the line.

After HBA was passed, states began passing their own laws supporting this bill and providing further guidance, which can be stricter, but can not be weaker than the federal law. The Outdoor Advertising Control Act (Act 160) was passed in Pennsylvania in 1971, providing guidance for both federally funded and state roads, and is based on the provisions in the HBA. It does not, however, regulate signs on local roads. For clarification, Act 160 is only applicable in the 660 foot control zone along interstates and designated state highways that are designated as controlled roads. The Pennsylvania Department of Transportation (PennDOT) is responsible for enforcing highway sign regulation under Title 67, Chapter 445 of Act 160.

Act 160 regulates sign type, location, spacing between other signs, and lighting. Under Act 160, all non-official signs are prohibited within the highway right-of-way. Other signs within 660 feet of the nearest edge of the road right-of-way are regulated, particularly placing limits on advertising signs. Official signs, sale or lease of property

signs, on-site advertising, and directional signs within 660 feet of the roadway have fewer restrictions.

An important Act 160 provision permits outdoor advertising to occur in zoned or unzoned commercial or industrial areas along the roadway, thus allowing for localities to control where billboards are permitted in their municipality. This act also includes sign control beyond 660 feet of the right-of-way in non-urban areas, thereby preserving the scenic quality of the state's more rural landscapes. Pittsburgh and Philadelphia are exempt from size and spacing requirements in Act 160. These two cities can not violate the restriction to limit billboards along controlled roads to areas zoned commercial and industrial, as that remains a Highway Beautification Act requirement.

Until 1978, communities could choose how to remove the non-conforming billboards, but in 1978 guidance was issued mandating cash compensation for removal.

One of most important cases in sign law is *Metromedia v. City of San Diego*, heard by the United States Supreme Court in 1981. This ruling overturned San Diego's sign ordinance, which permitted different content in off-premise versus on-premise signs. The Supreme Court found that San Diego, by restricting content in off-premise signs, was greatly limiting non-commercial speech signs.

Under the Public Health Cigarette Smoking Act of 1971, all cigarette ads on television and radio were banned, thrusting the tobacco industry fully into magazines and outdoor advertising, such as billboards. By 1999, however, cigarette advertisements were prohibited from billboards.

To further protect scenic, historical, recreational, cultural, natural and archaeological characteristics along many of America's roadways, the National Scenic Byways Program was created as part of the Intermodal Surface Transportation Efficiency Act (ISTEA), adopted in 1991. This program designates 126 Scenic Byways and All-American roads, making them eligible for additional federal preservation and enhancement funds. The act does not permit outdoor advertising signs along the designated scenic roadway except for on-site advertising signs, effectively eliminating billboards. To be included in the national program, the roadway must first be part of a state's Scenic Byway Program. Pennsylvania is home to two National Scenic Byways, both located in the western part of the state, and twelve additional State Scenic Byways. Pennsylvania State Scenic byways in the Delaware Valley include Interstate 476 (the Blue Route) in Delaware County, Route 30 Exton Bypass in Chester County, and Route 52 and 162 (the Brandywine Valley Scenic Byway) in Chester and Delaware counties.

Sign regulations are regularly challenged in court, and sign case law is extensive. Two modern court cases are used today as the test for most constitutional free speech challenges. *Central Hudson Gas and Electric v. Public Service Commission*, 447, US 557 (1980) contains the four-part test for constitutional restrictions on free speech. They are:

- 1) Is the speech protected by the First Amendment?
- 2) Does the regulation serve a substantial governmental interest?
- 3) Does the regulation directly advance the substantial governmental interest?
- 4) Is the regulation more restrictive than necessary to serve the governmental interest?

Metromedia v. San Diego, 1981, mentioned earlier, contains the specific test for free speech on outdoor advertising, such as billboards. The test elements include:

- 1) The government has a legitimate interest in controlling the non-communicative aspects of billboards, though First Amendment concerns place some limits on billboard regulation.
- 2) Commercial speech has less First Amendment protection than non-commercial speech.
- 3) Regulations on commercial speech are measured under the Central Hudson test (above).
- 4) The government's interests in traffic safety and community aesthetics are enough to justify a complete ban on off-site commercial billboards.
- 5) A preference cannot exist for certain kinds of non-commercial speech over other kinds of non-commercial speech.

Outdoor Advertising Industry

For most off-site signs, private companies are hired to display the material. In general, outdoor advertising companies sell space on billboards, and own or manage the display, though they do not necessarily create the visual design on the billboard. Other types of outdoor advertising signs include wallwraps, transit shelters, and street furniture (see Types of Signs section). The company that needs to advertise will lease the billboard space for a certain amount of time. Prices directly correlate to the size of the sign, the number of people who will see the sign on an average day, and the number of signs contracted for a given advertising campaign. Sign locations in higher traffic areas will demand a higher price than those with lower traffic counts.

One of the leading trade associations representing the outdoor advertising industry is the Outdoor Advertising Association of America (OAAA). They assist marketing companies with research and development, provide legal guidance, and collect general information on the outdoor advertising industry.

