

Economic Impact Study: Project Shuttle

State of West Virginia

February 23, 2017

CONFIDENTIAL

Contents

1. Executive Summary	2
2. Background and Study Region	3
3. Modeling Approach and Definitions.....	4-5
4. Project Assumptions	6
5. Economic Impact Results	7-8

List of Tables

Table 1. General Demographic Information for the State of West Virginia (2016).....	3
Table 2. Staffing Requirements by Year and Total for Initial Phase of Operation.....	6
Table 3. Estimated Average Base Salary by Occupation Level	6
Table 4. Building Cost (Construction and Labor) by Year and Total for Initial Phase of Operation.....	6
Table 5. Summary Economic Impact Results.....	7
Table 6. Top 10 Impacted Industries by Ongoing Operations.....	7
Table 7. State/Local Indirect and Induced Tax Results – Construction.....	8
Table 8. State/Local Indirect and Induced Tax Results – Ongoing Operations.....	8
Table 9. Industry Description and Codes by Impact Type	9

List of Charts

Chart 1. Modeling Inputs and Outputs	5
--	---

Appendix

A. Industry Definitions	9
B. Limitations	10

1. Executive Summary

A **confidential** Deloitte Consulting client is evaluating the statewide impact of the construction and ongoing operation of a large, state-of-the art heavy manufacturing facility. The total capital investment associated with this facility is over \$183M over a 4-yr period (2017 – 2020), which translates to approximately 150 net new jobs.

To determine this impact, Deloitte utilized an economic impact modeling software called IMPLAN, which identifies and quantifies any and all effects of a change in economic activity upon a regional economy. These effects occur either directly or indirectly, depending on project specifications entered into the model, and are further broken down into the following categories:

1. **EMPLOYMENT** – total jobs that will be created and supported by the project on an ongoing and temporary basis
2. **INCOME** – total increase in payroll for all industries supported by the project, including wages and salaries of workers, self-employed individuals, and income received by private business owners, doctors, merchants, etc.
3. **OUTPUT** – total increase in production for all industries supported by the project, interpreted as the total increase in sales value realized by a study area

This report describes the potential economic impact that this project is estimated to have on the State of West Virginia during construction and ongoing operations.

Based on the economic impact analysis performed by Deloitte Consulting, the proposed investment is estimated to stimulate over **\$191M in economic output during the construction period**, representing a multiplier of 1.44, and an annual operations output of **\$40M during full operations**, representing an output multiplier of 1.47. The anticipated income impact associated with the investment is \$73M during construction, representing a multiplier of 1.34, and \$9.3M annually at full operations, representing an income multiplier of 1.69.

Additionally, Deloitte Consulting estimates that **1,391 new direct, indirect, and induced jobs will be created during the construction period**, representing an employment multiplier of 1.44. **Upon full operations, an average of 152 direct, indirect, and induced jobs are estimated to be created and maintained**, representing an employment multiplier of 2.02.

All figures are quoted in 2020 dollars, which is the anticipated year in which the full investment amount and job creation will be complete for the initial phase of operation.

2. Background and Study Region

BACKGROUND

Deloitte Consulting is working on behalf of a **confidential** client that seeks to identify a community and site to support a new state-of-the-art heavy manufacturing facility. Our client is planning to locate an operation that will require 150 full-time employees and a capital investment of over \$183M, with the potential for future phases of expansion dependent on operating conditions.

Facility construction is tentatively expected to begin in Q2 of 2018, with production testing beginning and initial operations in Q4 2019 and full operations in Q4 2020.

STUDY REGION

This economic impact analysis estimates the ongoing economic benefits to the area, such as an injection of additional or supported jobs for area residents, new sales for area businesses, and additional income for workers and residents. For the purposes of our analysis, the economic impact region is defined to include the **State of West Virginia**.

The summary demographic data for the study region as reported by the economic impact modeling software used for this analysis, IMPLAN, is as follows:

Table 1. General Demographic Information for the State of West Virginia (2015)

Geographic Area	Area (sq. mi.)	Population	Households	Total Personal Income	Income per Household
State of West Virginia	24,087	1,844,128	753,080	\$68,328,636,416	\$90,732

3. Modeling Approach and Definitions

About IMPLAN

IMPLAN (IMPact Analysis for PLANning) was originally developed by the USDA Forest Service in cooperation with the Federal emergency Management Agency and the USDI Bureau of Land Management to assist the Forest Service in land and resource management planning.

MIG (Minnesota IMPLAN Group) began work on IMPLAN bases in 1987 at the University of Minnesota. In 1993, Minnesota IMPLAN Group, Inc. was formed to privatize the development of IMPLAN and its software. Version 1 of the Windows software was developed by MIG and released in June of 1996. The IMPLAN software and data closely follow the accounting conventions used in the “Input-Output Study of the U.S. Economy” by the Bureau of Economic Analysis (1980) and the rectangular format recommended by the United Nations.

Each year, MIG gathers statistical information at the national, state, and county level on employment, employee compensation, proprietary income, population, federal and state expenditures, selected wealth data, household expenditures, etc. The results are then correlated into matrices for each county and industry to represent the multiplicative econometric effects of changes in local spending.

Introduction to Economic Impact Analysis

The IMPLAN model utilizes a methodology called *input-output analysis* to evaluate the potential economic impact of the proposed investment. Input-output analysis is a means of examining the relationships within an economy between businesses, and between businesses and consumers. It attempts to capture all monetary market transactions for consumption in a given time period.

The resulting mathematical formula allows one to examine the effects of a change in one or several economic activities upon an entire economy (called impact analysis). The model assumes that industries respond to meet consumption (demand) directly or indirectly by supplying goods and services to other industries. Each industry that produces goods and services generates demands for other goods and services and so on, round by round. These iterations can be mathematically summarized and described by “multipliers.” This buying of goods and services (indirect purchases) continues until leakages from the region stop the cycle.

