Economic Effect Work Group
Revised Options for RAC Review

November 7, 2018
Summary of Status (November 2018)

The Economic Effect Work Group (WG) began its work by identifying options for five issues outlined in its Initial Scope of Work. Described briefly, these Initial Scope Issues are:

1. Determining the meaning of “existing or previous use”
2. Assumptions for estimating the “economic effect” of the “existing or previous use,” which includes:
   A. Assumptions on the use and geographic scope reported
   B. Assumptions on the timeframe reported for “previous use”
3. Assumptions for estimating the “economic effect” of the proposed action
4. How to estimate “economic effect,” which includes:
   A. Economic metrics reported for “economic effect”
   B. Verifying economic metrics reported
5. How to estimate the “net economic improvement” between the “most recent heavy industry use” and the proposed action, which includes:
   A. Defining “net economic improvement”
   B. Economic metrics reported for “net economic improvement”

The WG found, after its analysis, that many concepts within these five Issues are tied together through statutory language. As such, “bundling” and “streamlining” the five Issues may be the most logical way to present options to the RAC. In particular:

- Sections 7014 (c)(1) and 7014(c)(2) state that the applicant must describe “economic effect” as defined in section 7004(b)(2) for both “existing or previous use” as well as for the “alternative or additional heavy industry use or bulk product transfer activity.” As such, the economic metrics options identified for Issue #4A all apply to the options presented in Initial Scope Issues #1, 2A, 2B, and 3.

- Section 7014(c)(3) does not specifically refer to the 7004(b)(2) definition of “economic effect” for how “net economic improvement” should be measured. However, it is least complicated to assume that “economic effect” and “net economic improvement” utilize the same metrics. As such, it is reasonable to assume that the economic metrics options outlined in Issue #5B are the same as those identified for Issue #4A.

- Furthermore, it is least complicated to assume that “existing or previous use” (for the purposes of “economic effect”) is equivalent to the “most recent heavy industry use” (for the purposes of “net economic improvement”). As such, it is reasonable to assume that the options identified for Initial Scope Issue #5A align with those identified for Initial Scope Issues #1, 2A, 2B, and 3.
As a result of the above “bundling,” the WG decided to re-frame the original five Issues into four “streamlined” issues:

1. How to report information on the “existing or previous use” for “economic effect” purposes (and the “most recent heavy industry use” for “net economic improvement” purposes)
2. Defining the geographic scope for economic effect reporting
3. Defining the economic metrics used to report both “economic effect” and “net economic improvement”
4. Verifying the reported economic metrics

It is important to note that these streamlined issues take into account the assumptions noted in the bullet points above.

The options list for these “streamlined” issues are is provided on the next page. These streamlined options also indicate those options that the WG felt were the most technically feasible.

Finally, it should be noted that the full suite of options generated by the WG for the original five Issues (including pros and cons) is included in Appendix A of this document. As such, the RAC is free to consider options beyond the “streamlined” issues and options list.
“Streamlined” List of Economic Effect Options for Initial Scope Issues #1-5

1. How to report information on the “existing or previous use” for “economic effect” purposes (and the “most recent heavy industry use” for “net economic improvement” purposes)

In other words… the options for reporting the “economic effect” of “existing or previous” use AND the “economic effect” of the “alternative or additional heavy industry use or bulk product transfer activity” AND the “net economic improvement” between the “most recent heavy industry use” and the proposed action.

[Initial Scope Issues #1, 2B, 3, and 5A]

- **Option 1: Report effect of existing site uses for active sites, nothing for inactive sites.** For active sites, economic effect of “existing or previous” use would include effect of existing uses. For inactive sites, economic effect of “existing or previous use” would be reported as “none” or “zero.”

- **Option 2: Report effect of existing site uses for active sites, include current property taxes for inactive sites.** For active sites, economic effect of “existing or previous use” would include effect of existing uses. For inactive sites, economic effect of “existing or previous use” reported as current property taxes.

- **Option 3: Ask applicants to provide “previous use” economic effect measures for one historic year.** A single year would be determined as a baseline for all applicants (e.g., 2015, or three years prior to the application). Data would be reported for that specified year for all economic effect measures requested in the application.

  *The WG suggested that an option for the historic year reported is the last year of operation of the most recent heavy industry use on the site for both active and inactive/abandoned sites.*

- **Option 4: Ask applicants to report “previous use” economic effect with an average annual measure for a specified length of time.** An annual average would be calculated based on a specified range of years, or over the length of the previous use. The applicant would then determine an average across the specific time frame.

- **Option 5: Ask applicants to report “previous use” economic effect measures that provide a range of historical estimates over time.** A time range would be determined as the baseline for all sites. This could be a specific set of years (e.g., 2010-2015) or a range of years relative to the application date (e.g., for the previous two years relative to the application year).
- **Option 6: Report effect of existing site uses for active sites, report current property taxes and previous use for inactive sites (State burden).** Existing use would be reported for active sites. For inactive sites, economic effect of “previous use” would be reported using a State-produced report of previous use. Example title: “Economics Baseline Report.”