Outdoor advertising is a big industry in America, with total revenue in 2005 of more than \$6.3 billion dollars, an increase of eight percent from 2004. Below are the 2005 end-of-year statistics for the top outdoor advertising categories, top outdoor brands, and top outdoor advertising companies, compiled by OAAA at www.oaaa.org/outdoor/facts.

Top 10 Outdoor Advertising Categories

- | | |
|--|---|
| 1. Local Services & Amusements | 6. Financial |
| 2. Media & Advertising | 7. Restaurants |
| 3. Retail | 8. Communications |
| 4. Insurance & Real Estate | 9. Automotive Dealers & Services |
| 5. Public Transportation, Hotels & Resorts | 10. Automotive, Auto Access & Equipment |

Top 10 Outdoor Companies

- | | |
|------------------------------|--------------------------------|
| 1. Clear Channel Outdoor | 6. Fairway Outdoor Advertising |
| 2. CBS Outdoor | 7. NextMedia Outdoor |
| 3. Lamar Advertising Company | 8. Magic Media |
| 4. Van Wagner Communications | 9. Reagan National Advertising |
| 5. JCDecaux | 10. Burkhart Advertising |

Top 20 Outdoor Brands

- | | |
|--|--------------------------------------|
| 1. McDonald's Restaurants | 10. Miller Various Beers |
| 2. Cingular Wireless Service | 11. Cracker Barrel Old Country Store |
| 3. Verizon Long Distance Business & Residential | 12. State Farm Various Insurance |
| 4. General Motors Corporation Various Car & Trucks | 13. Geico Insurance |
| 5. Anheuser-Busch Various Beers | 14. Citibank Consumer Services |
| 6. Nextel Wireless Services | 15. Apple Various Computers |
| 7. Warner Brothers Various Movies | 16. Diageo PLC Various Beverages |
| 8. Coca-Cola Various Soft Drinks | 17. Sony Various Movies |
| 9. Verizon Wireless Services | 18. Coors Light Beer |
| | 19. Starbucks Coffee Store |
| | 20. Paramount Various Movies |

Clear Channel Outdoor is both the leading outdoor advertiser in America and in Philadelphia, owning an estimated 1,000 signs in the City of Philadelphia. On their website they advertise Philadelphia as the fourth largest media market and provide many demographic facts for the region. Other major outdoor advertising companies in the Philadelphia region, according to the local media activism group Media Tank, include:

- Steen Advertising, owning an estimated 1,000 signs in the City of Philadelphia
- Viacom, owning an estimated 250 signs in the City of Philadelphia
- Chesapeake, owning an estimated 900 signs in the City of Philadelphia
- Titan, owning all advertising in SEPTA vehicles and stations in the City of Philadelphia
- Interstate
- Metrolights
- Keystone

As some types of advertising signs are not licensed or regulated and others are non-conforming, the exact number of billboards that each company owns is not readily available. It is estimated that over half the billboards in Philadelphia are unlicensed and are therefore illegal.

Wayfinding and the Manual on Uniform Traffic Control Devices (MUTCD)

Regulation of traffic control devices began on the national level in 1927 for rural highways, and in 1930 for urban streets. *The Manual on Uniform Traffic Control Devices* (MUTCD) was first published in 1935. Over the next fifty years, several organizations have existed to regulate roadway signs, finally culminating in 1971 under the guidance of the Federal Highway Administration's (FHWA) National Committee on Uniform Traffic Control Devices (NCUTCD). The Highway Safety Act of 1966 decreed that all traffic control devices on all public streets and highways in each state must be in substantial conformance with the FHWA's standards. This document has evolved over time into the present MUTCD, with the latest edition published in 2003.

The definition of a traffic control device per the MUTCD is as follows:

Traffic control devices shall be defined as all signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway by authority of a public agency having jurisdiction. The Manual on Uniform Traffic Control Devices (MUTCD) shall be recognized as the national standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel.

Guidelines for regulatory, warning, and guide sign standards are located in the MUTCD for both freeways and conventional roads. Included in the MUTCD are many standards for these signs, such as the number of signs needed per exit, distance or placement, color, size, shape and materials.

Highway guide signs inform drivers of general roadway information, such as directions and distances to destinations, advance notice of intersections or interchanges, route identification, and access to motorist services. These signs are green with white borders on freeways and expressways, and can contain logos and white lettering. Supplemental guide signs are also permitted to provide information to one other destination, using the American Association of State Highway and Transportation Officials' (AASHTO) *Guidelines for the Selection of Supplemental Guide Signs for Traffic Generators Adjacent to Freeways*.

Highways also permit blue service signs for businesses or attractions within three miles of an exit. Services eligible for this program must fall into the following categories: gas, food, lodging, camping, attraction, and 24-hour pharmacy. Each category has eligibility requirements that the business or attraction must meet. Pennsylvania's Logo Signing Program administers this program for interstates and other major freeways. Racetracks currently qualify under the arena category, but there are no specific provisions for stand-alone slot parlors.

