Kerr Tar/C^{3}E Hub Implementation: Target Cluster Definition and Facility Features Specification

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by

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Executive Summary

In its original conception the Kerr Tar Hub was broadly envisioned as a tech-intensive, locally driven regional park potentially providing a wide variety of infrastructure and service offerings intended to attract and support the location of emergent firms from within selected RTRP targeted industries. The Kerr Tar Council of Governments recognized that implementing the Hub concept required more specific information on the industries to be targeted and the manner in which the Hub would serve the location and growth needs of such companies.

Beginning in May 2005, the UNC Center for Competitive Economies (C^3E) undertook an extensive research effort to deliver this critical implementation information. The attached report contains the following findings.

What Industry Clusters are Most Appropriate

From among the ten RTRP targeted industry clusters, evaluation of the selection criteria findings led to the selection of six clusters, in whole or in part, as appropriate targets for the Kerr Tar Hub. In order of priority, the industry clusters selected for Kerr Tar Hub targeting are:

1. **Pharmaceutical & Medical Technology**
2. **Information Technology & Instruments**
3. **Chemicals & Plastics**
4. **Metalworking & Industrial Machinery**
5. **Vehicle Parts Assembly**
6. **Food Products (sub sectors)**

Each of the identified clusters offered some compelling targeting motivation, as well as specific sub-sectors of particular interest.

What Companies to Target

The assessment of Hub comparable facilities and key informant discussions with company executives of representative firms emphasized the criticality of proactive and targeted marketing to the Hub's success. Based on this finding an important additional task was added to the project to not only identify the industrial clusters for Hub targeting but to also construct a method for identifying specific company prospects from each targeted cluster to solicit for location at the Hub.

Data on thousands of companies nationally was compiled for each of the six industry clusters selected for Hub targeting. The databases were then analyzed by screening each population for criteria intended to narrow the population of companies to identify those firms that correlated with the corporate profiles of firms choosing to locate in Hub-comparable areas of the RTRP region, and exhibited characteristics of firms positioned for substantial growth. Numerous criteria were considered and researched leading to the development of a methodology for identifying specific company prospects from each targeted cluster to solicit for location at the Hub.

What the Hub Should Offer

The highest priority potential Hub infrastructure and services offerings were identified through assessments of comparables facilities and key informant discussions with representative company executives. Those features, in order of highest to lowest priority, include:

- High speed internet connection
- Shared business support services
- Communal reception and conference room(s)
- Onsite training/classroom facilities
- Multi-tenant flex space and/or "incubator" mixed use space
- Flexible manufacturing speculative facilities
- Build ready industrial sites

The consensus opinion of comparable facility managers and industry executives was to emphasize proactive marketing and business services, proceed cautiously on speculative infrastructure investments, but be prepared to response decisively and effectively to market opportunities.

What is May Cost to Develop the Hub

Based on the joint Vance and Granville Counties site recommended by the site selection process, development of the Hub, including land acquisition ($21 million) but not building construction, could eventually total $77 million:

- Land - $21 million
- Clearing – 3 million
- Earthwork - $18 million
- Infrastructure - $14 million
- Amenities - $2 million
- Parking - $5 million
- Contingency/Overhead/Profit - $13 million

However, the Hub's total development cost is not required to initiate development. Hub management will also have several options that can defer substantial amounts of eventual Hub land acquisition and other development costs. Nonetheless, an estimated **$8.8 million** is needed for "Phase One" fundamental site preparation investments as recommended in the site selection process.

What Revenues it May Produce

Management decisions in regard to Hub sales and leasing strategies will have very substantial effects on long-term revenues. A **conservative strategy** relying entirely on ***land and building sales*** to Hub tenants would minimize capital requirements for building construction and land development but would also depress revenues, producing only $23 million over the first five years and **less than $50 million over 15 years**.

A more **aggressive strategy** relying entirely on **land and building leasing** to Hub tenants, while its would greatly increase capital requirements for building construction and land development, would realize the greatest revenues to the Hub, producing $28 million over the first five years and **$281 million over 15 years**. Choice between the options – or at the flexibility to choose - will depend on the Hub's ability to finance improvements above those the base level development requirement.

What Economic Benefits can be Achieved

Successful development of the Hub is expected to occur over a 15-year period. Hub occupancy is projected to grow at an average 5% annual rate over 15 years, eventually achieving an eventual 80% occupancy consistent with the experience of successful comparable development projects. A "virtual portfolio" of Hub based companies, constructed on the targeted industry clusters and business prospects, forecast Hub occupants to include **54 mid to large companies employing 3,000 people by 2021**.