- **Option 7: Report effect of existing and previous use for all sites (State burden).** Existing use would be reported for active sites. For both active and inactive sites, economic effect of “previous use” would be reported using a State-produced report of previous use. Example title: “Economics Baseline Report.” For inactive sites, existing use would be current property taxes.

The WG believes the most technically feasible options are Options 2, 6, and 7.
2. **Defining the geographic scope for economic effect reporting**

In other words… the options for assumptions on the geographic scope reported.

[Initial Scope Issue #2A]

- **Option 1:** Report all heavy industry use of property in the **permit boundary**. Report economic effect of existing or previous heavy industry use within the permit boundary.

- **Option 2:** Report all heavy industry use of property in the **tax parcel boundary or boundaries**. Report economic effect of ongoing heavy industry use within the tax parcel boundary or boundaries.

- **Option 3:** Report all heavy industry use of property in the **heavy industry use site boundary**. Report economic effect of existing or previous heavy industry use within heavy industry use site boundary.

The WG discussed that the CZA footprints of the 14 sites (i.e., the “heavy industry use sites,” as defined by the CZCPA) does not line up with tax parcel boundaries. As such, there are three potential geographic boundaries that may be relevant for conversion permits: the heavy industry use site footprint, tax parcel(s), and the proposed permit area (which may be a subset of the heavy industry use site).

The WG believes the most technically feasible options are Options 1 and 2.
3. **Defining the economic metrics used to report both “economic effect” and “net economic improvement”**

In other words... the options for economic metrics reported for “economic effect” and “net economic improvement.”

[Initial Scope Issues #4A and 5B]

The WG discussed the types of metrics that could be asked for on a conversion permit application as a way to address all the options laid out for Issues 4 and 5B. The WG felt it would be easiest to explore these metrics by drafting up example economic effect questions that could feasibly appear on a conversion permit application (reference the “Example Economic Effect Questions That Could Feasibly Appear on a Conversion Permit Application” document). Such metrics include:

- **Project Cost Information:** Remediation, demolition, construction, operations, capital costs, total investment

- **Tax Revenue Information:** Property taxes, gross receipts tax, personal income tax, corporate income tax, and other taxes; applicants could be asked to take into account tax incentives/credits received/anticipated and income tax write-offs in the tax numbers they provide

- **Employment Information:** Job count, wage, and occupation distribution for all jobs expected to be created for both site preparation/construction and facility operations

- **State- and Community-Level Effect:** Applicant-provided information on local hiring preferences, local purchasing preferences, and investments in community benefit agreements, workforce development programs, and/or educational programs

- **Costs to the State:** Primarily accounted for in the tax revenue information; the RAC may also wish to consider infrastructure investment, though this may be out of the scope of what is called for in the CZCPA because: 1) such infrastructure investment decisions are often made in other permit or decision-making processes, and 2) companies may pay for these investments themselves.

The WG believes that all of the above options are technically feasible, though notes that infrastructure investment costs to the state may not be an appropriate metric to account for in the conversion permit process (as noted in the bullet point above). Moreover, the WG felt that it may be too onerous and impractical for a conversion permit applicant to provide detailed information on tax incentives received, tax credits applied, and tax carryback/carryforward provisions utilized.
4. Verifying the reported economic metrics

In other words… the options for verifying economic metrics reported.

The WG discussed options for verifying applicant-reported economic information, which could include:

- **Option 1:** Developing simplistic calculations that could be carried out by DNREC to arrive at “back of the envelope” expectations about economic effect,
- **Option 2:** Applicant-provided case study examples, comparisons, and data points that demonstrate how the economic information provided by applicants is within reasonable range,
- **Option 3:** Having DNREC informally circulate the application to relevant agencies on an individual basis (e.g., to review financial information and tax information),
- **Option 4:** Hiring an expert economist contractor to review and comment on a conversion permit application,
- **Option 5:** Using a standing panel of experts (e.g., employees from Division of Revenue and Department of Labor) to review and comment on a conversion permit application

The WG also discussed the potential of asking conversion permit applicants to report annually, to the Department of Labor, site-level data on employment and wages. Such information is currently reported to the Delaware Department of Labor (DOL) but only on a statewide scale (i.e., if a company has more than one site out of which it is operating, it need not report employment and wage information at the site scale). The WG noted that such information should only be requested if it will actually be used in the conversion permit decision-making process and that its usefulness should be weighed against the increased cost to the applicant to provide it. Moreover, it was noted that such information could likely only be used for regulatory purposes if the data itself remains confidential (i.e., only accessible to the company or DOL).

The WG believes that all of the above options are technically feasible.
Appendix A

Initial Scope Issue #1

Options for determining the “existing or previous use” for which the “economic effect” must be estimated by the applicant.

Summary Overview:

The CZA section 7014(c)(1) states that “economic effect of the existing or previous use” should be considered in assessing a conversion permit application. This issue paper discusses options for how applicants determine which “existing or previous” uses should be reported. Assumptions and data options for describing effect of these uses are discussed in Issue #2.

Existing or Previous Use Reporting Options

- **Option 1:** Report effect of existing site uses for active sites, nothing for inactive sites. For active sites, economic effect of “existing or previous” use would include effect of existing uses. For inactive sites, economic effect of “existing or previous use” would be reported as “none” or “zero.”

