

# Appendix A1

Background Plans and Studies

## RELEVANT HIGHLIGHTS FROM EXISTING PLANS

### Municipal Comprehensive Plans

1. Comprehensive Plans were reviewed for the City of Aliquippa (1996) and Center Township (1993). No comprehensive plan was located for Hopewell Township.
2. Local plans describe the Brodhead Road corridor a residential area as well as a hub of commercial activity. The continued "in-filling" of commercial areas along Brodhead Road has created demand for additional commercial zoning in Center Township. Plans identified the following issues in the study area:
  - Traffic safety (Aliquippa)
  - Visual blight (signage) (Aliquippa)
  - Minimal landscaping or upkeep of business land uses (Aliquippa)
  - Rezoning (Center)
3. Comprehensive Plans for the City of Aliquippa and Center Township recommended the following:
  - The City should adopt signage improvements or requirements for commercial districts. (Aliquippa)
  - Future planning should promote economic vitality while maintaining the level of service of the highway. (Center)
  - The township should pursue safety improvements including signalization, turning lanes, and synchronization of signals. (Center)
  - The Township should continue to work with PennDOT to obtain the recommended sight distance improvements at the Chapel Road/ Brodhead and Chapel Road/High Street intersections. (Center)
  - Zoned areas should remain residential and commercial. Only a few residential areas are recommended for a change to commercial. (Center)

## Regional Policies and Priorities

1. Active Transportation
  - a. Recommendations: (SPC Regional Active Transportation Plan)
    - i. Complete Streets
    - ii. Safe Routes to School
    - iii. Bicycle Friendly America
    - iv. Walk Friendly Communities
    - v. Walk Works
  - b. Beaver County Active Transportation Profile Takeaways (SPC Regional Active Transportation Plan)
    - i. Currently there are no bicycle friendly communities, complete streets policies, or walk-friendly communities in Beaver County
    - ii. 36 miles of bike route throughout Beaver County
    - iii. 17 miles of trail throughout Beaver County
    - iv. 33.8 miles of PA Bike Route A
    - v. 0 miles of protected bike lanes
    - vi. 2.6 miles of bike lanes
    - vii. 3 bike facilities
    - viii. 919,8000 passengers on BCTA in 2019
    - ix. 1.4% of Beaver County uses transit to commute to work
  - c. SPC Smart Moves Active Transportation Objectives: reinvest in communities, sustainability, and clean air (SPC Smart Moves)
  - d. Hopewell Township is interested in Safe Routes to School (Beaver County Active Transportation Profile)
  - e. Brodhead Road was listed as a Hazardous Route within the Center Area School District (Center Township Safe Routes to School Plan)
    - i. Recommendations for improved pedestrian and bicycling improvements
2. Corridor Transportation Operations and Safety

- a. SPC's Regional Traffic Signal Program (SPC Operations Plan)
    - i. Traffic signals, traffic incident management, multimodal connectivity, and freight management
    - ii. Proposed regional traffic signal program/intelligent transportation systems initiatives in Beaver County (SPC 2019 Annual Report)
  - b. High priority projects (SPC Operations Plan)
    - i. I-376 Corridor ITS (intelligent transportation system) – traveler information, CCTV, DMS
  - c. SPC Smart Moves Roadways Objectives: infrastructure, prioritize and streamline, smart technology (SPC Smart Moves)
  - d. [SPC TIP Projects](#) (February 2021): SR 3007/Frankfort Rd. – Allegheny County Line
    - i. Efficiency/operations
    - ii. Highway restoration and pavement resurfacing and/or restoration
    - iii. 2 inches mill and overlay on PA 3007, Broadhead Road from Frankfort Road to Allegheny County line in City of Aliquippa, Hopewell and Center Townships, Beaver County
3. Freight
- a. Monaca and Aliquippa are key freight cluster areas (Beaver County Freight Profile)
  - b. Attract money for site development to maximize potential of economic development related to the Shell petrochemical facility, including infrastructure improvements needed to make sites shovel ready. This would include transportation improvements to maximize capacity of Hopewell Industrial Site and Bet-Tech sites in Aliquippa (SPC Emerging Industries Corridor and Mobility Report)
4. Transit
- a. Enhancing speed and reliability of bus service (SPC Operations Plan)
    - i. Transit lanes, transit signal priority, stop bump outs, and real-time information systems for users
  - b. Regional trail network connections opportunities (SPC Operations Plan)
    - i. SPC Goal: A trail within 15 minutes of every PA citizen
  - c. Accessible pedestrian corridors (sidewalks) (SPC Regional Active Transportation Plan)

