

Template: Network Design and Implications Template

The network design process will be iterative and requires the design team to balance considerations. This tool guides the design team through:

Step 1: Exploring district priorities and context together with the design criteria

Step 2: Choosing the overarching design principle and defining success metrics for other design considerations

Step 3: Creating strawman networks

Step 4: Proof testing network designs for alignment to strategic priorities and feasibility

Step 1: District Priorities and Network Design Criteria

The purpose of this first exercise is to allow the network design team to explore each of the design criteria in the context of both the current state and the future design of the principal supervisor’s role. Refer to the *Design and Context Map* (Tool 1) your team has already created to capture the district priorities and their implications for principal supervisors and their networks. Spend in group discussion to determine potential considerations and questions related to each of the design criteria as they apply to your district priorities and their implications. For additional context for the considerations listed here, see *Network Design Guidance*, pp. 11-14, or the summary chart of considerations for network design in the Appendix of this document.

Design Criteria	District Priorities: Implications for Principal Supervisor Focus and Network Design	
	<i>Referring to Tool #1 (Design and Context Map), capture implications of the plan in organizing the schools according to each consideration. For guiding questions for each criteria, refer to the charts in the appendix.</i>	
	Current State (Page 2 of Tool 1): What do we need to consider about the current state of school groupings in weighing the impact and feasibility of future network designs based on each of the design criteria listed below?	Future State: What do we need to consider about our plans for the district and for the principal supervisor role in weighing the impact and feasibility of future network designs based on each of the design criteria listed below?
First Tier: Overarching Design Principles		
Grade Level		
Feeder Patterns		
“Carve-Out” Considerations (<i>any small number of schools that require special grouping outside of grade-level or feeder-pattern structure</i>)		
Second Tier: Further Design Considerations		
Student Outcomes + Performance Levels (Homogeneous or Heterogeneous Groupings)		
Geographic Networks		
Other, district-specific criterion as applicable		

Step 2: Choosing the Overarching Design Principle and Defining Success for Other Design Considerations

Based on the considerations above, districts should choose an overarching design principle for networks: will they be organized based on grade-level bands or feeder patterns? Questions to consider include:

Tier 1: Overarching Design Principles

Grade Level Bands	Feeder Patterns
<ul style="list-style-type: none">• Is the district focused on strategies specifically focused on elementary, middle, or high schools?• Is there a strong focus on grade-level-specific content rigor and standards as a lever for district improvement?• Is there historical precedent for grouping schools together as elementary, middle or high schools?• Has the district identified a specific type of school (for example, middle schools and preparing students for high school readiness) as representing a particular challenge—or opportunity?	<ul style="list-style-type: none">• Is there an explicit district focus on vertical alignment among schools?• Has the district prioritized transition points between elementary and middle or middle and high schools as specific barriers to student outcomes?• Is there historical precedence for this type of alignment or helpful informal relationships among schools in the same feeder patterns that could be reflected in the network design?

In general, districts will see strong reasons to pursue one or the other of these overarching design principles, and the majority of districts will move forward with networks organized around grade-level bands.

Once the first tier direction is determined, other criteria will be factored in to further inform network structure design. These other considerations, weighed and prioritized, also become important means for testing possible network structures: for example, if we prioritize establishing networks by clustering schools with those that have the same grade levels, what are the implications for variability of school performance and student outcomes across the networks? Are the networks manageable geographically, or are they too widely disbursed across the city? What if we sorted first by grade level and then geographic proximity?