- **Option 2:** Report effect of existing site uses for active sites, include current property taxes for inactive sites. For active sites, economic effect of “existing or previous use” would include effect of existing uses. For inactive sites, economic effect of “existing or previous use” reported as current property taxes.

- **Option 3:** Report effect of existing site uses for active sites, report previous use for inactive sites. For active sites, economic effect of “existing or previous use” would include effect of existing uses. For inactive sites, economic effect of “existing or previous use” reported as previous use. The burden of determining economic effect metrics falls on the applicant.

- **Option 4:** Report effect of existing and previous use for all sites (applicant burden). For active sites, economic effect of “existing or previous use” would include effect on existing use and previous use. For inactive sites, economic effect of “existing or previous use” reported as previous use. The burden of determining economic effect metrics falls on the applicant.

- **Option 5:** Report effect of existing site uses for active sites, report current property taxes and previous use for inactive sites (State burden). Existing use would be reported for active sites. For inactive sites, economic effect of “previous use” would be reported using a State-produced report of previous use. Example title: “Economics Baseline Report.”

- **Option 6:** Report effect of existing and previous use for all sites (State burden). Existing use would be reported for active sites. For both active and inactive sites, economic effect of “previous use” would be reported using a State-produced report of previous use.
Example title: “Economics Baseline Report.” For inactive sites, existing use would be current property taxes.

**Other Information**

This issue should align with decisions being made by the Environmental Impact Work Group, because the statutory language includes “environmental and economic effect.” This paper assumes that ongoing cleanup activities would not be considered relevant for applicants to report for “economic effect” purposes.

**Additional Comments**

The WG finds that Options 2, 5, and 6 are the most technically feasible options for Issue #1.

**Pros and Cons for Issue #1**

**Table 1. Pros and Cons of Options for Determining “Existing or Previous Use”**

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<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
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| 1: Report only existing site uses, nothing for inactive sites | • Least data intensive for all sites.  
• Most logical for measuring economic effect (other than excluding property taxes on inactive sites). | • Would not report previous use for active or inactive sites.  
• May not meet statutory minimum requirements for inactive sites. |
| 2: Report only existing site uses, include current property taxes for inactive sites | • Least data intensive for active sites; minor requirement for inactive sites.  
• Meets minimum statutory requirements.  
• Property taxes data should be readily available to applicant. Would enable state to understand change in expected property taxes from redevelopment.  
• Most logical for measuring economic effect. | • Would not report previous use for active or inactive sites. |
| 3: Report existing site uses for active sites, report previous use for inactive sites | • Most complete reporting of data for inactive sites.  
• Meets or exceeds minimum statutory requirements. | • Would not report previous use for active sites.  
• Lopsided requirements for inactive sites when compared to active sites.  
• Impractical and burdensome for applicants at inactive sites.  
• Difficult to establish uniform requirements for previous use that provide meaningful information and are not overly burdensome.  
• Unlikely to provide useful economic information to decision makers on economic effect. |
| 4: Report existing and previous use for all sites (applicant burden) | • Most complete reporting of data.  
• Likely exceeds minimum statutory requirements. | • Impractical and burdensome for all applicants.  
• Difficult to establish uniform requirements for previous use that provide meaningful information.  
• May result in inconsistent reporting by applicants. |
| 5: Report existing site uses for active sites, report current property taxes and previous use for inactive sites (State burden) | • Reduced burden to applicant related to reporting of previous use.  
• Likely exceeds minimum statutory requirements.  
• Improved consistency across applications because use common source document in reporting previous use. | • Unlikely to provide useful economic information to decision makers on economic effect.  
• Would require the State to incur costs of completing initial baseline study.  
• May require DNREC asking the General Assembly for specific funding to carry out this task.  
• CZCPA does not mandate that DNREC provide previous use information.  
• Would require updates and review over time depending on changes to current site activities.  
• May result in inconsistent reporting by applicants, given that only inactive sites would need to provide information on previous use, even with the baseline study. |
|---|---|---|
| 6: Report existing and previous use for all sites (State burden) | • Most complete reporting of data.  
• Reduced burden to applicant related to reporting of previous use.  
• Likely exceeds minimum statutory requirements.  
• Improved consistency across applications because use common source document in reporting previous use. | • Would require the State to incur costs of completing initial baseline study.  
• May require DNREC asking the General Assembly for specific funding to carry out this task.  
• CZCPA does not mandate that DNREC provide previous use information.  
• Would require updates and review over time depending on changes to current site activities. |
Initial Scope Issue #2

Options for identifying specific assumptions, sources of data, or other information to be used by the applicant to develop economic effect estimates for “existing or previous use.”

Summary Overview

The CZA section 7014(c)(1) states that “economic effect of the “existing or previous use” should be considered in assessing a conversion permit application. However, “use” is not defined in the CZA. This issue paper discusses options for defining the scope of relevant economic uses that should be reported, the geographic boundaries, as well as assumptions that the applicant should make when reporting economic effect of those uses.