Tourist-Oriented Directional signs are specific guide signs for facilities that receive major portions of their income from visitors not residing in the area of the facility. These signs are blue and contain the phrase "Tourist Activities" at the top, with the name, direction, and distance to the tourist attraction below. Either generic or business-specific logos can also be included on the signs. PennDOT installs these signs on primary and secondary roads, while the tourist attraction pays for the sign.

Road sign guidelines provide specifications for placement, color, material and general content, and should be enforced at all times. While the MUTCD provides universal guidelines, there is always the possibility that a specific sign does not conform to code. Unfortunately for the driver, a sign not up to code could result in confusion or safety concerns. It is imperative that all signs covered by the MUTCD are brought up to code to maximize their role in orienting drivers.

Recreational and cultural interest signs are intended for attractions or traffic generators open to the public, including parks, campgrounds, museums, or historical buildings. Gaming facilities are also included as a recreational facility. These signs are brown with white lettering and can include images, lettering, and arrows. Both highways and lower volume roads can exhibit these signs.

In 1986, DVRPC published a report, *Suburban Directional Sign Policy Guide*, examining obstacles and challenges to directional signage in suburban areas, specifically focusing on tourist attractions, street signs, route markers, and general information signs. This report recommended a coordinated signage program, with responsibilities spread over five different entities, including PennDOT, municipalities, tourist attractions, sign district associations, and county planning agencies. In 1988, in response to the study, Chester, Delaware and New Castle counties began a wayfinding signage program, which currently has over 60 signs within the Brandywine Valley.

Guide Signs, Tourist-Oriented Directional Signs and Recreational Signs



Signage Impacts

Orderly and legal signage is a challenge not only for the four communities that may be licensed for the gaming facilities, but for the entire region. Not all of the following impacts will occur, but the potential is there for future conflict. The best defense is a well-written, easy to understand sign ordinance that is updated regularly and not easily challenged in court.

Potential Direct Signage Impacts

Once the gaming facilities are built, it stands to reason that the facility will maximize their on-site advertising signs. The casino might install moving light beacons pointing to the sky at night for all to see their location. The facility name will be lit from inside and in large letters, facing traffic along the main roadway. Other off-site advertising will be placed along the approach roads to the casinos, including billboards. Digital video displays on the casino property itself and off-site are also possible. These digital video or electronic displays will rotate a series of images, and information on coming attractions. It's possible each site will have bright spinning signs at the tops of their buildings, or lights that blink on and off around the building.

Potential Indirect Signage Impacts

The gaming facilities will spur more development nearby, who will also have signage needs. At the same time, advertisers will recognize the increased potential for advertising on roadways leading to the casinos. Existing older billboards, such as the 30-sheet variety, may be replaced with digital billboards, with rapidly changing images. More temporary signs along roadways may also occur, such as signs advertising new cigarette prices at gas stations or local sales at businesses. Vacant buildings may be candidates for wall wraps, as is already the case near one casino proposal.

Signage and Visual Quality Recommendations

Following are a variety of recommendations that municipalities can implement to plan for the arrival of large gaming facilities. Some recommendations are general, while others are quite specific to the particular casino proposal and location. The highest level of specificity was attempted to provide the greatest benefit.

Sign Ordinance Recommendations on Sign Types and Classifications

Existing local sign ordinances should be updated to:

1. Limit the size, height, location and number of signs for the different types of signs: freestanding, building-attached, and permanent signs. It is recommended that traditional billboards are not regulated as their own type of sign, but should be regulated as a freestanding sign based on size regardless if they are on-site or off-site. No sign face (for any type of sign) should be larger than 300 square feet, more than 25 feet high from the ground, and not closer than 1,500 feet from another sign of the same 300-foot size.
2. Allow large signs in certain zones, such as commercial and industrial, but do not prohibit them outright. The key regulations are the size, height and location of large signs.
3. Permit all commercial freestanding signs regardless if they are traditional billboards, *but only as a conditional use*. This provision would allow for traditional off-site advertising signs in the community, but require the additional level of review resulting from a conditional use review.
4. Remove any content distinctions. Regulate height, size, number, wall coverage, lighting, and location. Height and size, or face area, should be proportional to the building or the lot with maximum sizes established for different districts.
5. Remove any regulations on color or materials, as many major companies have specific colors in logos. It is possible to regulate the number of colors per sign in commercial districts, or award sign size or height bonuses for commercial center sign plans.
6. Require an update of the sign ordinance every four years, to keep pace with the industry.
7. Define what constitutes a changing, animated, moving, or video display sign. Each is not necessarily the same, and each type needs to be clearly explained. The time between image movements can be regulated for flashing or animated signs. A good rule of thumb is to permit an image change between twice a minute to once every two minutes.
8. Include a residential sign category permitting at least one non-commercial message sign that can be used for any free expression message. Activities legally offered on the site should also be allowed without a sign permit. The non-commercial portion would allow for signs expressing political or religious views as well as an address marker while the “legally offered on site” provision would allow for a home occupation, temporary real estate (For Sale or For Rent), or construction (A contractor’s sign).