Measurements of Economic Activity

The results of economic impact analyses are best understood when they are expressed in everyday terms, such as total production, or jobs created. The results presented herein are broken down into three general categories:

- **Output** – represents the estimated increase in total production for all industries in the region supported by the project, and is a measure of overall economic activity. Output can also be thought of as the increase in the value of total sales for the region, or “Gross Local Product”

- **Income** – represents the estimated increase in total payroll (including benefits) for all industries in the region supported by the project. It includes wages and salaries of workers, self-employed individuals, and income received by private business owners, doctors, lawyers, etc.
- **Employment** – represents the estimated total jobs created and supported by the project, on both a temporary and ongoing basis

Components of Economic Activity

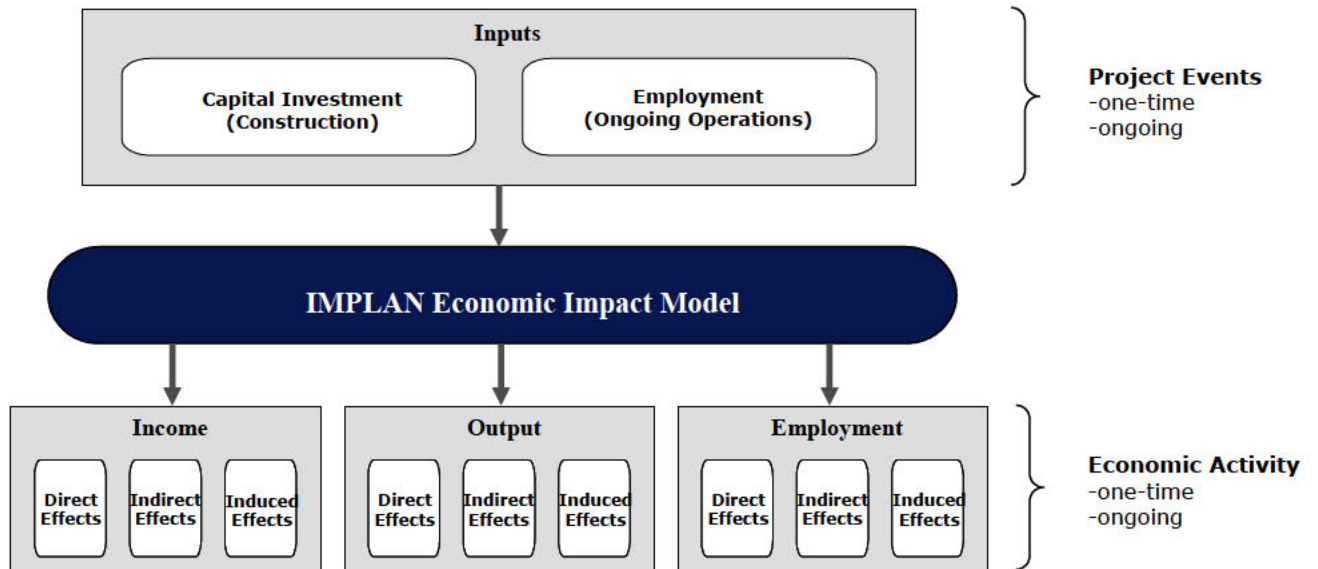
Output, Income, and Employment can be further broken down into three sub-components:

- **Direct effects** measure the changes in the employment and expenditures due to the operation of the development itself. Direct impacts include employment, construction, infrastructure improvements, property taxes, etc.
- **Indirect effects** measure the changes in inter-industry purchases as they respond to the demands of the directly affected industries. Indirect impacts include business-to-business purchases arising from local spending for goods and services
- **Induced effects** measure the effects on all local industries caused by the expenditures of household income generated by the direct and indirect impacts

Modeling Inputs and Outputs

Model inputs are events that cause an impact to the local economy. The IMPLAN model uses these inputs to calculate the expected economic effects on output, income, and employment. The input events utilized in this analysis can be seen below.

Chart 1. Modeling Inputs and Outputs



4. Project Assumptions

LABOR

Table 2. Staffing Requirements by Year and Total for Initial Phase of Operation

Full-Time Employees	TOTAL	2019	2020
Plant Management	11	11	-
Supervisors	14	12	2
Engineers	3	3	-
Coordinators/Planners	3	3	-
Operators and Technicians/Specialists	117	90	27
Administrative/Other Management	2	2	-
ANNUAL TOTAL	150	121	29

Table 3. Estimated Average Base Salary by Occupation Level

Occupation Level	Starting Base Salary*
Plant Management	\$110,000
Supervisors	\$65,000
Engineers	\$85,000
Skilled / Semi-skilled Operators	\$35,000
Unskilled Operators	\$28,000
Administrative / Other Management	\$57,000
Weighted Average Annual Base Salary*	\$46,611 (\$22.41 per hour)

*Salaries are preliminary estimates based on (1) initial due diligence of the local labor market and (2) qualification thresholds for incentives programs and may be updated by the client as necessary

CAPITAL EXPENDITURE

Table 4. Building Cost (Construction, Equipment, and Labor) by Year and Total for Initial Phase of Operation

Investment (\$M)	TOTAL	2017	2018	2019	2020
Building Costs	\$183	\$13	\$61	\$87	\$21

5. Economic Impact Results

The estimated economic impact of Project Shuttle is as follows:

Table 5. Summary Economic Impact Results

		Employment	Income	Output
Construction	Direct	969	\$54,402,879	\$133,053,329
	Indirect	106	\$5,957,828	\$18,703,405
	Induced	317	\$12,666,405	\$40,035,591
	Total	1,391	\$54,517,572	\$191,792,325
	Multiplier	1.44	1.34	1.44
		Employment	Income	Output
Ongoing Operations	Direct	75	\$5,474,793	\$27,652,331
	Indirect	37	\$2,167,798	\$7,851,385
	Induced	40	\$1,603,209	\$5,070,007
	Total	152	\$9,245,800	\$40,573,724
	Multiplier	2.03	1.69	1.47

Table 6. Top 10 Impacted Industries by Ongoing Operations

Sector	Description	Ongoing Operations		
		Employment	Income (\$)	Output (\$)
215	Mineral wool manufacturing	75	5,475,477	27,656,741
395	Wholesale trade	4	258,151	877,719
502	Limited-service restaurants	4	66,560	270,017
501	Full-service restaurants	3	60,887	136,498
482	Hospitals	3	200,453	391,916
411	Truck transportation	3	176,577	483,716
461	Management of companies & enterprises	2	190,914	446,347
440	Real estate	2	43,057	385,570
468	Services to buildings	2	36,799	67,261
433	Monetary authorities and depository...	2	89,012	280,726
TOTAL OF TOP 10 IMPACTED INDUSTRIES		99	6,597,888	30,996,512

NOTE – ongoing operations direct employment is less than the 150 who will be employed at the facility due to the labor shed in this region of pulling employees from Virginia and Maryland. Workers that commute into West Virginia are not fully counted for employment purposes, though the appropriate taxes and monetary spend within the state is. All impact figures for construction **include only projected expenditures on building construction, including labor, and exclude projected expenditures associated with machinery and equipment**, as it is unknown if the client will be able to source all machinery and equipment within the state.