Issue #2A: Assumptions on the Use and Geographic Scope Reported

- **Option 1**: Report all heavy industry use of property in the permit boundary. Report economic effect of existing or previous heavy industry use within permit boundary.

- **Option 2**: Report all commercial or industrial uses of property in the permit boundary. Report economic effect of all types of existing or previous economic activities within permit boundary.

- **Option 3**: Report heavy industry use of property in the tax parcel boundary or boundaries. Report economic effect of ongoing heavy industry use within parcel boundary.

- **Option 4**: Report all commercial or industrial uses of property in the tax parcel boundary. Report economic effect of all types of existing or previous activities within parcel boundary.

- **Option 5**: Report heavy industry use of property in the heavy industry use site boundary. Report economic effect of ongoing heavy industry use within parcel boundary.

- **Option 6**: Report all commercial or industrial uses of property in the heavy industry use site boundary. Report economic effect of all types of existing or previous activities within parcel boundary.

Additional Comments

The WG finds that Options 1 and 3 are the most technically feasible options for Issue #2A.
Issue #2B: Assumptions on the Timeframe Reported for “Previous Use”

- **Option 1:** Ask applicants to provide “previous use” economic effect measures for one historic year. A single year would be determined as a baseline for all applicants (e.g., 2015, or three years prior to the application). Data would be reported for that specified year for all economic effect measures requested in the application.

- **Option 2:** Ask applicants to report “previous use” economic effect with an average annual measure for a specified length of time. An annual average would be calculated based on a specified range of years, or over the length of the previous use. The applicant would then determine an average across the specific time frame.

- **Option 3:** Ask applicants to report “previous use” economic effect measures that provide a range of historical estimates over time. A time range would be determined as the baseline for all sites. This could be a specific set of years (e.g., 2010-2015) or a range of years relative to the application date (e.g., for the previous two years relative to the application year).

- **Option 4:** Ask applicants to report “previous use” economic effect measures using the Economics Baseline Report outlined in Issue #1.

- **Option 5:** Ask applicants to report current property taxes for sites have been abandoned or are inactive.

- **Option 6:** Ask applicants to report no “existing or previous use” economic effect measures where sites have been abandoned or are inactive. For sites with no active heavy industry uses, no data would be specified or reported.

**Additional Comments**

The WG finds that Options 1, 4, and 5 are the most technically feasible options for Issue #2B.

**Other Information**

As in Issue #1, this paper assumes that ongoing cleanup activities would not be considered relevant for applicants to report for “economic effect” purposes.
### Pros and Cons for Issue #2

**Table 2A. Pros and Cons of Options for Assumptions on the Use and Geographic Scope Reported**

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<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
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</table>
| 1: Report all heavy industry use of property in the permit boundary | • Seems most aligned with statutory language. | • May omit mention of other existing activities on the site (e.g., office building that may have been lost or replaced with redevelopment).  
• Difficult to provide meaningful estimates for permit boundaries (e.g., difficult to estimate number of employees, wage distribution, and property tax distribution across the parcel). |
| 2: Report all commercial or industrial uses of property in permit boundary | • Captures other existing types of economic activities that may occur at the site. | • May be less aligned with statutory language.  
• Limiting reporting to permit boundary may require applicants to estimate metrics for site area.  
• Difficult to provide meaningful estimates for permit boundaries (e.g., difficult to estimate number of employees, wage distribution, and property tax distribution across the parcel). |
| 3: Report heavy industry use of property in the tax parcel boundary or boundaries | • Heavy industry reporting seems aligned with statutory language; reporting metrics at the tax parcel level may be easier for applicant (e.g., employment). | • May omit mention of other existing activities on the site (e.g., office building that may have been lost or replaced with redevelopment).  
• May overstate previous/existing use effect. |
| 4: Report all commercial or industrial uses of property in the tax parcel boundary or boundaries | • Captures other existing types of economic activities that may occur at the site. Reporting metrics at parcel level may be easier for applicant (e.g., employment). | • May overstate previous/existing use effect.  
• May be difficult to provide (or specifically tease out) economic effect metrics for mixed uses on the same tax parcel(s). |
| 5: Report all heavy industry use of property in heavy industry use site boundary | • Heavy industry reporting seems aligned with statutory language | • May omit mention of other existing activities on the site (e.g., office building that may have been lost or replaced with redevelopment).  
• Difficult to provide meaningful estimates for heavy industry use site boundaries (e.g., difficult to estimate number of employees, wage distribution, and property tax distribution across the heavy industry use site). |
| 6: Report all commercial or industrial uses of property in heavy industry use site boundary | • Captures other existing types of economic activities that may occur at the site. | • May be less aligned with statutory language.  
• Limiting reporting to permit boundary may require applicants to estimate metrics for site area.  
• Difficult to provide meaningful estimates for heavy industry use site boundaries (e.g., difficult to estimate number of employees, wage distribution, and property tax distribution across the heavy industry use site). |
Table 2B. Pros and Cons of Options for Assumptions on the Timeframe Reported for “Previous Use”