9. Require permits for banners, canopies, suspended signs or projecting signs. Include height, number, area, and lighting regulations for each type.
10. Itemize which signs are *only* permitted in the right-of-way, including ground signs, street furniture, signs on utility poles, and suspended or protruding signs. Types of signs permitted should correspond with the type of roadway. Wayfinding signs, and regulatory municipal signs, such as parking signs, utility, and transit signs, could be permitted. Temporary signs with specific time limits can be allowed with a permit in the right-of-way on local streets. State law prohibits nailing any kind of sign to a utility pole while only traffic signs are permitted on traffic structures or traffic poles.
11. Prohibit beacons, or large lights with beams directed into the atmosphere, in certain zones or ban them outright. They can be highly distracting, especially to airplanes. While they are not signs per se, they can be regulated as they act as a form of advertisement through drawing attention to the location.
12. Regulate the percentage of total wall space that can be devoted to advertising. This will clean up a cluttered building that may have multiple signs or stickers.
13. Define painted wall murals as signs only if the image pertains directly to the business. If the mural contains the name of the business or any part of their logo then it should be considered a sign. A painting of a football team at a sporting goods store can also be considered a sign; however, the same football team painting on a bookstore or a music store would not be considered a sign.
14. Use the MUTCD for appropriate lettering for on-site advertising signs. Using this method, the size of the lettering should correspond with the classified speed on any given roadway. Any font that can be readily read from the roadway should be considered a sign. Fonts that are smaller and can not be read from the roadway or very small signs, such as operating times on a front door or window, should not be considered a sign but regulated as part of the overall percentage of wall space that can be devoted for advertising.
15. Treat any sign that does have fonts clearly legible from the street or sidewalk, again using the same MUTCD standards and language, as a sign regardless of being inside a building. Many businesses now are getting savvy and will have a sign inside a building but behind a glass wall or window. When this occurs, the business gains by having an extra sign visible to the public that would otherwise be non-conforming if it was outside.
16. Include the following signs:
 - **Flags:** Flags should be regulated through pole height limit as well as total size of the flag. U.S., state and municipality flags should be treated as flags, while all others should be treated as banner signs and subject to their limitations.
 - **Banner Signs:** Banners should be permitted, for some banners display religious or social messages while others advertise for community

events, but regulations could also stipulate non-commercial messages only, without a permit. The ordinance then can stipulate height, area size, location and other regulations for these signs. Permits could also be required for banners that are attached over roadways using right-of-way language. Wallscapes/wallwraps and all non-governmental flags should be regulated as banners.

- **Transit Shelter and Bench Signs:** Listed separately, these signs can be allowed with a permit. The ordinance can regulate the materials each piece of street furniture is constructed with. To mitigate some companies constructing these structures in unwanted places, the ordinance can stipulate that the structure has to be located at an approved transit stop. For communities that do not want these types of signs, they can prohibit certain types of signs within the right-of-way.
- **Variable Message Signs:** Do not regulate these signs as a separate type; rather permit a percentage of the sign to contain a variable message. Regulating each type of sign, such as a time and temperature sign, is content-based, which should be avoided. Different zoning districts might permit a portion or the entire sign to be a variable message, or not permit them at all. Allow messages to change once a minute or for a scrolling ticker. Scrolling messages should be not be directed toward vehicular traffic but rather to pedestrians. The minute allocation allows time and temperatures to be illustrated, not to mention movie times, or gas prices. A scrolling ticker then permits letters or stocks.
- **Wallscapes/Wallwraps:** These banner signs should be regulated for size and height, or by percentage of wall space. Permits should be required.
- **Rotary Billboards:** These signs should fall under the same regulations as the billboard or freestanding sign section, depending on the ordinance. Additional regulations should limit the number of image changes to one per minute. Permits should be required.
- **Digital Video Display:** Again, these signs should be regulated like other billboards. The rate of image change can be regulated for static images as well. A municipality can either prohibit moving images all together or permit them only in certain areas. In Philadelphia, digital video displays should not be permitted with moving images along Columbus Boulevard facing I-95, for traffic safety reasons. Permits should be required.
- **Non-Commercial Message Signs:** It is commonly recognized that personal signs expressing beliefs have inherently more rights than advertising signs. The major obstacle in sign regulation stems from potential restrictions on free speech. It is not recommended to have separate regulations for political, religious, free speech, or other types of non-commercial messages. By over-regulating signs and lumping many kinds into few categories, freedom of speech lawsuits may arise, and can make an entire sign ordinance suspect until changes are made. The best

practice here is to permit one free expression sign per unit or lot, and then regulate the size and height. These signs are allowed without a permit.

- **Temporary Signs:** Many of the content-based signs are actually commercial message temporary signs, such as construction signs, real estate signs, and yard sale signs. Rather than having separate categories for each type, regulate the number of signs per lot, the height, and the size. Include a time frame for removal of the signs following the completion of the event. These signs should be allowed without a permit.