Summary of State/Local Indirect and Induced Tax Results

Tax impact results represent only the estimated indirect and induced effects of Project Shuttle operations and construction, not the direct taxes paid by the company or its employees. Indirect and induced effects are generated by the business-to-business and household expenditure activities arising from the direct impact of the facility's operation.

Table 7. State/Local Indirect and Induced Tax Results – Construction

Description	Employee Compensation	Tax on Production and Imports	Households	Corporations
Dividends				\$23,690
Social Ins Tax- Employee Contribution	\$51,173			
Social Ins Tax- Employer Contribution	\$103,394			
Tax on Production and Imports: Sales Tax		\$1,695,037		
Tax on Production and Imports: Property Tax		\$901,258		
Tax on Production and Imports: Motor Vehicle Lic		\$23,969		
Tax on Production and Imports: Severance Tax		\$446,861		
Tax on Production and Imports: Other Taxes		\$183,147		
Tax on Production and Imports: S/L NonTaxes		\$22,559		
Corporate Profits Tax				\$231,506
Personal Tax: Income Tax			\$1,639,978	
Personal Tax: NonTaxes (Fines- Fees			\$142,737	
Personal Tax: Motor Vehicle License			\$57,239	
Personal Tax: Property Taxes			\$21,212	
Personal Tax: Other Tax (Fish/Hunt)			\$31,115	
TOTAL TAX RESULTS	\$154,568	\$3,272,834	\$1,892,283	\$255,196

Table 8. State/Local Indirect and Induced Tax Results – Ongoing Operations

Description	Employee Compensation (\$)	Tax on Production and Imports (\$)	Households (\$)	Corporations (\$)
Dividends				\$6,264
Social Ins Tax- Employee Contribution	\$6,747			
Social Ins Tax- Employer Contribution	\$13,632			
Tax on Production and Imports: Sales Tax		\$368,747		
Tax on Production and Imports: Property Tax		\$196,064		
Tax on Production and Imports: Motor Vehicle Lic		\$5,214		
Tax on Production and Imports: Severance Tax		\$97,212		
Tax on Production and Imports: Other Taxes		\$39,843		
Tax on Production and Imports: S/L NonTaxes		\$4,908		
Corporate Profits Tax				\$61,216
Personal Tax: Income Tax			\$208,277	
Personal Tax: NonTaxes (Fines- Fees)			\$18,128	
Personal Tax: Motor Vehicle License			\$7,269	
Personal Tax: Property Taxes			\$2,694	
Personal Tax: Other Tax (Fish/Hunt)			\$3,952	
TOTAL TAX RESULTS	\$ 20,380	\$711,988	\$240,320	\$67,480

Appendix A. Industry Definitions

Critical to the accuracy of an IMPLAN analysis is the selection of the industry sectors, by NAICS code, that correctly align to each operational component of the project. The industries used to capture the economic impact of Project Shuttle are as follows:

Table 9. Industry Description and Codes by Impact Type

Impact Type	Description	Industry Code	NAICS Code
Construction	Construction of new manufacturing structures	53	N/A
Ongoing Operations	Mineral Wool Manufacturing	196	326211

Appendix B. Limitations

This analysis is based on information and estimates available through the date of this report, and information provided by the client and other third-party sources. While we cannot confirm or warrant the completeness or accuracy of all information and assumptions, we believe them to be directionally correct.

Estimates, by their very nature, are inherently subject to both known and unknown risks, uncertainties, and other factors that may cause actual results to vary materially from these estimates, including but not limited to general economic and business conditions, demographic and technology changes, existing and future government regulations and tax policies, the ability and resources of the project, and other relevant factors.

Zoning and Permitting Timeline

Permit Category	Agency	Months								
		1	2	3	4	5	6	7	8+	
Rezoning, Land Development, and Plat Revision										
Pre-Application Meeting	Ranson/Land Owner	█								
Submit Rezoning, Land Development Plan, and Plat Revision	Land Owner	█								
Planning Commission Meeting #1 (submit amendment and set public hearing date)	Ranson		█							
City submits legal advertisement to Spirit	Ranson		█							
Public Hearing (Rezoning, Land Development, Plat Revision)	Ranson			█						
Planning Commission Meeting #2 (approval of rezoning/land development plan/plat revision)	Ranson			█						
City Council Meeting for Final Approval	Ranson			█	◆					
Site Plan and Building Permits										
Submit Site Plan Application	Shuttle			█	█					
Review Site Plan Application	Ranson			█	█	█				
Planning Commission Meeting #3 (Approval of Site Plan)	Ranson				█	█	◆			
Submit Site Improvement Permit Application	Shuttle						█			
Review Site Improvement Permit Application	Ranson						█	█	◆	▨
Submit Building Permit Application	Shuttle					█				
Review Building Permit Application	Ranson					█	█	█	█	
Building Permit Issuance (only issued once core infrastructure installed)	Ranson									▨

◆ Permit/Approval Issuance ▨ Potential, additional time requirement

KEY OBSERVATIONS

- Building Permit is only issued once core infrastructure is installed pursuant to the site improvement permit