Tier 2: Additional Design Criteria and other Considerations

<p style="text-align: center;">Student Outcomes and School Performance Levels: Homogeneous Networks</p> <p style="text-align: center;"><i>(Creating networks that group schools with similar performance profiles)</i></p>	<p style="text-align: center;">Student Outcomes and School Performance Levels: Heterogeneous Networks</p> <p style="text-align: center;"><i>(Creating networks that deliberately include schools at a range of performance levels)</i></p>	<p style="text-align: center;">Geographic Proximity</p>
<p>Questions to Consider:</p> <ul style="list-style-type: none"> • Is there a district strategy to focus resources on low-performing schools which should be reflected in network design? • Does the district have a distinct management strategy for low-performing schools (ex. limits on autonomy) that should be reflected in network design? • How should this criterion be evaluated in the form of 1-2 metrics that can be determined about potential networks modeled in the strawman analysis? 	<p>Questions to Consider:</p> <ul style="list-style-type: none"> • Are there reasons to facilitate learning across diverse schools within the district? • How important is it to “balance” the challenges of schools within each network to ensure equitable managerial loads for principal supervisors? 	<p>Questions to Consider:</p> <ul style="list-style-type: none"> • How important are logistical considerations in network design? How much does a dispersed network impact things like travel time? • Is there historical precedent for this consideration? Are there existing informal or formal relationships among nearby schools?
<p>Example metrics if student outcomes and school performance is a secondary consideration:</p> <ul style="list-style-type: none"> • Percentage of networks where no more than XX% of the schools are in the lowest-performing category and at least XX% are in the highest • Percentage of networks where at least XX% showed positive gains (defined as XXXX) in student outcomes last year 	<p>Example metric if geographic alignment is a secondary consideration:</p> <ul style="list-style-type: none"> • Percentage of networks with a span of farthest distance between schools that is no more than X miles 	

Step 3: Creating Strawman Network Designs

Once the design criteria have been weighed and the design team has determined metrics for each, the district should create two to three potential network designs to test for feasibility and alignment to district priorities. For each model, the district design team should analyze the resulting implications for each design criteria by the metrics defined above. These strawman network designs will be tested for both their alignment to district priorities and for the feasibility of their implementation.

The strawman process is crucial when network design criteria are created by collective agreement and in alignment with district priorities, but there are a few other scenarios where this process of explicit design, testing assumptions, and illuminating implications may be helpful. For example, if there is a lack of consensus around the design criteria, creating diverse scenarios and examining its real world implications for other considerations may help build consensus, or at least understanding, to advance decision-making. Or, if a particular stakeholder group is especially invested in the status quo or in another specific design priority, testing the implications of a design built around these factors may illuminate the challenges and support the rationale for moving in a new or different direction.

Side-by-Side Comparison of Strawman Network Designs

Criteria for Consideration	Guiding Question and Metric(s)	Model 1	Model 2	Model 3
Student outcomes and performance levels	Guiding Question and Metric definition	%age of networks meeting metric	%age of networks meeting metric	%age of networks meeting metric
Geographic considerations	Guiding Question and Metric definition	%age of networks meeting metric	%age of networks meeting metric	%age of networks meeting metric
Varying performance levels across networks	<p>What are the implications of this model for maintaining equity in role demands across the principal supervisor corps?</p> <p>Metric: Percent of networks where no more than 50% of schools are at the lowest performance level and at least 10% are at the highest</p> <p>Metric: Percent of networks where 10% or more of the schools are demonstrating positive achievement gains (as defined in district context)</p>	%age of networks meeting metric	%age of networks meeting metric	%age of networks meeting metric
Other	Guiding Question and Metric definition	%age of networks meeting metric	%age of networks meeting metric	%age of networks meeting metric
Other	Guiding Question and Metric definition	%age of networks meeting metric	%age of networks meeting metric	%age of networks meeting metric

Step 4: Proof-testing network designs for alignment to strategic priorities and feasibility

Proof testing possible designs is an important step before confirming the final structure. In general, it is important to review network options for implications:

- **Unintended impacts on another priority.** For example, grouping by school performance levels might lead to networks that are so geographically dispersed that school visits become inefficient and impractical. This is why testing out models in practice—and against a map—is so important!
- **Considerations of “fairness”** across the principal supervisor corps based on variability within the networks in any of the criteria listed above. In some ways, differences in the difficulty level of a network can support differentiation of principal supervisor responsibilities. For example, someone new to the role or the district should not start out managing the most “difficult” network. At the same time, principal supervisors will be interested in the level of fairness across the network assignments, particularly if their performance is measured against the same bar and/or if their support is the same.