<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
<td>1: Report “previous use” economic effect measures for one historic year.</td>
<td>• Least burden to the applicant for gathering data without reporting “no activity” or “none” for activity  &lt;br&gt; • Easily understood for permit analysts.  &lt;br&gt; • Same baseline for all applicants and sites.</td>
<td>• Would require agreement on which single year to be used.  &lt;br&gt; • Potential differences across sites in ease of data collection for the specified year.</td>
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<tr>
<td>2: Report “existing or previous use” economic effect measures for a specified length of time.</td>
<td>• Captures historical trends and changes to economic effect; Reports multiple metrics for a permit analyst to assess</td>
<td>• May burden applicants with gathering large amounts of data.</td>
</tr>
<tr>
<td>3: Report “existing or previous use” economic effect with an average annual measure.</td>
<td>• Provides an easily understood and communicable value for both existing and previous use  &lt;br&gt; • Relatively straightforward calculations.</td>
<td>• May overstate or understate impact of outlier years of activity.  &lt;br&gt; • May burden applicants with measurement, calculation, and gathering of data for the specified set of time.  &lt;br&gt; • Large differences may exist across sites, specifically active and inactive.</td>
</tr>
<tr>
<td>4: Report “existing or previous use” economic effect based on a state-specified set of data.</td>
<td>• Complete reporting of data. Available to all applicants and reduces uncertainty.  &lt;br&gt; • Uniform data and reporting across applicants.</td>
<td>• Would require the State to incur costs of completing initial baseline study.  &lt;br&gt; • May require DNREC asking the General Assembly for specific funding to carry out this task.  &lt;br&gt; • CZCPA does not mandate that DNREC provide previous use information.  &lt;br&gt; • Would require updates and review over time depending on changes to current site activities.</td>
</tr>
<tr>
<td>5: Report current property taxes for sites have been abandoned or are inactive.</td>
<td>• Convenient for applicant. Most logical for measuring economic effect for abandoned or inactive sites.</td>
<td>• Would not report any data for previous use.</td>
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<tr>
<td>6: Report no “previous use” economic effect measures where sites have been abandoned or are inactive.</td>
<td>• Convenient for applicant. Most logical for measuring economic effect for inactive sites, other than property tax reporting.</td>
<td>• Would not report any data for previous use.</td>
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Initial Scope Issue #3

Options for identifying specific assumptions, sources of data, or other information to be used by the applicant to develop economic effect estimates for “alternative or additional heavy industry use or bulk product transfer activity.”

Summary Overview

The CZA section 7014(c)(2) states that “economic effect of the alternative or additional heavy industry use or bulk product transfer activity” should be considered in assessing a conversion permit application. This issue paper discusses options for defining the scope of relevant economic uses that should be reported, the geographic boundaries, as well as assumptions that the applicant should make when reporting economic effect of those uses.

Previous and Existing Use Scope Assumptions Options

- **Option 1:** Report economic effect measures for the proposed actions that are identical to Issue #2. In this option, the same scope would be selected for reporting of “previous or existing use” and proposed uses.

- **Option 2:** Allow reporting that is limited to the proposed permit boundary even if previous and existing use reporting metrics are more broad. In this option, applicants would need to clearly state whether the application adds to or replaces measures reported under existing use.

- **Option 3:** Allow additional reporting metrics than are provided for previous and existing use. Under this option, applicants would use the same scope used for reporting “previous or existing use” but would also have the option to provide additional metrics of economic effect that are not provided for previous and existing uses.

Pros and Cons for Issue #3

Table 3. Pros and Cons of Options for Proposed Action Assumptions

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<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
<td>1: Report economic effect measures for the proposed actions that are identical to Issue #2.</td>
<td>• Would allow for consistent comparison of existing and previous use to proposed action uses.</td>
<td>• If metrics are reported at the tax parcel level, the effect of the proposed actions may be muted.</td>
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<tr>
<td>2: Allow reporting that is limited to the proposed permit boundary even if previous and existing use reporting metrics are more broad.</td>
<td>• May be easier for applicants to report metrics for the proposed action area alone.</td>
<td>• Has some potential to confuse decision-makers if geographic boundaries of previous and existing use and proposed action are different.</td>
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<tr>
<td>3: Allow additional reporting metrics than are provided for previous and existing use.</td>
<td>• Would allow for consistent comparison of existing and previous use to proposed action uses.</td>
<td>• May burden applicants with additional reporting they feel they have to provide to accurately capture economic effect.</td>
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Initial Scope Issue #4

Options for how applicants can estimate “economic effect” in a manner that, at the very least, addresses the economic effect “components” identified §7004(b)(2)

Summary Overview

The CZA section 7014(c)(1) states that “economic effect of the existing or previous use” should be considered in assessing a conversion permit application. Section 7014(c)(2) states that “economic effect of the alternative or additional heavy industry use or bulk product transfer activity” should be considered in assessing a conversion permit application. The CZA states that the reported form must include items from section 7004(b), which states that “economic effect” includes:

- the number of jobs created;
- the income which will be generated by the wages and salaries of these jobs in relation to the amount of land required; and
- the amount of tax revenues potentially accruing to state and local government.