- d. BCTA- expressway travel center improvements/bus and shared ride van delivery (SPC 2019 Annual Report)
  - e. SPC Smart Moves Transit Objectives: equitable access, emerging technology, public transit (SPC Smart Moves)
  - f. Establish regional transit centers at key locations throughout the region (SPC Smart Moves)
  - g. Emphasizes public-private partnerships to solve transportation problems (SPC Smart Moves)
  - h. Strategies include greater coordination of services, wider availability of services, and data sharing to aid coordination and availability of services (SPC Coordinated Transportation Plan)
  - i. Key beneficiaries for improved transportation availability include seniors, persons with disabilities, and low-income individuals (SPC Coordinated Transportation Plan)
5. Future Land Use Changes/Anticipated Development:
- a. Growth areas in US 19 and SR 228 due to cracker plant construction (SPC Regional Operations Plan)
  - b. Large scale cracker plant could lead to an uptick in natural gas drilling within the SPC region and development of other ancillary business (SPC Regional Operations Plan)
  - c. Former J&L Steel Mill (Aliquippa) (Beaver County Freight Profile)
6. Past/Current Improvements
- a. Monaca Gateway Corridor improvements (SPC Smart Moves)
  - b. State Route 228 modernization and capacity upgrades (SPC Smart Moves)
  - c. Improvements were made to Old Brodhead Road that should have been completed in 2018 (PennDOT Beaver County Outreach)
    - i. \$4,000,000 for repairs, signal updates, and other miscellaneous work
  - d. Improvements were made to Brodhead Road that should have been completed in 2018 (PennDOT Beaver County Outreach)
    - i. \$7,700,000 for resurfacing, repairs, traffic signal updates, signing, ramps, and other work
  - e. Chapel & Broadhead Roads Intersection: The 1993 Township Comprehensive Plan recommended improving sight distances and they still haven't been completed (Center Township Safe Routes to School Plan)

- f. Center Grange & Brodhead Road Intersection: The 1993 Township Comprehensive Plan recommended the Township work with PennDOT install a left turn lane and conduct a traffic signal study which was not completed (Center Township Safe Routes to School Plan)
- g. Pleasant Drive & Brodhead Road Intersection: The 1993 Comprehensive Plan recommended the Township work with PennDOT to complete a study to determine if a traffic signal is warranted which was not completed (Center Township Safe Routes to School Plan)

### Regional Recommendations:

1. Improved corridors (Beaver County Comprehensive Plan 2010)
  - a. I-376 and Brodhead Road
  - b. PennDOT and municipalities are leads/participating parties
  - c. Widen lanes, redesign intersections/interchanges, manage access to businesses
2. Maintain commercial area on Brodhead Road and create a new area on the Eastern portion of Franklin Avenue in Aliquippa (Beaver County Comprehensive Plan 2010)
3. Rezone portions Brodhead Road as commercial rehabilitation/infill (Beaver County Comprehensive Plan 2010)
  - a. Commercial rehabilitation/infill at the intersections of Brodhead Road and Kennedy Boulevard/Mill Street and Brodhead Road with Sheffield Road
4. Address traffic congestion along Brodhead Road (Beaver County Comprehensive Plan 2010)
5. Improvements such as access management techniques, turn lanes, and better signalization (Beaver County Comprehensive Plan 2010)
6. Shoulders along Brodhead Road are used frequently by cyclists and could be used as highway bike lanes (Beaver County Greenway and Trails Plan – 2007)
7. Complete transportation improvements to maximize capacity of Hopewell Industrial Site and Bet-Tech sites in Aliquippa (SPC Emerging Industries Corridor and Mobility Report):
  - i. Use the I-376 Hopewell interchange, Route 151 and Route 51 as truck access to the Aliquippa industrial properties
  - ii. Signalize the current on/off ramps to allow for smoother ingress/egress
  - iii. Add a left turning lane at Gringo Road to ramp for I-376
  - iv. Upgrade pavement condition along Gringo Road to Five Points
  - v. Improve Five Points intersection

- vi. Signalize the intersection of Route 151 and Route 51

## Research Notes

### City of Aliquippa Comprehensive Plan, 1996

- Broadhead Road and Sheffield Street commercial district (concentrated commercial land use)
  - Traffic safety is a concern
  - Visual blighting (signage) is a concern – inappropriate signs and lack of/minimal landscaping of business land uses
    - City should adopt signage improvements/requirements for commercial districts

### Center Township Comprehensive Plan, 1993

- Brodhead Corridor is a residential area as well as an economic/commercial development area
- The Broadhead Road Corridor has developed as a community service center with economic and social value
- Future planning should promote economic vitality while maintaining the level of service of the highway
- The township should pursue safety improvements including signalization, turning lanes, and synchronization of signals
- The Township should continue to work with PennDOT to obtain the recommended sight distance improvements at the Chapel Road/ Brodhead and Chapel Road/High Street intersections
- Between 1962 and 1978 residential development occurred primarily in the areas between Brodhead and Chapel Roads and between Chapel and Center Grange Roads
- Since 1978, multifamily development has occurred primarily in the Brodhead Road Corridor
- The recommendations are that zoned areas should remain residential and commercial, only a few residential areas are recommended to change to commercial
- The continued "in-filling" of commercial areas along Brodhead Road has created a demand for more commercial zoning to meet the needs of the future population in the Township
- Objectives:

- Create a new C-1, Limited Commercial, District which encourages small business development on small lots in the Brodhead Road Corridor to reduce traffic impacts and serve the shopping and service needs of the residents of the Township
- Consider the traffic impact on Brodhead Road of rezoning additional property to the C-1 or C-2 District classifications
- Cooperate with PennDOT to accomplish left turn lane and signalization of Center Grange/Brodhead intersection
- Continue discussions with County regarding needed improvements to North Branch and its intersection with Brodhead Road
- Continue to cooperate with PennDOT to evaluate need for improvements on State roads, particularly Brodhead Road
- Perform Traffic Study of Center Grange & Pleasant Drive intersections with Brodhead to determine need for signalization

### **Emerging Industries Corridor and Mobility Report – SPC, 2015**

- Report reviews corridor for potential sites and improvements that could maximize the potential associated with Shell's proposed petrochemical facility
  - Identify sites and locations for business opportunities associated with the facility
  - Identify sites and locations to meet the needs of businesses associated with the industry
  - Improve supply chain needs – product and workforce
- Findings
  - Study corridor (defined in part by I-376, -I-79 and I-70) lacks in shovel-ready industrial sites
  - Basic utility infrastructure needs to be improved
    - Some lacked adequate sewage treatment plants for the size of the industry that they want to attract
- Recommendations
  - Identify new potential (raw) sites that are not yet on the market (for example: river, rail, and interstate access)
  - Attract investment for site development
  - Increase funding for access to freight programs

- Expand the site analysis throughout the entire region
- Designated Toll 576 as an Interstate
- Improve “last mile” connections for freight
- Support transportation improvements
  - Hopewell Industrial and Bet-Tech
  - Cemex Property
  - Clinton Commerce Park
  - Mon River Industrial Park
- Planned Improvements
  - SPC’s “Mapping the Future” includes 84 projects and \$2.6 billion in infrastructure investment planned for 15-minute drive time corridor
  - 18 located within Beaver
    - Turnpike: \$150,000,000
    - Interstate Maintenance Program: \$18,051,914
    - System Reliability & Safety: \$5,000,000
    - Maintenance: \$173,050,000
    - Economic Development: \$60,000,000
- Sites in Beaver County
  - Aliquippa Industrial Park and Bet-Tech 1&2
    - Infrastructure issues: signage, difficulty making left turns, pedestrians roaming the entrance area (150-foot one-lane tunnel)
    - Recommendations: access improvements from Route 51 and potential signalization. Alternately, improvements to access to/from Mancini Bridge to Route 51. Suggested route improvements would include improvements to Five Points and potential signalization between the on/off ramps of I-376 and Route 151. Add left turn lane at Gringo Road to I-376 ramp. Upgrade pavement condition from Gringo Road to Five Points.
  - Hopewell Industrial Park
    - Recommendations: intersection improvements at Gringo Road/Gringo Clinton

- Pittsburgh International Airport
  - Potential for multiple access points
- Mall Development Site
  - Located near proposed Shell facility and Horsehead site
  - Recommendations: Utilities need to be extended, sewage and water may be an issue
- WestGate Business Park
  - Located near Horsehead site
  - Recommendations: on-site grading improvements, off-site reconstruction of the PA Turnpike Bridge

**Regional Operations Plan 2019 – SPC - [https://www.spcregion.org/wp-content/uploads/2019/09/ROP\\_Final\\_2019.pdf](https://www.spcregion.org/wp-content/uploads/2019/09/ROP_Final_2019.pdf)**

- Beaver County
  - Future Land Use Changes – large-scale cracker plant could lead to an uptick in drilling within the SPC region and development of other ancillary business
  - Anticipated Development – Growth areas in US 19 and SR 228 due to cracker plant construction
- SPC's Regional Traffic Signal Program
  - Traffic signals, traffic incident management, multimodal connectivity, and freight management
- Enhancing speed and reliability of bus service
  - Transit lanes, transit signal priority, stop bump outs, and real-time information systems for users
- High priority projects
  - I-376 Corridor ITS (intelligent transportation system) – traveler information, CCTV, DMS

**Regional Active Transportation Plan 2019 – SPC - [https://www.atrc-spc.org/uploads/7/18/8/8/78882890/atp\\_for\\_southwestern\\_pa\\_april\\_2019.pdf](https://www.atrc-spc.org/uploads/7/18/8/8/78882890/atp_for_southwestern_pa_april_2019.pdf)**