1. Network Design Overall: Alignment and Feasibility

After designing strawman network structures and examining the implications of each model, plot each option for (1) alignment to strategic priorities and (2) ease of implementation and weigh the results before making a decision on an overarching design. Alignment considerations are captured in the metrics for each potential model and in the answers to the questions examined for each design criteria. Feasibility considerations include variability in the metrics across the networks (for example, do some networks represent a significantly smaller geographic area than others?), significance of the differences between the proposed model and the current state, and political considerations.

Alignment to Strategic Priorities High → Low		
	Ease of Implementation Low → High	

2. Options for Adjusting Models and Matching Networks to Principal Supervisors

As network designs are tested, districts also have to ensure that the networks represent a feasible managerial load for the principal supervisors, allowing them to engage deeply in school-facing work with principals. If a specific network in the design is considered too challenging because of the particular composition of the schools (low-performing schools, high schools, complex external partnerships, *etc.*), the district has several options to address this:

- **Decrease the size of the network**, reducing the number of schools so that principal supervisors can invest deeply in a smaller number of principals and schools with particular challenges.
- **Adjust the network composition**, so that challenging schools are balanced in the portfolio with stronger principals or more stable schools, so that principals can differentiate their support.
- **Increase the support offered** to the network by augmenting the network team with additional support staff to be deployed by the principal supervisor, either through direct team assignment or a dotted-line affiliation. (It's important to note that if this is the strategy, districts need to ensure that the additional support doesn't itself make the managerial load of the principal supervisor impossible.)

The final network design also has to match the portfolio of principal supervisors the district has—or plans to hire—so that each network, with its specific makeup of schools and support needs, has the leadership that it requires to ensure principals and schools are adequately managed and supported. If the principal supervisor cohort is largely in place as network design is completed, it may be important to the district leadership to at least tentatively explore the implications of matching specific networks to actual principal supervisors in a structure similar to the one below:

Network	Network Profile: <i>School types and support needs</i>	Principal Supervisor	Principal Supervisor Profile: <i>Strengths and experience, as well as areas of growth</i>	Strength of Match <i>and potential areas of needed additional support for the principal supervisor or the network</i>
Network 1				
Network 2				
Network 3				
Network 4				

Appendix: Summary Chart of Considerations for Network Design

First Tier Design Criteria

Grade Level	Feeder Pattern
<p>Key benefits:</p> <ul style="list-style-type: none"> • Clustering schools with those having the same grade levels allows principal supervisors to tailor their support and network priorities to the specific instructional strategies and content that will impact student outcomes at that level. • Principal supervisors can become deep experts on the instructional expectations of their focal schools and on building capacity in those areas. Schools with the same grade levels often have other similarities (student body and faculty size, facilities realities, etc.) that can make this a way to allow principal supervisors to achieve efficiencies in their management. • Principal supervisors have demonstrated success as principals themselves and can better translate their experience to guidance within the network if schools have the same grade levels. <p>Potential issues to address:</p> <ul style="list-style-type: none"> • Potential for inequitable caseloads for principal supervisors, especially if there is no corresponding differentiation of the network size, because elementary school management can often be less complex than upper school support. • This can perpetuate disconnects between schools at different grade levels, if this is a challenge for the district. • There is the potential for geographic dispersion. • There is the potential that, within the network schools, needs for support, resources available, and instructional models will differ greatly. 	<p>Key benefits:</p> <ul style="list-style-type: none"> • Grouping schools by feeder patterns allows principal supervisors to encourage vertical alignment among schools at the elementary, middle and high school levels, taking a holistic look at the strategies and cumulative results for student preparation and, ultimately, readiness for college and career. • Feeder patterns also often represent other formal and informal affiliations among schools. • Feeder pattern grouping can be helpful in facilitating community engagement, if that is an important part of the principal supervisor’s role. <p>Potential issues to address:</p> <ul style="list-style-type: none"> • Potential for inequitable caseloads for principal supervisors if more challenging schools are clustered in specific feeder patterns, as is often the case. • Feeder patterns may be too complex or weak to be a meaningful consideration for network design. • Principal supervisors must have a broad knowledgebase of school practices in order to effectively manage schools across the PreK-12 continuum.
<p>Questions to consider:</p> <ul style="list-style-type: none"> • Is the district focused on strategies specifically focused on elementary, middle, or high schools? • Is there a strong focus on grade-level-specific content rigor and standards as a lever for district improvement? • Is there historical precedent for grouping schools together as elementary, middle or high school? • Has the district identified a specific type of schools (for example, middle schools and preparing students for high school readiness) as representing a particular challenge—or opportunity? 	<p>Questions to consider:</p> <ul style="list-style-type: none"> • Is there an explicit district focus on vertical alignment among schools? • Has the district prioritized transition points between elementary and middle or middle and high schools as specific barriers to student outcomes? • Is there historical precedence for this type of alignment or helpful informal relationships among schools in the same feeder patterns that could be reflected in the network design?