Sign Ordinance Recommendations on Sign Removal, Enforcement, and Permitting

The local sign ordinance should be updated to:

1. Include a specific timeline for sign removal. Include provisions for when a sign needs to be brought up to code.
2. Require businesses that are no longer functioning, either because of closure or relocation, to remove all of their building signs within a certain time period. Signs that no longer serve a function should be removed, and provisions in the sign ordinance should address this type of removal. Under this situation, businesses could then use the space once reserved for the store name to advertise that the building is for sale or for lease.
3. Provide clear guidance for when signs that correspond to an event should be removed within a certain time period after the event is over. For example, signs with messages saying “Vote Yes on Bill 1234”, “County Fair: April 10 – 15”, and “Big Sale This Week at Jim’s Motors” should be removed within two weeks after the vote, fair, or sale; but similar signs that have no time-sensitive elements do not need to be removed.
4. Establish permit fees that are issued for a set amount of time, usually one year, with appropriate renewal paperwork and lower renewal fees. The permit should cover the actual sign, not the number of images, consequently a digital video display sign would only require one permit as opposed to one for each image. Adjust fees with inflation as well as with demand.
5. Charge one fee for all signs and then an additional amount per additional square feet. Fees can be proportional to the area of the sign. For example, an appropriate fee would be \$50 up to 50 square feet and then \$1 per each additional square foot.

Wayfinding Recommendations

1. Expand attraction categories to include gaming facilities under the Pennsylvania Logo Signing Program. As an alternative, include gaming facilities as an option under Recreational Areas. Create a generic gaming logo for these signs.
2. Erect signs listing the gaming facilities along major highways on supplemental guide signs if the gaming attraction meets the criteria for the number of visitors.

3. Replace directional signs if they are damaged or destroyed, as the lack of signs can lead to confusion and safety hazards. Specific types of signs that should always be repaired include all hazard signs and regulatory signs. Each municipality should replace, or erect, signs that mark their own boundaries on all streets.
4. Remove any guide sign if the attraction is closed for more than 15 days outside of normal operations. Examples here include a fire or the sale of the attraction, and the attraction has not re-opened.
5. Erect wayfinding signs along all roadways with average daily traffic of greater than 5,000 vehicles per day, such as Street Road in Bensalem, PA 291 in Chester, Ridge Pike in Limerick, Columbus Boulevard, Washington Avenue, Spring Garden Street, Fox Street, and Wissahickon Avenue in Philadelphia, and on the region's major highways, such as I-95, I-76, US 422, among others. Destination signs should be placed 200 feet from an intersection. Distance signs should always follow destination signs and be placed 300 feet from an intersection. On other roads, signs should be erected no less than a half-mile from the attraction, with additional signs placed at intersections as needed. The number of signs should be based on attendance.
6. Encourage lettering size between eight and six inches, as anything smaller can not be easily read by the driver. All of the specifications can be adjusted for differing reasons. While a minimum height of six inches is recommended, larger letters can be used and could be more effective for drivers with poor eyesight.

Other Signage Recommendations

1. Create a signage plan for special districts or types of developments, to address clutter. A signage plan is a document that a developer or owner agrees upon during the permitting phase, or one in which an existing property owner can enter at any time. The owner and municipality can agree to more specific sign regulations to achieve a level of district conformity. The signage plan can include color, font, size, height, placement and materials. The community benefits from a signage plan that controls the aesthetics and placement of signs in special areas, such as historic districts or neighborhoods. The developer or owner can be rewarded with larger lettering, lower permit fees, or additional signs in or around the development, if such incentives have to be included politically.

Conclusion

While the issues surrounding the arrival of gaming facilities in the region are complex, what is easier to understand is the importance of local planning in creating good development. Local communities need to assert their perspective on local impacts and development controls. The myriad recommendations in this report can only be implemented through local and regional entities, and this report attempts to reflect the best interests of local governments and neighborhood groups. As gaming licenses are awarded, it is in the public interest to be ready to mitigate potential impacts and capitalize on community building opportunities.

Bibliography

Greater Philadelphia Gaming Facility Applicants

Foxwoods

www.foxwoods.com/Aboutus/FoxwoodsDevelopmentCo/CurrentProjects/CurrentProjects.aspx

Harrah's Chester

www.harrahs.com/casinos/harrahs-chester/hotel-casino/property-home.shtml

Limerick Casino

www.boydlimerick.com – note: this site is no longer in operation

Philadelphia Park

www.philadelphiapark.com

Philadelphia Park Casino

www.philadelphiaparkcasino.com

Pinnacle

www.pnkinphilly.com

Riverwalk

www.planethollywood.com

SugarHouse

www.sugarhousecasino.com

TrumpStreet

www.trumpstreetphilly.com

Municipalities

Bensalem Township

www.bensalem-township.net

City of Chester

www.chestercity.com

Limerick Township

www.limerickpa.org

City of Philadelphia

www.phila.gov

Organizations

Allegheny West Foundation
www.awest.org

American Gaming Association
www.americangaming.org

Casino Free Pennsylvania
www.casinofreepa.org

Casino Free Philadelphia
www.casinofreephila.org

Fight for Philly
www.fightforphilly.com

Fishtown Neighbors Association
<http://fishtownlife.com>

Hallwatch
www.hallwatch.org

Multi-Community Alliance
www.casinofreezone.com

Neighbors Allied for the Best Riverfront (NABR)
www.nabrhood.org

Northern Liberties Neighborhood Association
www.nlna.org

Outdoor Advertising Association of America
www.oaaa.org

Pennsport Civic Association
www.pennsportcivic.org

Pennsylvania Gaming Control Board
www.pgcb.state.pa.us

Philadelphia City Planning Commission
www.philaplanning.org

Philadelphia Gaming Advisory Task Force
www.phila.gov/gamingadvisory

Riverfront Communities United
www.riverfrontunited.org

Society Created to Reduce Urban Blight

www.urbanblight.org

Stop the Casinos
www.stopthecasinos.com

Other References

Boyd Gaming Facility Traffic Assessment. Traffic Planning and Design. December 2005.
“Design Principles for Gaming Establishments.” Design Advocacy Group.
www.designadvocacy.org