Zoning and Permitting Timeline

Permit Category	Agency	Months								
		1	2	3	4	5	6	7	8+	
Rezoning, Land Development, and Plat Revision										
Pre-Application Meeting	Ranson/Land Owner	█								
Submit Rezoning, Land Development Plan, and Plat Revision	Land Owner	█								
Planning Commission Meeting #1 (submit amendment and set public hearing date)	Ranson		█							
City submits legal advertisement to Spirit	Ranson		█							
Public Hearing (Rezoning, Land Development, Plat Revision)	Ranson			█						
Planning Commission Meeting #2 (approval of rezoning/land development plan/plat revision)	Ranson			█						
City Council Meeting for Final Approval	Ranson			█	◆					
Site Plan and Building Permits										
Submit Site Plan Application	Shuttle			█	█					
Review Site Plan Application	Ranson			█	█	█				
Planning Commission Meeting #3 (Approval of Site Plan)	Ranson				█	█	◆			
Submit Site Improvement Permit Application	Shuttle						█			
Review Site Improvement Permit Application	Ranson						█	█	◆	▨
Submit Building Permit Application	Shuttle					█				
Review Building Permit Application	Ranson					█	█	█	█	
Building Permit Issuance (only issued once core infrastructure installed)	Ranson									▨

◆ Permit/Approval Issuance ▨ Potential, additional time requirement

KEY OBSERVATIONS

- Building Permit is only issued once core infrastructure is installed pursuant to the site improvement permit

I. PROJECT DESCRIPTION

Deloitte Consulting is working on behalf of a confidential client that seeks to identify a community and a site to support a new state-of-the-art heavy manufacturing facility for consumer and industrial products. Our client is planning to locate an operation that will require up to 150 full time employees and a capital investment of over \$140 million, with the potential for future expansion investments and additional labor needs.

This project is part of a broader strategic goal of expanding the company's global presence to respond to rising demand. As previously noted, the project holds the possibility of a second phase which may result in expansion beyond the initial investment. While the specifications contained in this RFP are for the initial investment, we request that you consider the longer term opportunities of subsequent phase(s) as you prepare your response.

II. PROJECT SPECIFICATIONS

The information we provide herein is for planning purposes only and does not constitute a guarantee by Deloitte or by our client. The numbers below are only for the initial investment of Project Shuttle.

Initial Investment Specifications

CAPEX AND LABOR RAMP-UP							
		TOTAL	2017	2018	2019	2020	2021
Capex (\$M)	Land and land preparation		11				
	Building Construction			33	28		
	Process equipment			17	44	17	
	Other (e.g., IT, Software, Relocation)		5.5				
	TOTAL	\$155.5M	16.5	50	72	17	
Labor	Plant Management				11		
	Supervisors				12	2	
	Engineers				4		
	Skilled Operators				25	8	
	Semi-skilled Operators				30	8	
	Unskilled workers				38	10	
	Administrative/Other Management				2		
TOTAL		150			122	28	

Estimated Average Base Wage for Whole Facility	\$46,500
Estimated Average Base Wage for Direct Manufacturing Workers	\$36,300

UTILITIES **Phase 1 / Phase 2**

Electric	Power Demand (kW)	15 MW / 50 MW
	Power Factor (%)	80-90 %
	Load Factor (%)	40-60 %
	Avg. Daily Consumption (kWh)	24/7 operation
	Peak Daily Consumption (kWh)	Similar to average
	Transmission Line Size (kV)	Min. 10 kV; Max. preferred 30 kV (mid. V.)
	Uninterruptable Operations	2 separate sources; sub-surface supply cables
Water	Water Pressure (psi)	<u>Pref: 87-145 PSI (58-87 is min)</u>
	Avg. Daily Consumption (gallons)	160,00 / 318,00 gal/day
	Peak Daily Consumption (gallons)	13,500 / 26,500 gal/hour
	Size of Water Line (in)	No preference
	Water Properties Requirement	Normal process industry water
Waste Water (Sanitary / Industrial)	Avg. Daily Waste Flow (gallons)	47,000 / 95,000 gal/day
	Peak Daily Waste Flow (gallons)	79,500 / 159,00 gal/day
	Size of Water Line (in)	No preference
	BOD level (industrial)	Reject from Reverse Osmosis
	Pre-treatment	None
Natural Gas	Gas Pressure (psi)	<u>Pref: 87-145 PSI (58 PSI is okay)</u>
	Size of Gas Line (in)	No preference
	Avg. Daily Consumption	2.42 / 4.48 MMSCF / day
	Peak Daily Consumption	X 1.25 or 25% increase
Telecom		2 x 20 Mb/s synchronous

Estimated Number of Workers and Total Payroll
Note: These estimates are for one line of the plant; future expansion to two lines could double these estimates

	Year 1	Year 2	Year 3	Year 4	Year 5
Plant Management	11	11	11	11	11
Supervisors	12	14	14	14	14
Engineers	4	4	4	4	4
Operators	55	71	71	71	71
Unskilled Workers	38	48	48	48	48
Administrative	2	2	2	2	2
Total:	122	150	150	150	150
Total Wages (Millions):	\$6.3	\$7.7	\$7.9	\$8.1	\$8.3
Total Payroll with Benefits (Millions):	\$8.9	\$10.8	\$11	\$11.3	\$11.6

III. REQUEST FOR PROJECT ASSISTANCE

Please send an electronic response to each of the outlined items. For each response, please describe the assistance that can be provided both in terms of direct funding or incentives, as well as in-kind services. **In addition, for each program described, please include the following information as applicable:**

I	Name of the program or incentive
II	Detailed description of the program or incentive and how it will apply (including an example of how the incentive should be calculated)
	Authorizing agency
III	Restrictions that may apply (e.g., job creation requirements, wage thresholds, “claw-backs”, etc.)
	Approvals needed (including process and timing, authorizing bodies, application forms required)
IV	Program funding cycles. Please indicate whether the funding is currently available or needs to be raised. Does the potential exist for future administrations to withdraw funding?
V	Estimated cost before incentive (where applicable)
VI	Whether the incentive constitutes “direct funding” versus “in kind”
VII	Estimated value of the funding (by year for the duration of the incentive)
VIII	Start year and duration of incentive

A. Project Request for Tax Credits/Exemptions/Abatements

For the project requests listed below, please include an example of how the incentive should be calculated and note the duration. PLEASE CONFIRM AND OUTLINE THE MECHANISM BY WHICH THE INCENTIVES OFFERED BELOW WILL BE EXTENDED AND “LOCKED IN” FOR FUTURE PHASES OF DEVELOPMENT

