### Fixed and Marginal Costs

- **Key Concept 1:** Fixed and marginal costs are real and affect all types of schools. Fixed and marginal costs are related but separate concepts. (Brief 1)
- **Key Concept 2:** Some other state formulas address fixed or marginal cost issues; few address both. (Brief 1)
- **Key Concept 3:** Traditional districts lose revenue when their enrollment drops. This revenue loss is most acute when students move to public schools of choice, because this includes both state and local share. (Brief 2 and Discussion and Public comment)
- **Key Concept 4:** There is ample empirical data to rationally quantify fixed costs. Marginal costs are more difficult to quantify. (Brief 1)

### Discussion Notes

| Considerations to promote **fairness** in the way that the funding formula handles these issues |  |
| Considerations to promote **equity** amongst student and school types in the way that the funding formula handles these issues |  |
| Considerations that will help ensure that all recommendations for revision are **grounded in data** |  |
| Other notes |  |
Issue Summary: Fixed and Marginal Costs

This brief addresses the relationship between the cost of running districts and schools and the funding received from enrollment. Under Rhode Island’s “funding-follows-the-student” formula design, state (and in some cases, local) share is a function of enrollment: the state contributes toward every full seat and contributes nothing toward empty seats. This raises two important issues: (1) fixed costs, and (2) marginal costs/savings. Both of these issues affect traditional school districts and public schools of choice.

Fixed costs: Districts and schools have some financial obligations that are “fixed” and do not vary much by small changes in enrollment. Common examples include heating, lights, grounds maintenance, and accounting services. Under the current formula, when a student leaves a school, the district loses the state (and, in the case of public schools of choice, local) share of funding for that student. For fixed costs, the loss of revenue doesn’t result in any appreciable decrease in expenses.

Marginal cost/savings: While fixed costs can’t be adjusted to match changes in revenue, marginal costs can be adjusted. However, not all marginal costs can be adjusted at the same rate. Some marginal costs can be managed to match enrollment (like consumable workbooks and meals). However, some cannot be managed to match enrollment changes (like teachers and building administrators).

Unlike fixed costs, marginal costs can work to the advantage and disadvantage of schools and districts. In some cases, the loss in revenue associated with the loss of a student cannot be met by an equivalent reduction in expenses; this produces a (marginal) loss. However, in other cases, the revenue gained through the addition of a student is greater than the costs of serving that student; this produces a (marginal) gain.

Rhode Island Context and Data

Fixed costs: One of the most common and well-established ways to quantify fixed costs is through a federal method of defining and combining them and expressing them as a percentage. Based on this method, it is reasonable to estimate that districts’ fixed costs range from approximately 3% – 10%. This method includes an array of expenses including utilities, maintenance, retiree health and other legacy costs, etc.

Marginal costs: It is difficult to precisely calculate the marginal costs or savings on student seats. Calculation of this value is clouded by three issues: (1) the rate and urgency with which schools and districts respond to enrollment changes, and (2) the fact that empty seats can appear and disappear at any time (and sometimes multiple times) during the school year, and (3) marginal “cost” is not the same as lost revenue.
National Practice and Examples
Several other states use a “funding follows the student” approach to their formula; across these states, there are two primary adjustments made to address fixed and marginal costs/savings:

1. States reimburse districts for a portion of the lost revenue when students move to public schools of choice.
2. States allow districts to withhold a flat percentage from their per-pupil “tuition” to public schools of choice.

State Reimbursement Example: Massachusetts:
Massachusetts reimburses the sending district 100% of per pupil revenue the first year and 25% of the per pupil revenue every year for five years for each additional charter student. This transition support is triggered by increase in charter school enrollment.

Withheld Flat Percentage Example: New Jersey
New Jersey law requires that the per-pupil amount paid to charter schools, from districts, not exceed the program budget per pupil for the specific grade level in the district in which the charter school is located. Charters are required to at least receive 90% of the traditional school district per-pupil funding.