This issue paper discusses whether only these “economic effect” should be reported or whether additional metrics should also be reported. Note: CZA section 7014(c)(3), which requires reporting of net economic improvement, does not explicitly call for this measure to utilize this “economic effect” definition.

Issue #4A: Economic Metrics Reported for “Economic Effect”

Option 1: Ask applicants to report direct jobs created, income generated, and tax revenues as required under the statute.

Option 1A (Refinement): Ask applicants to report direct jobs created, income generated, and tax revenues as required under the statute. Also request information about: 1) the total investments made for the proposed projects, including costs for remediation, demolition, construction, and other capital investments; 2) Delaware-specific employment and community-specific employment; and 3) economic costs to the state. Allow for additional information to be provided by applicant, if desired.

Option 2: Ask applicants to estimate additional indirect/induced measures of regional effect associated with direct jobs created, income generated, and tax revenues.

Option 3: Ask applicants to report additional direct measures of economic effect that would allow analysts to more fully assess the economic effect of projects.

Option 4: Ask applicants to report additional direct/indirect/induced measures of economic effect that would allow analysts to more fully assess the economic effect of projects.
**Additional Comments**

The WG finds that Options 1A is the most technically feasible option. The WG has put together a list of example economic effect questions that could feasibly appear on a conversion permit application to help illustrate the approach of Option 1A (reference the “Example Economic Effect Questions That Could Feasibly Appear on a Conversion Permit Application” document).

**Issue #4B: Verifying Economic Metrics Reported**

The WG discussed options for DNREC to verify reported economic effects. Options could include:

**Option 1:** Develop simplistic calculations that could be done by DNREC to arrive at “back of the envelope” expectations about impacts.

**Option 2:** The applicant provides case study examples and comparisons.

**Option 3:** Hire an expert economist (contractor) to review and comment on a conversion permit application.

**Option 4:** Standing panel of experts (e.g., employees from Division of Revenue and Department of Labor) to review and comment on a conversion permit application.

**Option 5:** Have DNREC informally circulate the application to relevant agencies on an individual basis (e.g., to review financial information and tax information).

**Pros and Cons for Issue #4**

**Table 4A. Pros and Cons of Options for Economic Metrics Reported for “Economic Effect”**

<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
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| 1: Ask applicants to report direct jobs created, income generated, and tax revenues. | ● Easiest to report for applicant because this meets minimum statutory requirements.  
● Specifying direct metrics would be most likely to be accurate.  
● Some existing/previous metrics could be verified with state reporting agencies. | ● Does not capture regional economic effect. Work Group has some concerns that not capturing regional effect could inadvertently cause a permit application to be rejected on the basis of “insufficient” positive economic effect/improvement.  
● Requires forecasting by applicants for impacts of new activity (could allow a range to be provided). [This is unavoidable] |
| 1A: Ask applicants to report direct jobs created, income generated, and tax revenues as required under the statute. Also request information about: 1) the total investments made for the proposed projects, including costs for remediation, demolition, construction, and other capital investments; 2) Delaware-specific employment and community- | ● Addresses interests and concerns brought up by the RAC at its October 2018 meeting  
● Easiest to report for applicant because this meets minimum statutory requirements.  
● Specifying direct metrics would be most likely to be accurate. | ● Requires forecasting by applicants for impacts of new activity (could allow a range to be provided). [This is unavoidable]  
● Some information on total investments may be deemed sensitive by the applicant. It is possible that some information could be withheld or marked as sensitive in these cases. |
specific employment; and 3) economic costs to the state. Allow for additional information to be provided by applicant, if desired.

- Some existing/previous metrics could be verified with state reporting agencies.
- Allows applicant flexibility to provide additional information if they want to show additional positive effects without overburdening them.
- Provides additional information to the State about employment and other effects.
- Provides information about community-level effects
- Provides information about economic costs to the state

| 2: Ask applicants to estimate direct and indirect/induced measures of regional effect associated with direct jobs created, income generated, and tax revenues. | Would provide additional measures to enable the state to understand larger implications of redevelopment activities. | Requires assumptions on behalf of applicants that may not be verifiable.  
Could result in inconsistent reporting across applicants, making estimates more difficult to compare.  
Requires forecasting by applicants for impacts of new activity (could allow a range to be provided). [This is unavoidable]. |
|---|---|---|
| 3: Ask applicants to report additional direct measures of economic effect that would allow analysts to more fully assess the economic effect of projects. | Requesting additional reporting of metrics would enable state analysts to more fully understand economic implications of projects.  
Allows applicants to provide additional information. | More work for applicant.  
Requires forecasting by applicants for impacts of new activity (could allow a range to be provided). [This is unavoidable]. |
| 4: Ask applicants to report additional direct/indirect/induced measures of economic effect that would allow analysts to more fully assess the economic effect of projects. | Requesting additional reporting of metrics would enable state analysts to more fully understand economic implications of projects.  
Would provide additional measures to enable the state to understand larger implications of redevelopment activities. | Requires assumptions on behalf of applicants that may not be verifiable.  
Could result in inconsistent reporting across applicants, making estimates more difficult to compare.  
Requires forecasting by applicants for impacts of new activity (could allow a range to be provided). [This is unavoidable]. |
Table 4B. Pros and Cons of Options for Verifying Economic Metrics Reported