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Provide maximum abatement of Real and Personal Property Taxes. Indicate the ability to extend or enhance property tax abatement benefits beyond the proposed abatement schedule. Please note the year the property taxes would start and the abatements would start						
2	Expedite the depreciation schedules on personal and real property. Please provide the proposed accelerated/enhanced schedules						
3	Provide Sales Tax exemption on Machinery and Equipment, if applicable						
4	Provide Sales Tax exemption on building materials and construction labor, if applicable						
5	Provide Sales Tax exemption on furniture, fixtures, and office equipment (inclusive of all communications, computer, server, software, and other hardware equipment), if applicable						
6	Provide State, County, and local Sales and Use Tax exemptions on electricity, natural gas, water, and waste water, if applicable						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
7	Provide tax exemption on inventory, such as a Freeport Exemption on all goods shipped out of state, if applicable						
8	Apply on behalf of Project Shuttle for New Market Tax Credits, if applicable						
9	Detail additional tax reduction programs. Please note that corporate income tax reduction programs may not be able to be utilized by the client. Therefore, in instances where Project Shuttle would be eligible for such income tax abatements please provide information on the State's ability to re-allocate any potential corporate income tax reduction/abatement programs to either additional incentives or augmenting other incentives programs so as to be usable by the client.						
10	Please confirm that any tax credit awarded levied in the state / locality that is usable to the client will also be offered to future project expansions						
11	Please confirm that any profits generated by the initial investment will receive payroll tax, and any other usable tax credits to the company as new phases come on line at the site						
12	Provide any Job Creation incentives, applicable credits or proposed programs to reduce or limit tax liability including eligibility for refund, highly preferred, if the credits exceed tax liability (carry forward and carry back). Please also identify: <ul style="list-style-type: none"> • Ability to transfer credits to parent company or other entities (in column II) • How these programs may be combined or whether they are mutually exclusive (in column II) 						
13	Please complete the following table regarding taxes and abatements						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
	Tax	Rate	Abated Rate	Start Date of Abatement	Duration of Abatement	Goods Applicable	
	Real Property Tax – Millage Rate						
	Personal Property Tax – Millage Rate						
	Assessment Value (Property Tax)						
	Sales Tax (General)						
	Sales Tax (Utilities)						
	Manufacturing Sales Tax						
	Inventory Tax						
	Contractor's Tax (Labor)						

B. Project Request for Discretionary Grant Funding

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Grant assistance from State or local discretionary grant programs (please provide details on whether they are directly payable to the client on a reimbursement basis or whether they are subject to other requirements, such as public bidding requirements)						
2	Provide other grants as may be available to offset one-time costs (e.g., training, utilities, etc.), along with details on whether they are directly payable to the client on a reimbursement basis or whether they are subject to other requirements, such as public bidding requirements						

C. Project Request for Recruiting and Training

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Provide assistance with seamless screening, recruitment, customized testing (e.g., drug, competency, etc.), hiring, and training processes throughout the hiring ramp up for the initial investment (through 2020)						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
2	<p>Provide any additional assistance with customized job training, through the local community college system, or other entities if appropriate. Describe in detail all direct and indirect recruiting and training programs, grants and other cost offsets for the recruitment and training of Project Shuttle workforce such as subsidies for, or reimbursement of, the costs for the following:</p> <ul style="list-style-type: none"> Expenses for training conducted within and outside of West Virginia, including travel, transportation, boarding, salary, etc. Reimbursement of wages at the initial stage of employment <p>For the above, please be sure to describe:</p> <ul style="list-style-type: none"> Specific groups of employees that qualify for such programs (in column III) Particular conditions for obtaining the incentives (e.g., hiring or investment requirements) qualifications, stipulations, and “claw-back (in column III) Time of commencement and duration of the incentive (in column VIII) 						
3	Describe the opportunities available to work with local universities, colleges, and technical schools to recruit candidates with appropriate skills						
4	Provide recruiting and training facilities during plant construction and hiring period to fill the gap while the project specific training center is being completed						
5	<p>Provide relocation assistance for Project Shuttle expatriates, including:</p> <ul style="list-style-type: none"> Familiarization tours for expats employees and families Assistance in securing housing for expats Programs for provision of short term (up to 3 months) housing Reduced rates for hotels and short-term housing Assistance with cultural assimilation of expats into the community 						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
6	Describe the interchangeability of funding for recruiting, training, and relocation assistance						

D. Project Request for Permitting and Inspections

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Waive costs of all building permits						
2	Identify all State, County and local inspections that will be required and waive fees for these inspections						
3	Detail ability to fast-track permitting at the Federal, State, County and local levels, especially for the Air Permit. Illustrate project development timeline						
			n/a	n/a	n/a	n/a	n/a
4	Confirm what types of construction activities will be allowed to begin before the Air Permit is issued						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
			n/a	n/a	n/a	n/a	n/a
5	Confirm ability to start application process for necessary permits before client takes possession of the property						
			n/a	n/a	n/a	n/a	n/a
6	Describe your plans to ensure that the client can secure vesting of development rights for the entire property						
			n/a	n/a	n/a	n/a	n/a
7	Describe your plans to provide a dedicated project Ombudsman to guide the project through the permitting process, construction, facilitate inspections, organize necessary meetings with government officials, and help ensure that the State and local commitments contained in the incentives agreement are fulfilled						
			n/a	n/a	n/a	n/a	n/a

E. Project Request for Zoning and Easements

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Confirm that the site is appropriately zoned for heavy industrial manufacturing, and the proposed manufacturing processes of Shuttle						
			n/a	n/a	n/a	n/a	n/a

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
2	Confirm that all non-project-related easements will be removed from the property according to the project schedule and at no cost to the client						
3	Waive any restrictions that would prevent any part of the building from being of 115' high with a main chimney up to 328'						
			n/a	n/a	n/a	n/a	n/a
4	Describe ability to work with Project Shuttle to establish industrial park guidelines/setbacks						
			n/a	n/a	n/a	n/a	n/a
5	Detail commitment to fast track zoning, zoning variances and easement changes, as necessary						
			n/a	n/a	n/a	n/a	n/a

F. Project Request for Land Acquisition

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Provide 184 acres of land at no cost						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
2	Confirm that, upon selecting the site, the proposed site will be exclusively reserved for Project Shuttle during any negotiations and through final approval of any agreement(s)						
3	Grade and level 184 acres of land, including the import or removal of engineered fill as necessary and desired by client at no cost to the client,						
4	Describe ability to provide immediate access to the site for client's designated engineering team						
			n/a	n/a	n/a	n/a	n/a
5	Describe ability to provide ALTA boundary survey and title policy						
6	Describe ability to provide Phase 1 Environmental Study and Soil Borings						
7	Waive all land transfer taxes						