Additional Design Criteria and Considerations

<p style="text-align: center;">Student Outcomes and School Performance Levels: Homogeneous Networks <i>(Creating networks that group schools with similar performance profiles)</i></p>	<p style="text-align: center;">Student Outcomes and School Performance Levels: Heterogeneous Networks <i>(Creating networks that deliberately include schools at a range of performance levels)</i></p>	<p style="text-align: center;">Geographic Networks</p>
<p>Key benefits:</p> <ul style="list-style-type: none"> • This design principle can be particularly attractive where specific resources, supports, and expectations are directed at schools based on tiering their performance. Principal supervisors can share best practices and facilitate resource connections in an efficient way across a network with similar performance levels which are facing similar challenges in raising student achievement outcomes. • Research has shown that principals need to make different leadership moves to address schools at various levels of functionality, and a principal supervisor who is familiar with best practice strategies for a school at a specific level can tailor their support to principals in that way. • This structure can facilitate support and learning among principals in that network and allow the principal supervisors to advocate for specific policies or resources to the central office. • Often times, this consideration is especially important for schools in turnaround or lowest-performing designations, where the level of district engagement in management—but also resources—can be very distinct. <p>Issues to address:</p> <ul style="list-style-type: none"> • Unless assignment to a tier of underperforming schools is accompanied by a lower caseload for the principal supervisor, there is the possibility that principal supervisors will not have equitable roles. • This design limits engagement and learning between higher-performing principals and schools and their developing peers. 	<p>Key benefits:</p> <ul style="list-style-type: none"> • Networks with schools that include a diverse set of performance levels, strengths, and challenges provide learning opportunities and a wide range of examples of effective practices. • Principal supervisors can benefit from managing schools with a broad range of needs and challenges, allowing them to differentiate their support and helping ensure “fair” managerial loads across the principal supervisor corps. <p>Issues to address:</p> <ul style="list-style-type: none"> • Principal supervisors may be drawn into “fire-fighter” mode, focusing their time and energy—and that of the network resources—on the highest-need principals and schools while neglecting other, growing schools. 	<p>Key benefits:</p> <ul style="list-style-type: none"> • Taking into account geography results in networks that enable principal supervisor engagement at the schools. A network that is not too geographically dispersed facilitates frequent school visits, an important part of principal supervisor responsibilities because they are a lever for impact and success. This also makes cross-network learning more efficient and possible as well. • Geography can also be a proxy for other similarities among schools: communities served or local resources available. Most often, geography is an effective secondary consideration. Districts should prioritize other factors and then look at geographic implications <p>Issues to address:</p> <ul style="list-style-type: none"> • This consideration is most frequently not reflective of district priorities or differentiation among schools along meaningful distinctions.
<p>Questions to consider:</p> <ul style="list-style-type: none"> • Is there a district strategy to focus resources on low-performing schools which should be reflected in network design? • Does the district have a distinct management strategy for low-performing schools (ex. limits on autonomy) that should be reflected in network design? • How should this criterion be evaluated in the form of one to two metrics that can be determined about potential networks modeled in the strawman analysis? 	<p>Questions to consider:</p> <ul style="list-style-type: none"> • Are there reasons to facilitate learning across diverse schools within the district? • How important is it to “balance” the challenges of schools within each network to ensure equitable managerial loads for principal supervisors? 	<p>Questions to consider:</p> <ul style="list-style-type: none"> • How important are logistical considerations in network design? How much does a dispersed network impact things like travel time? • Is there historical precedent for this consideration? Are there existing informal or formal relationships among nearby schools?