Limerick Generating Station
www.exeloncorp.com/ourcompanies/powergen/nuclear/limerick_generating_station.htm

“Gambling Planning In Pennsylvania—Is There Any?” Panel at Pennsylvania Planning Association Conference, Harrisburg, PA. November 8, 2004.
Gaming Forum Presentations. Presented by Central Philadelphia Development Corporation, Philadelphia Convention and Visitors Bureau, and CoreNet Global. January 19, 2005, January 11, 2005, February 1, 2005.

Gaming Studies Research Center
www.gaming.unlv.edu

Guidelines for the Selection of Supplemental Guide Signs for Traffic Generators Adjacent to Freeways. American Association of State Highway and Transportation Officials. 2001.

House Bill No. 2330. Session of 2004. Printer’s No. 4272. *Pennsylvania Race Horse Development and Gaming Act*. Commonwealth of Pennsylvania. Signed into law July 5, 2004.

Institute for the Study of Gambling and Commercial Gaming
www.unr.edu/gaming

“Issues in Sign Regulation.” Presentation by Eric Damian Kelly. APA Conference. San Antonio, Texas. April 24, 2006.

Who Owns Philly’s Media: Billboards. Media Tank.
www.mediatank.org/resources/ownership/philly/billboards.html

Manual on Uniform Traffic Control Devices (MUTCD). U.S. Department of Transportation: Federal Highway Administration. July 18, 2006.
www.mutcd.fhwa.dot.gov/index.html

National Gambling Impact Study Commission
www.govinfo.library.unt.edu/ngis

Philadelphia Park Traffic Impact Study. Pennoni Associates, Inc. October 2004.

PhillySkyline
www.phillyskyline.com

Impacts of Gaming in Greater Philadelphia

Pinnacle Delaware Riverfront Site Transportation Impact Study. Pennoni Associates, Inc. March 2006.

Policy Guide on Billboard Controls. American Planning Association. September 1989, revised April 1997. www.planning.org/policyguides/billboards.html

Preliminary Traffic Impact Assessment for Proposed Slot Parlor/Casino on Columbus Boulevard between Reed and Tasker Streets. Orth-Rodgers & Associates, Inc. March 2006.

Saffron, Inga. "A casino shop of horrors." *The Philadelphia Inquirer*. August 18, 2006.

Sign Regulation for Small and Midsize Communities, American Planning Association, 1989

Smart Parking. *Zoning Practice.* Volume 23. No. 1. American Planning Association. January 2006.

Suburban Directional Sign Policy Guide. DVRPC. June 1986.

The Highway Beautification Act: A Broken Law in Pennsylvania. Scenic America. 1997.

The Innovation Group
www.theinnovationgroup.netu

The Philadelphia Development Thread. Skyscraper Page. September, 2006.
www.skyscraperpage.com

Traffic Analysis Harrah's Chester Downs. Orth-Rodgers & Associates. January 2005.

Traffic Impact Analysis Report for SugarHouse Site. Gannett Fleming. December 2005.

Traffic Impact Study Riverwalk Casino. Pennoni Associates Inc. December 2005.

Trump Casino at the Former Budd Plant Site – Traffic Impact Study. Vollmer Associates. December 2005.

Zoning Remapping in Philadelphia. Philadelphia City Planning Commission. May 2000.

Note: All photographs taken by DVRPC, unless otherwise noted. Casino renderings and site plans are courtesy of the casino applicants. A number of signage photographs were taken from signage websites.

Glossary of Acronyms

AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans With Disabilities Act
APA	American Planning Association
CED	Commercial Entertainment District
CMAQ	Congestion Management Air Quality
CMP	Congestion Management Process
CSD	Context Sensitive Design
DAG	Design Advocacy Group
DRPA	Delaware River Port Authority
DVRPC	Delaware Valley Regional Planning Commission
FHWA	Federal Highway Administration
HBA	Highway Beautification Act
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
ITS	Intelligent Transportation Systems
KOZ	Keystone Opportunity Zone
LEED	Leadership in Energy and Environmental Design
LOS	Level of Service
MUTCD	Manual on Uniform Traffic Control Devices
NJDOT	New Jersey Department of Transportation
OAAA	Outdoor Advertising Association of America
PENNDOT	Pennsylvania Department of Transportation
PGATF	Philadelphia Gaming Advisory Task Force
PGCB	Pennsylvania Gaming Control Board
PUT	Pottstown Urban Transit
SAC	Study Advisory Committee
SEPTA	Southeast Pennsylvania Transit Authority
SVM	Schuylkill Valley Metrorail
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TMA	Transportation Management Association
VMT	Vehicle Miles Traveled

Study Advisory Committee

We wish to thank the following individuals for their time and attention in guiding this effort.