G. Project Request for Utilities

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Waive all utility tap, meter, connection, and impact fees; including the cost of both a water and wastewater meter						
2	Guarantee that all natural gas infrastructure, water infrastructure, waste water, and fiber infrastructure: <ul style="list-style-type: none"> • Will be extended to the building / appropriate connection point on the property at the requested capacities, at no cost, and in time for client to start product testing beginning of Q3 2019 • Will meet all required capacities and pressures (where applicable) specific to this project by beginning of Q3 2019 (in column II) at no cost to client • Provide sufficient capacities for construction purposes scheduled to begin Q2 2018 (in column II) 						
3	Confirm that the electrical provider (1 st Energy) will provide/undertake the following by beginning of Q3 2018 (unless otherwise specified) and at no cost to the client: <ul style="list-style-type: none"> • Provide sufficient electrical capacity needed to site for construction to begin Q2 2018 • Provide electricity to the designated point on the site at least 10kV (preferably 30kV) • Tap into a high voltage transmission line to supply the client • Construct a substation at a designated point on client site to supply the facility • Construct a substation for the client with sufficient bays to host additional redundancy and/or future phases • Construct or tap into a second substation for redundant supply • In consultation with client, install pad-mounted transformers around the facility at designated points in the plans to serve the buildings • Maintain the substation and transformers 						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
4	Administer a one-time flow test from nearest hydrant that indicates static, residual, and flow rate (gpm)						
5	At no cost to client, construct a water tank for fire protection, or install boosters to firefighting water line, if flow rates are deemed to be too low by the insurer						
6	Confirm right-of-way to extend access road to site						
			n/a	n/a	n/a	n/a	n/a
7	Commit to construct two access road to the site to handle the projected truck traffic, at no cost						
			n/a	n/a	n/a	n/a	n/a
8	Offer reduced utility rates for the project. Please indicate the lower rates versus standard rates and duration of the reduced rates: <ul style="list-style-type: none"> • Water • Waste water • Electricity • Natural Gas • Fiber 						
9	Provide a rail spur, track switching, and extensions, at no cost						
10	Waive local utility permit fees and one-time utility impact fees						

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
11	Ensure redundant fiber/telecommunications service is brought to the site, at no cost						

H. Miscellaneous Project Requests

I	II	III	IV	V	VI	VII	VIII
Name of Program or Incentive	Detailed Description (include example of calculation) and Authorizing Agency	Restrictions that May Apply and Required Approvals	Program Funding Cycles. Are the funds available?	Estimated Cost Before Incentive	Direct Funding (DF) or In-Kind (IK)?	Value of Direct Funding (\$)	Start Year and Duration of Incentive
1	Provide office space for project team (June 2017 through December 2019) at no cost						
2	Provide experienced rating for workers compensation, unemployment insurance, etc.						



Project Shuttle

Site Visits

Jan 26 - 27, 2017

Project Overview

Details	Information
Client	Confidential
Industry	Heavy Manufacturing in Consumer and Industrial Goods
Description	Our client seeks to identify a community and a site to support a new heavy manufacturing facility. Our client is planning to locate an operation with a capital investment of ~\$150 million.
Est. Headcount	120-150 headcount
Real Estate	Greenfield preferred, but will consider brownfield sites

Thursday Representative Daily Itinerary

Representative Timing	Team 1	Team 2 (Environmental Team)
Morning (Start: 8:30 AM)	Overview Meeting [~1/2 hour]	
	FO Day Visit [~1 hour]	
	Jefferson Orchards Visit [~1 hour]	
	Community Tour [~1 hour]	
Afternoon (End: 5:30 PM)	Lunch [~1/2 hour]	
	Environmental and Permitting Discussion [~1 hour]	
	Technical Overview of FO Day and Jefferson Orchards [~4 hours]	Travel To Respective Locations
	Project Shuttle team dinner	
Evening		
	Team 1	Team 2 (Environmental Team)
	<ul style="list-style-type: none"> VP Operations General Counsel Project Manager Deloitte (3) 	<ul style="list-style-type: none"> GT Director Environmental Representative Environmental Consultant (1-2) (TBD) Design Coordinator

Project Shuttle000333

Friday Representative Daily Itinerary

Representative Timing	Team 1	Team 2 (Environmental Team)
Morning (Start: 8:30 AM)	Taxes and Incentives Discussion [~2 hours]	Extended DO Day Site Visit [~2 hours or as needed]
	Internal Deloitte / Shuttle Meeting [~1.5 hour]	
Request space for internal debrief		
Afternoon	Lunch [~1/2 hour]	
	Travel to Washington, D.C. Airport [~1 hour]	
Evening	Flights to respective destinations	
	Team 1	Team 2 (Environmental Team)
	<ul style="list-style-type: none"> • VP Operations • General Counsel • Project Manager • Deloitte (3) 	<ul style="list-style-type: none"> • Environmental Representative • Environmental Consultant (1-2) (TBD) • Design Coordinator

West Virginia – Thursday, January 26th

Start	Finish	Activity	Location	Address	Contact Name / Info	Comments
8:00 AM	8:15 AM	Drive	Jefferson County EDA	1948 Wiltshire Road, Suite 3, Kearneysville, WV 25430	Todd Hooker, (304) 389-4892 John Reisenweber, (304) 676-9204	
8:15 AM	8:45 AM	Overview Meeting				
8:45 AM	9:00 AM	Drive	FO Day	942 Baker Rd, Martinsburg, WV 25405		
9:00 AM	10:00 AM	FO Day Site Visit				
10:00 AM	11:00 AM	Jefferson Orchards Site Visit	Jefferson Orchards	TBD		
11:00 AM	12:00 PM	Community Tour	TBD	TBD		
12:00 PM	12:30 PM	Lunch	Jefferson County EDA	1948 Wiltshire Road, Suite 3, Kearneysville, WV 25430		
12:30 PM	1:30 PM	Environmental and Permitting				
1:30	5:30	Technical Overview of FO Day / Jefferson Orchards	Jefferson County EDA	1948 Wiltshire Road, Suite 3, Kearneysville, WV 25430		Includes utilities, rail, site development, zoning; includes Berkeley and Jefferson County Commissioner or representative for property rights and future development uses
6:30 PM	7:30 PM	Dinner	TBD	TBD		