- Mentions Beaver County's water trail and hiking trails
- Recommendations:

- Complete Streets
- Safe Routes to School
- Bicycle Friendly America
- Walk Friendly Communities
- Walk Works
- Regional trail network connections opportunities
  - SPC Goal: A trail within 15 minutes of every PA citizen
- Accessible pedestrian corridors (sidewalks)

**Beaver County Active Transportation Profile - [https://www.atrc-spc.org/uploads/7/8/8/8/78882890/beco\\_profile\\_sheet\\_final\\_draft.pdf](https://www.atrc-spc.org/uploads/7/8/8/8/78882890/beco_profile_sheet_final_draft.pdf)**

- 36 miles of bike route throughout Beaver County
- 17 miles of trail throughout Beaver County
- 33.8 miles of PA Bike Route A
- 0 miles of protected bike lanes
- 2.6 miles of bike lanes
- 3 bike facilities
- 919,8000 passengers on BCTA
- 1.4% of Beaver County uses transit to commute to work
- Hopewell is interested in creating a Safe Routes to School program
- Currently there are no bicycle friendly communities, complete streets policies, or walk friendly communities in Beaver County

**Beaver County Freight Profile-**

- Future development opportunities include the Shell Cracker Plant (Monaca) and the Former J&L Steel Mill (Aliquippa)
- Monaca and Aliquippa are key freight cluster areas

**SPC Annual Report 2019 - <https://www.spcregion.org/wp-content/uploads/2020/01/2019AnnualReport.pdf>**

- Beaver County

- BCTA- expressway travel center improvements/bus and shared ride van delivery
- Proposed regional traffic signal program/intelligent transportation systems initiatives in Beaver County

**SPC Smart Moves - <https://www.spcregion.org/programs-services/transportation/smartmoves-long-range-plan-transportation-improvement-program/>**

- Regional vision: connected mobility, resilient communities, and a globally competitive economy
  - Transit: equitable access, emerging technology, public transit
  - Active transportation: reinvest in communities, sustainability, clean air
  - Roadways: infrastructure, prioritize and streamline, smart technology
- Relevant examples:
  - Establish regional transit centers at key locations throughout the region
  - Monaca Gateway Corridor improvements
  - State Route 228 modernization and capacity upgrades
- Emphasizes public-private partnerships to solve transportation problems

**SPC Coordinated Transportation Plan - <https://www.spcregion.org/wp-content/uploads/2019/10/CTPReport.pdf>**

- Core beneficiaries
  - Seniors
  - Persons with disabilities
  - Low-income individuals
- Spatial, temporal, economic, physiological, and social barriers to transportation
- Strategies include greater coordination of services, wider availability of services, and data sharing to aid coordination and availability of services

**Beaver County Comprehensive Plan – 2010**

- Improve corridors designated on the Future Land Use Plan:
  - I-376 and Brodhead Road
  - PennDOT and municipalities are leads/participating parties
  - Widen lanes, redesign intersections/interchanges, manage access to businesses

- Recommends maintaining commercial on Brodhead Road and creating a new area on the eastern portion of Franklin Avenue
- Growing demand for commercial along Brodhead Road, recommends rezoning as commercial and addressing traffic congestion
  - Commercial rehabilitation/infill at the intersections of Brodhead Road and Kennedy Boulevard/Mill Street and Brodhead Road with Sheffield Road
- Recommend transportation partnership for Brodhead Road

#### **Beaver County Greenway and Trails Plan - 2007**

- Shoulders along Brodhead Road are used frequently by cyclists and could be used as highway bike lanes.

#### **PennDOT Beaver County Outreach- <https://www.penndot.gov/RegionalOffices/district-11/Documents/2017BeaverCountyOutreach.pdf>**

- Improvements were made to Old Brodhead Road that should have been completed in 2018.
  - \$4,000,000 for repairs, signal updates, and other miscellaneous work
- Improvements were made to Brodhead Road that should have been completed in 2018.
  - \$7,700,000 for resurfacing, repairs, traffic signal updates, signing, ramps, and other work

#### **Center Township Safe Routes to School Plan – 2008**

- Brodhead Road was listed as a Hazardous Route within the Center Area School District.
- Chapel & Broadhead Roads Intersection: The 1993 Township Comprehensive Plan recommended improving sight distances, which had not been completed.
- Center Grange & Brodhead Road Intersection: The 1993 Township Comprehensive Plan recommended the Township work with PennDOT install a left turn lane and conduct a traffic signal study which had not yet been completed.
- Pleasant Drive & Brodhead Road Intersection: The 1993 Comprehensive Plan recommended the Township work with PennDOT to complete a study to determine if a traffic signal is warranted, which had not yet been completed.