Lynn T. Bush	Bucks County Planning Commission
Mike Roedig	Bucks County Planning Commission
John E. Pickett	Delaware County Planning Commission
Thomas Shaffer	Delaware County Planning Commission
Lee Senior	Delaware County Planning Commission
Gary J. Jastrzab	Philadelphia City Planning Commission
Jametta Johnson	Philadelphia City Planning Commission
Martin Gregorski	Philadelphia City Planning Commission
William Payne	City of Chester
William McCauley	Bensalem Township
Carl Pearson	Bensalem Township Gaming Advisory Board
Micah Mahjoubian	Philadelphia Gaming Advisory Task Force
Patrick Mulligan	Philadelphia Gaming Advisory Task Force
Dave Sciocchetti	Chester Economic Development Authority
Benjamin J. Ginsberg	Center City District
Anne LaCour Neeb	Pennsylvania Gaming Control Board
David Fogel	SEPTA
Jerry Kane	SEPTA
Jerome Lutin	New Jersey Transit
Brian Cuccia	New Jersey Department of Transportation (NJDOT)
Louis Belmonte	Pennsylvania Department of Transportation (PENNDOT)
Rina Cutler	Pennsylvania Department of Transportation (PENNDOT)
Karl Ziemer	Delaware River Port Authority (DRPA)
William Becker	Design Advocacy Group
Mary Tracy	Society Created to Reduce Urban Blight (SCRUB)
Lynn McConville	Pennsylvania Resources Council, Inc
Dennis Winters	East Coast Greenway Alliance, and DVRPC Regional Citizens Committee
William Rickett	Bucks County Transportation Management Association
Cecile Charlton	Delaware County Transportation Management Association
Len Carey	Philadelphia Park Racetrack
Vince Donlevie	Harrah's Chester Casino and Racetrack
Anne Allman	Harrah's Chester Casino and Racetrack

DVRPC Staff:

Karin A. Morris, AICP, Manager, Office of Smart Growth; Study Project Manager
Richard G. Bickel, AICP, Director, Division of Planning
Rosemarie Anderson, Manager, Office of Corridor Planning
Eric Grugel, Regional Planner
Kenneth Thompson, GIS Analyst

Appendix A: Transportation Maps

A1

A2

A3

A4

A5

A6

A7

A9

A10

A11

A12

A13

A14

A15

A17

A19

A20

A21

A24

Appendix B: The Public Trust Doctrine and Riparian Rights

The Public Trust Doctrine is also much broader, applying to resources other than just riverbeds. It was intended as a means of protecting air and water quality and conserving the natural landscape for the benefit of the public. Thus, the Public Trust Doctrine is the basis for many environmental laws.

The Public Trust Doctrine has been adopted and modified by each state through its courts and legislature. In Pennsylvania, the basic principle of the Common Law Public Trust Doctrine is incorporated under Article 1, Section 27 of the Constitution of the Commonwealth of Pennsylvania. It states that:

“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

The Commonwealth applies the principles of the Public Trust Doctrine specifically to riverbeds through the Dam Safety and Encroachment Act of 1978 (P.L.1375, No.325 / 25 *Pa. Code*, Chapter 105). This Act authorizes the state to hold submerged lands in trust for the Commonwealth to ensure that the public has access to the beds of navigable waterbodies for fishing, navigation, commerce, and recreation.

In addition to the beds of navigable waterbodies, the Commonwealth also has control over some shorelands. There is however some discrepancy between the public's perception of shores and the Commonwealth's definition. While the public may perceive shorelands as beaches and riverbanks, the Commonwealth defines the landward boundary of their jurisdiction by water marks. In Pennsylvania and in most other states, the reach of the Public Trust on navigable freshwaters is the bed of the waterbody, landward to the ordinary high water mark--the normal reach of water during the high water season. In navigable tidal waters, the Commonwealth's jurisdiction applies landward to the mean high tide line. Thus, in both freshwater and tidal waters, the public trust shorelands constitute only a small portion of dry land.

While the landward boundary of public trust land is relatively easy to determine on natural shorelines, it is difficult to determine in areas where artificial changes were made to the shoreland. This is the case in Philadelphia where much of the shoreline of the Delaware River was filled or developed over the years. Since colonial times, property owners along the Delaware River were encouraged to develop the shoreline through docks, ports, piers, and wharves for maritime purposes.

In cases where the natural shoreline has been modified such as in Philadelphia, the original location of the shoreline boundary must be determined. This boundary is referred to as the bulkhead line and was established on the Delaware River by the Secretary of the Army on September 10, 1940. This line is the divider between private and Commonwealth property.

Riverfront landowners wishing to build out into a river must acquire the riparian rights to the submerged land from the state. Under the Public Trust Doctrine, each state has the authority to grant private ownership and use of public trust lands. However, states generally require that the private uses and activities be “clear and unequivocal,” should serve a “public purpose,” and should not “substantially impair trust resources and their use.”