West Virginia – Friday, January 27th

Start	Finish	Activity	Location	Address	Contact Name / Info	Comments
8:15 AM	8:30 AM	Drive				
8:30 AM	10:30 AM	Taxes and Incentives Meeting	Jefferson County EDA	1948 Wiltshire Road, Suite 3, Kearneysville, WV 25430	Todd Hooker, (304) 389-4892 John Reisenweber, (304) 676-9204	Team 1: Walk through and discussion of incentives offer and applicable state and local taxes
		Extended	FO Day	942 Baker Rd, Martinsburg, WV 25405		Team 2: Extended FO Day and surroundings site visit
10:30 AM	12:00 PM	Internal Meeting	Jefferson County EDA	1948 Wiltshire Road, Suite 3, Kearneysville, WV 25430		Conference room needed for internal meeting
12:00 PM	--	Lunch / Driving	Washington, D.C.			

Materials / What to Bring

Owner or site representative should bring the items listed below to the meeting; Expect to meet on or at the site (or in a nearby building, if necessary); Site visit must include a walkthrough of the site

Category	Description
Site Plan	<p>A large copy of the site plan and property delineations that includes all relevant details:</p> <ul style="list-style-type: none">• Site boundary• Topographical map• Wetlands delineations and relevant state and federal designations• 100-year and 500-year floodplains• Utilities (lines, access points, etc.)• Easements• Road access• Proposed rail spur• Proposed siting of a 900 x 500 meter or 750 x750 meter footprint <p><i>*An aerial view would be preferred to see the physical site characteristics first-hand</i></p>
Utility Infrastructure Map	<ul style="list-style-type: none">• Utility maps with infrastructure and proposed service lines for electricity, natural gas, water / waste water, and telecom• Current and planned capacity, availability, dual circuit, voltage of transmission lines, indication of whether dual-circuit capable, and nearest substation• Detailed plans for any proposed service lines

Introductory Meeting Overview

The visit will begin with an overview discussion of the operating environment for approximately 30 minutes

Area of Focus	Parties Involved	Discussion Topics
Introductory Meeting	Director of economic development, Workforce Development, Senior representative of regional planning (others as appropriate)	<ul style="list-style-type: none">• Geographic orientation of the metro region (using maps)<ul style="list-style-type: none">○ Overview of economic sectors & trends○ Demographic trends○ Manufacturing employment corridors○ Roadways, transit and air transport• Overall economic and investment climate• Overview of local labor environment• Local labor environment discussion<ul style="list-style-type: none">○ Manufacturing environment (top employers, recent closures, new entrants)○ Local workforce training programs/institutions○ Unemployment rate and recent changes

Environmental and Permitting Meeting Overview / Request

Area of Focus	Parties Involved	Discussion Topics
Permitting Process	Local and state representatives (where applicable)	<ul style="list-style-type: none"> • Permits required for site, facility, and utility development • Estimate time required for permitting and associated restrictions (e.g. construction, machinery and equipment installation, etc.) • <i>*Rep for all state permits to be a part of one of the meetings in the state (e.g. air and water/waste water)</i>
Environmental Regulations and Permitting	WV Department of Environmental Protection, EPA, local and state representatives (where applicable)	<ul style="list-style-type: none"> • Environmental rules and regulations applicable to Shuttle • Timeline of air permitting and potential hurdles to address • Timeline of any other relevant processes to obtain necessary permits • Clarification of impact of Chesapeake Bay Watershed, specifically with regards to water/waste water/storm water

Technical Meeting Overview / Request (1 of 2)

Area of Focus	Parties Involved	Discussion Topics
Local Operating Characteristics	Local and State Economic Development Representatives	<ul style="list-style-type: none"> Identify proposed site and building footprint with dimensions 900m x 500m or 750m x 750m Current acreage and expansion capabilities (if applicable, details on the ability to purchase adjacent land to meet footprint dimension requirements) Proposed road access to the site Coverage ratio (specify if for under roof or impervious surfaces)
Physical Site Characteristics	Owner or Site Representative	<ul style="list-style-type: none"> Current site ownership Cost for land per acre / clearing costs per acre Status and findings of site tests – Phase I, environmental, archeological – and any remaining studies required Zoning – current and future, process and timing to change, if needed Wetlands, 100-yr and 500-yr floodplains, and delineations (if applicable), including ability, timing and cost to mitigate Documentation of any environmental issues, disclosures, or requirements for site Ground water level Soil bearing capacity, nature of soil, depth of bedrock
Construction Readiness		<ul style="list-style-type: none"> Any and all impediments to development, along with timing and cost to mitigate them Confirmation of site / parks willingness to support the proposed use (what you know if it) Site prep activities, timing and cost Road/ transportation infrastructure upgrades from the site
Rail Access	Rail Representative	<ul style="list-style-type: none"> Ability, timing, and cost to get rail to the site Closest intermodal facility

Technical Meeting Overview / Request (2 of 2)