<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Develop simplistic calculations that could be done by DNREC to</td>
<td>• Low-effort and little cost to DNREC for each application.</td>
<td>• Unlikely to be precise tool for understanding impacts.</td>
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<tr>
<td>arrive at “back of the envelope” expectations about impacts.</td>
<td>• No effort on the part of applicant.</td>
<td>• If applied incorrectly, could result in inaccurate results.</td>
</tr>
<tr>
<td></td>
<td>• Unlikely to be precise tool for understanding impacts.</td>
<td>• May become out of date over time; DNREC would find expertise need</td>
</tr>
<tr>
<td></td>
<td>• If applied incorrectly, could result in inaccurate results.</td>
<td>to update.</td>
</tr>
<tr>
<td></td>
<td>• May become out of date over time; DNREC would find expertise need</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>to update.</td>
</tr>
<tr>
<td>2: The applicant provides case study examples and comparisons.</td>
<td>• Inexpensive for DNREC to implement.</td>
<td>• Effort needed by applicant to locate examples with comparable</td>
</tr>
<tr>
<td></td>
<td>• Would provide helpful comparisons.</td>
<td>metrics.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• DNREC could wish to verify examples, resulting in additional work.</td>
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<tr>
<td>3: Have DNREC informally circulate the application to relevant agencies</td>
<td>• Would provide more certainty than back-of-envelope comparisons.</td>
<td>• Potential to slow up process in locating reviewers. Reviewers</td>
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<tr>
<td>on an individual basis (e.g., to review financial information and tax</td>
<td></td>
<td>should be identified early.</td>
</tr>
<tr>
<td>information).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4: Hire an expert economist (contractor) to review and comment on a</td>
<td>• Would provide more certainty than back-of-envelope comparisons.</td>
<td>• New costs to DNREC for each application.</td>
</tr>
<tr>
<td>conversion permit application.</td>
<td></td>
<td>• Potential to slow up process during analysis period.</td>
</tr>
<tr>
<td>5: Standing panel of experts (e.g., employees from Division of Revenue</td>
<td>• Would provide more certainty than back-of-envelope comparisons.</td>
<td>• Work for DNREC to identify standing panel; agreements for payment</td>
</tr>
<tr>
<td>and Department of Labor) to review and comment on a conversion permit</td>
<td></td>
<td>to panel?</td>
</tr>
<tr>
<td>application.</td>
<td></td>
<td>• Potential to slow up process during analysis period.</td>
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</table>
Initial Scope Issue #5

Options for how applicants can estimate “the net economic improvement inherent in the alternative or additional heavy industry use or bulk product transfer activity as compared to the most recent heavy industry use engaged in at that site.”

Summary Overview

The CZA section 7014(c)(3) states that “the net environmental improvement or economic improvement, or both, inherent in the alternative or additional heavy industry use or bulk product transfer activity as compared to the most recent heavy industry use engaged in at that site” should be considered in coastal zone conversion permit applications.

It has been noted that the statutory language does not define “net economic improvement” or state that the metrics for it must be the same as the “economic effect” that are reported under 7014(c)(1) and 7014(c)(2). It is also not necessarily the case that the “most recent heavy industry use” is the same as the “previous use.” This issue paper discusses options for calculating the net economic improvement under this section.

Issue #5A: Defining “Net Economic Improvement”

- **Option 1**: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is assumed to be “zero” or “none” for inactive sites and current use at active sites.

- **Option 2**: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is defined as the heavy industry use at the site during a particular previous point in time (e.g., five years ago).

- **Option 3**: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is defined as average annual heavy industry use at the site during a specified period of time period (e.g., past five years).

- **Option 4**: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is defined as a range of metrics at the site during a specified period of time period (e.g., past five years).

- **Option 5**: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is the economic effect measures from the Economics Baseline Report outlined in Issue #1.
Additional Comments

The WG finds that Options 1, 2, and 5 are the most technically feasible options for Issue #5A.

Issue #5B: Economic Metrics Reported for “Net Economic Improvement”

- **Option 1**: Metrics could be statutorily defined measures of economic effect.
- **Option 2**: Metrics could include indirect and induced regional economic effect metrics.
- **Option 3**: Metrics could include other effect, such as qualitative considerations of community-level effect and environmental justice considerations.

Additional Comments

The WG finds that Issue #4 Option 1A is also the most technically feasible option for Issue #5A. This is based on the assumption that the metrics used for “net economic improvement” are the same as those used for “economic effect.” As noted in the “‘Abridged’ List of Economic Effect Options for Initial Scope Issues #1-5” above, Issue #4 Option 1A takes into account the metrics listed in Issue #5B Options 1-3.