States have broadly interpreted the phrase “public purpose.” In Pennsylvania, regulations under the Dam Safety and Encroachment Act (commonly referred to as Chapter 105 regulations) are used to determine public or “proper” purpose. Under Chapter 105, uses are required to be “water dependant.” There are six different categories of these water dependant uses that are said to meet the public purpose. The six categories are:

- Improving navigation or public transportation.
- Recreation, fishing or other public trust purposes.
- Protecting public safety or the environment.
- Providing water supply, energy production or waste treatment.
- Providing a public utility service by a government agency or subdivision, public utility or electric cooperative.
- Other activities which require access to water.

A developer must first acquire a Chapter 105 permit from the Pennsylvania Department of Environmental Protection (DEP) before carrying out a project that requires development of submerged lands for a water dependant use. However, uses such as condominiums or casinos are not considered water dependant uses and do not qualify for a permit. For non-water dependent uses such as these, Chapter 105 regulations state that a private developer can acquire the riparian rights only through an act of the state legislature. In doing so, the individual purchases the rights to the bed of the river between the bulkhead line and the pierhead line--the water boundary beyond which deposits or obstructions such as docks and wharves are not allowed--from the state. The pierhead line was also approved by the Secretary of War on September 10, 1940 and was established to protect commerce and navigation on the Delaware River.

The Pennsylvania Department of General Services implements legislation that authorizes the transfer of the Commonwealth’s riparian rights. Riparian land is transferred by a deed of conveyance or a 99-year long-term lease. A deed of conveyance transfers actual ownership of the submerged land to a private party. However, the more common method of transferring riparian rights is through a long-term lease. This method of transfer grants a developer the use of public trust land in exchange for a nominal rental fee, usually \$1 per year.

Often the legislature will specify that the lease contain a special clause. In many cases, the legislature will grant a private developer a lease for a non-water dependent use, but will place conditions on it such as requiring public access. In addition, some clauses may specify that the conveyed lands specifically exclude activities related to gambling or gaming. This was a restriction in Senate Bill 688, PN 969 which conveyed submerged lands to the Erie-Western Pennsylvania Port Authority to build a convention center under the restriction that the parcels not be used as the location for a licensed gaming entity under 4 Pa.C.S. Part II.

Impacts of Gaming in Greater Philadelphia

In the past several decades, there have been relatively few requests to the Pennsylvania state legislature for the transfer of riparian rights. According to state records, only three transfers of these rights occurred along the Delaware River between 1980 and 2002. However, in recent years the legislature has received a flood of requests for the use of submerged lands for non-water dependant uses such as waterfront condominiums and hotels.

Impacts of Gaming in Greater Philadelphia

Publication Number: 06042

Date Published: December 2006

Geographic Area Covered: City of Philadelphia; Bensalem Township, Bucks County, Pennsylvania; Limerick Township, Montgomery County, Pennsylvania; City of Chester, Delaware County, Pennsylvania; DVRPC Region.

Key Words: Act 71, The Pennsylvania Race Horse Development and Gaming Act, Pennsylvania State Gaming Control Board, Philadelphia Gaming Advisory Task Force, category one, two, and three gaming licenses, Philadelphia Park, Harrah's Chester Racetrack and Casino, Limerick Casino, Pinnacle Entertainment, Riverwalk Casino, Foxwoods, TrumpStreet Casino, SugarHouse Gaming, slot machines, pari-mutuel wagering, racinos, land use impacts, transportation impacts, signage impacts, parking, zoning, land use, access, local zoning control, billboards.

ABSTRACT:

This document, *Impacts of Gaming in Greater Philadelphia*, examines the potential transportation, land use and signage impacts of the proposed casino developments in the Greater Philadelphia region. Enabling legislation for gaming in Pennsylvania, titled The Pennsylvania Race Horse Development and Gaming Act, Act 71 (House Bill 2330), was signed by Pennsylvania Governor Edward Rendell on July 5, 2004, at Philadelphia Park in Bensalem Township, Bucks County. The legislation authorizes up to 61,000 slot machines at 14 sites across the Commonwealth, including Bensalem, Chester and Philadelphia. Prior to this legislation, the only legalized gambling in the Commonwealth were pari-mutuel wagering at racetracks and the state lottery. There are eight applications for casino licenses in the Delaware Valley region. This study offers an overview of the legislation and licensing process, the casino proposals, the potential impacts, and a variety of recommendations to mitigate the potential impacts. Such recommendations include changes to zoning, design standards, parking requirements, access management, transit service, billboard ordinances, and directional signage.

Delaware Valley Regional Planning Commission
190 N. Independence Mall West
8th Floor
Philadelphia PA 19106-1520

Phone: 215-592-1800
Fax: 215-592-1925
Internet: www.dvrpc.org

Staff Contacts:

Karin Morris, AICP
Manager, Office of Smart Growth
215-238-2858
kmorris@dvrpc.org

Rosemarie Anderson
Manager, Office of Safety & Corridor Planning
215-238-2832
randerson@dvrpc.org