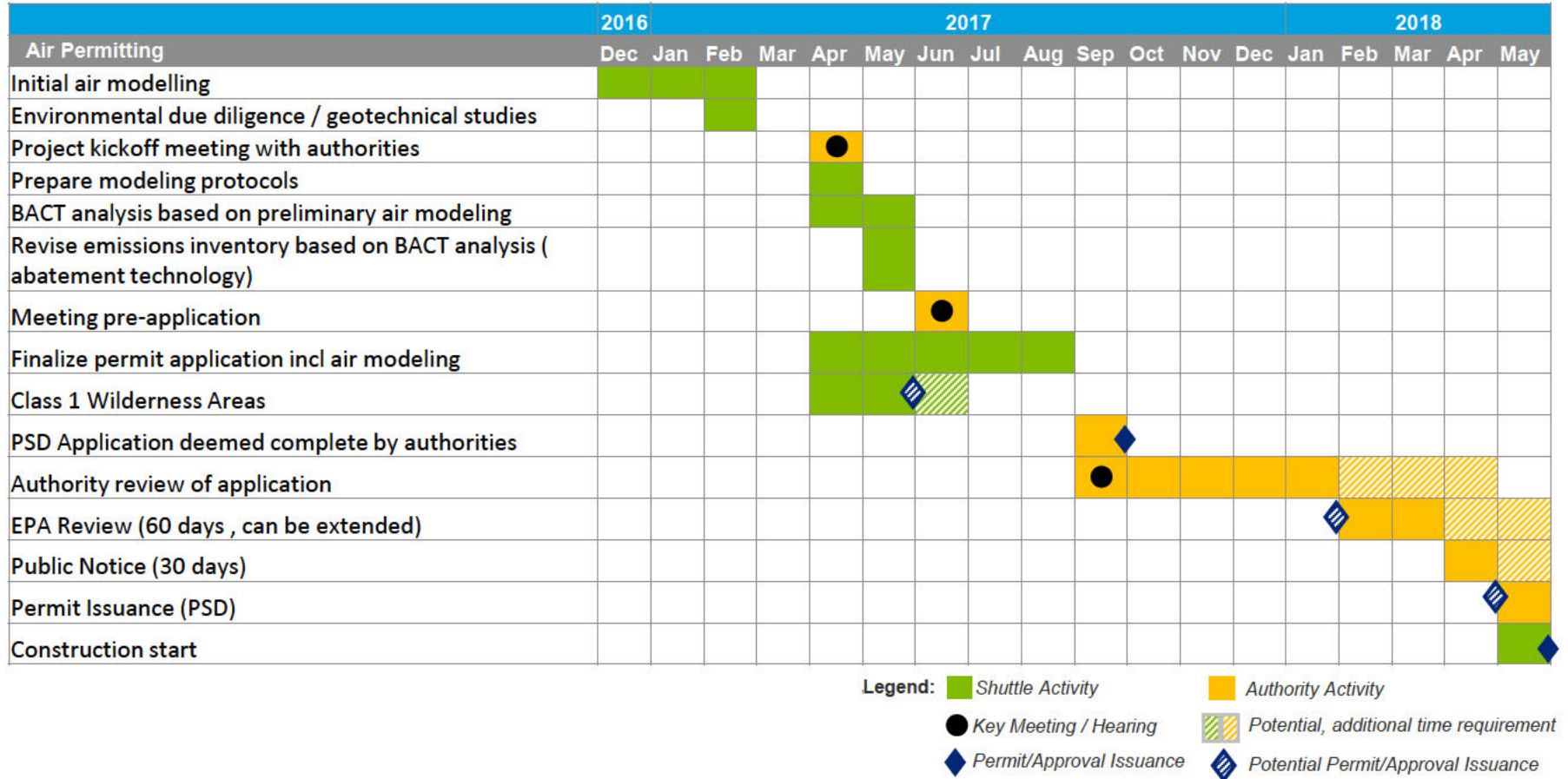
Area of Focus	Parties Involved	Discussion Topics
Utility Access, Availability, and Capacity	Representatives from all utilities (electric, gas, water / wastewater and telecom)	<p>Gas</p> <ul style="list-style-type: none"> • Current and future capacity and pressure • Location of line • Timing, cost, and funding entity for any upgrades or extensions, • Estimated gas usage rate <p>Water / Waste Water</p> <ul style="list-style-type: none"> • Current and future capacity, location of line • Timing, cost, and funding entity for any upgrades or extensions • Water availability and flow rate • Waste water discharge infrastructure • Discharge requirements and permits - Biologic Oxygenated Demand (BOD) limitations or regulations for waste water / other requirements • Local utility/municipality's ability to treat waste water • Temperature requirements for waste water • Any costs related to waste water discharge or treatment • Usage rates <p>Electricity</p> <ul style="list-style-type: none"> • Current and future capacity, location of line • Timing, cost, and funding entity for any upgrades or extensions • On-site substation • Dual circuit service • Line voltage and capacity • Planned upgrades • Nearest substation(s) • Total cost per kWh based on project specifications <p>Telecom</p> <ul style="list-style-type: none"> • Location, timing and cost to extend service from two providers • Usage rates <p>External Waste Disposal</p> <ul style="list-style-type: none"> • Access, providers and associated permitting • Cost and timing

Incentives and Taxes Meeting Overview / Request

Area of Focus	Parties Involved	Discussion Topics
Taxes	Local, county, and state officials	<ul style="list-style-type: none">• All applicable taxes and tax rates at the local, county, and federal level• Tax abatements and/or exemptions available, the process for securing them, potential hurdles to their securement, and the schedule of how they will apply
Incentives Offer	Local and state representatives and any other applicable party assisting with the incentives offer	<ul style="list-style-type: none">• Details on all incentives and programs and how they will apply• Value, timing, process to secure approval, restrictions, etc. with regards to incentives

Air Permitting (as understood to date)

Air permitting is crucial to Project Shuttle and as such they want to confirm the accuracy and feasibility of the permitting timeline



FO Day – Jefferson County, WV Permitting Timeline

Total process to obtain non-air permits for FO Day is estimated to take 180 days; Project Shuttle would like to confirm the details below are accurate

Permit Category	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
SITE PERMITTING												
Concept Plan Submission	█	█	▨									
Public Hearing and Application Review			█	▨								
Second Submission Period (Due to Size)			█	█								
Site Permit Issued					◆	▨	◆					
BUILDING PERMITTING												
Building Permit Review					█	▨						
State Fire Marshal Review					█	▨						
Building Permit Issued and Posting Bond for Improvements						◆	▨	◆				
STORMWATER POLLUTION PREVENTION PERMIT												
Stormwater Management Review	█	█	█	◆	▨	▨	▨	◆				

◆ Permit/Approval Issuance ▨ Potential Permit/Approval Issuance ▨ Potential, additional time requirement

Key Observations

- Jefferson County has a bonding requirement for site improvements, which would be held up to 2.5 years or until site improvements are made. Bonding is a requirement the permitting process
- Permitting for site/building can occur concurrently with air and stormwater permitting

Notes: Stormwater review must be done 100 days before construction begins for sites more than 100 acres of ground disturbance and 60 days for sites with less than 100 acres. Additional requirements likely to apply due to MS4 and Chesapeake Bay Watershed designations. Indication from planning officials is that the process could be expedited and would reportedly take less than 3-4 months. Processes can occur concurrently.