Other Information

This issue may need to align with decisions being made by the Environmental Impact Work Group, because the statutory language includes “environmental improvement or economic improvement.” Also, because the statute says that the “net environmental improvement or economic improvement, or both” should be provided, the WG wonders whether an option to not provide net economic improvement exists.
### Pros and Cons for Issue #5

#### Table 5A. Pros and Cons of Options for Defining “Net Economic Improvement”

<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is assumed to be zero or none for inactive sites and current use at active sites.</td>
<td>• Easiest calculation for applicant. &lt;br&gt;• Consistent with other metrics reported. &lt;br&gt;• Appears likely to be closest to statutory intent. &lt;br&gt;• Reports logical economic effect estimates.</td>
<td>• For inactive sites, may not be considered to be fully compliant with “compared to the most recent heavy industry use engaged at that site.”</td>
</tr>
<tr>
<td>2: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is defined as the heavy industry use at the site during a particular previous point in time (e.g., five years ago).</td>
<td>• Fully compliant with providing information “compared to the most recent heavy industry use engaged at that site.”&lt;br&gt;• Provides decision-makers with some context for understanding proposal in history of site.</td>
<td>• For inactive sites, does not make intuitive economic sense to compare current action to past action that is no longer occurring.&lt;br&gt;• May result in illogical conclusions that the net economic improvement is negative for inactive sites.&lt;br&gt;• Burdensome for applicants.&lt;br&gt;• Does not accurately depict “story” of site changes over time.</td>
</tr>
<tr>
<td>3: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is defined as average annual heavy industry use at the site during a specified period of time period (e.g., past five years).</td>
<td>• Fully compliant with providing information “compared to the most recent heavy industry use engaged at that site.”&lt;br&gt;• Provides decision-makers with some context for understanding proposal in history of site.</td>
<td>• For inactive sites, does not make intuitive economic sense to compare current action to past action that is no longer occurring.&lt;br&gt;• May result in illogical conclusions that the net economic improvement is negative for inactive sites.&lt;br&gt;• Burdensome for applicants.&lt;br&gt;• Does not accurately depict “story” of site changes over time.</td>
</tr>
<tr>
<td>4: Define “net economic improvement” as the difference between the economic effect of the most recent heavy industry use and the economic effect of the planned action, where “most recent heavy industry use” is defined as a range of metrics at the site during a specified period of time period (e.g., past five years).</td>
<td>• Fully compliant with providing information “compared to the most recent heavy industry use engaged at that site.”&lt;br&gt;• Provides decision-makers with context for understanding proposal in history of site.</td>
<td>• For inactive sites, does not make intuitive economic sense to compare current action to past action that is no longer occurring.&lt;br&gt;• May result in illogical conclusions that the net economic improvement is negative for inactive sites.&lt;br&gt;• Burdensome for applicants.&lt;br&gt;• Confusing to interpret</td>
</tr>
<tr>
<td>5: Use Economics Baseline Report (see Issue #1) to provide measure of previous use.</td>
<td>• Fully compliant with providing information “compared to the most recent heavy industry use engaged at that site.”&lt;br&gt;• Less burdensome for applicant than other options that require provision of historic data.&lt;br&gt;• Provides decision-makers with context for understanding proposal in history of site.</td>
<td>• For inactive sites, does not make intuitive economic sense to compare current action to past action that is no longer occurring.&lt;br&gt;• May result in illogical conclusions that the net economic improvement is negative for inactive sites.&lt;br&gt;• Confusing to interpret</td>
</tr>
</tbody>
</table>
### Table 5B. Pros and Cons of Options for Economic Metrics Reported for “Net Economic Improvement”

<table>
<thead>
<tr>
<th>Option</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Metrics could be statutorily defined measures of direct economic effect.</td>
<td>• Easiest to report for applicant because this meets minimum statutory requirements. &lt;br&gt; • Specifying direct metrics would be most likely to be accurate. &lt;br&gt; • Some existing/previous metrics could be verified with state reporting agencies.</td>
<td>• Does not capture regional economic effect. Work Group fears not capturing regional effect could inadvertently cause a permit application to be rejected on the basis of “insufficient” positive economic effect/improvement. &lt;br&gt; • Requires forecasting by applicants for impacts of new activity (could allow a range to be provided).[this is unavoidable] &lt;br&gt; • Requires the permit analyst to understand the regional economic effect of the proposed use, as the applicant is not required to explicitly spell those factors out.</td>
</tr>
<tr>
<td>2: Metrics could include indirect and induced regional economic effect metrics.</td>
<td>• Would provide additional measures to enable the state to understand larger implications of redevelopment activities.</td>
<td>• Requires assumptions on behalf of applicants that may not be verifiable. &lt;br&gt; • Could result in inconsistent reporting across applicants, making estimates more difficult to compare. &lt;br&gt; • Requires forecasting by applicants for impacts of new activity (could allow a range to be provided).[this is unavoidable]. &lt;br&gt; • Analysis of regional economic effect could be assessed for all activities by state for consistency.</td>
</tr>
<tr>
<td>3: Metrics could include other effect, such as qualitative considerations of community-level effect and environmental justice considerations.</td>
<td>• Provides additional discussion of potential economic benefits or costs (i.e., externalities) to communities, particularly those adjacent to the heavy industry use site in question.</td>
<td>• Requires additional review and technical knowledge by reviewing agency. &lt;br&gt; • Additional effort for applicant.</td>
</tr>
</tbody>
</table>