How to Proceed

In addition to the $8.8 million Phase One investment recommended in the site selection process, three progressive Hub implementation scenarios were developed based on the comparable facilities experiences and market priority articulations compiled by C^3E. The cost of **implementing Phase One investments and all three scenarios is estimated at $17.3 million,** exclusive of land acquisition costs.

Scenario One: Building the "Virtual Hub", $1 million

The experience of comparable facilities repeatedly demonstrated the critical nature of the facility staff as both marketers of the facility and service providers to tenant and prospective tenant firms. This role is especially important given the regional industry cluster basis of the Kerr Tar Hub strategy, which requires coordination and facilitation function to achieve linkage efficiency benefits of cluster integration. A three year commitment totaling $1 million would establish a minimal administrative capacity consisting of a Hub lead executive, a secondary executive, and an administrative support position, plus operating expenses.

Scenario Two: Establishing a "Beachhead" Facility Capacity, $6 million

The experience of comparable facilities and stated company executive preferences suggests that the most immediately useful facility of the Hub would be a highly flexible mixed use business and industrial facility that would both house the Hub administrative offices and provide a variety of smaller scale "flex space" business location options for companies establishing initial operations on the Hub area.

Based on a composite of comparable facilities, the Hub "beachhead" building would be a 50,000 square foot building including multiple 1,000 s.f. to 5,000 s.f. mixed used tenant spaces, as well as 4 to 6 heavier adjoining industrial spaces ranging from 5,000 to 10,000 s.f. The building would offer common areas for training purposed and limited shared administrative support services.

Scenario Three: Hub Cluster Complex, $8.5 million

Industrial shell buildings are among the most commonly used economic development tools. But for each one that has proved critical to a successful prospect location, another one or two or more have sat mockingly vacant for years. Nonetheless, such a facility could accelerate the launch of the Kerr Tar Hub if developed for the primary markets of the Hub's targeted clusters.

Most industrial shell buildings range from 70,000 s.f. to 120,000 s.f. and consist of partially fitted out generic industrial facilities readily finished to the requirements of an industrial location client. The size of such buildings is typically governed by construction economies of scale and expectations of market requirements based on historic precedents that may or may not remain relevant.

However, in the case of the Kerr Tar, there is substantial information on the scale of firms dominant in the population of companies constituting the Hub's targeted clusters. Of those, the most common facility requirements are in the 30,000 s.f. to 60,000 s.f. range, with many starting at the low end of that range and progressing rapidly to the upper end of the range and beyond. Therefore, rather than constructing large generic shell building, it would be more appropriate to develop a 90,000 s.f. to 120,000 s.f. multi-tenant shell or near-spec building accommodating lower range prospects for grow-out to subsequent Hub or regional industrial locations.

END

Introduction

The concept of the Kerr Tar Hub originated within research and planning activities undertaken by the Research Triangle Regional Partnership (RTRP). That effort, described in the 2004 "Staying on Top" report, identified ten (10) industry clusters for which the region possesses economic development competitive advantages. Subsequent research examined the feasibility of a "hub" industrial park that would serve to attract and cultivate industrial growth within the Kerr Tar area of the RTRP region. That work led to the initiation of the Kerr Tar Hub development effort.

In its original conception the Kerr Tar Hub was broadly envisioned as a tech-intensive, locally driven regional park potentially providing a wide variety of infrastructure and service offerings intended to attract and support the location of emergent firms from within selected RTRP targeted industries. The Kerr Tar Council of Governments recognized that implementing the Hub concept required more specific information on the industries to be targeted and the manner in which the Hub would serve the location and growth needs of such companies.

Implementation Research Goals

Beginning in May 2005, the UNC Center for Competitive Economies (C^3E) undertook an extensive research effort to deliver this critical implementation information. This research rebuilt upon C^3E's prior collaboration with the Kerr Tar Council of Governments that laid the foundation for the Hub concept itself. To this research C^3E brought the considerable resources of its office, the Kenan Institute and the Kenan Flagler School of Business, as well as a broad network of economic development and planning collaborators. The research also specifically emphasized a market interrogation-based methodology to both guide implementation of the Kerr Tar Hub through clearly articulated corporate officials' preferences and to identify corporate prospects for Hub location.

Goal One: Kerr Tar Hub Target Cluster(s) Definition

The concept of the Kerr Tar Hub originated within research and planning activities undertaken by the Research Triangle Regional Partnership (RTRP). That effort, described in the 2004 "Staying on Top" report, identified ten (10) industry clusters for which the region possesses economic development competitive advantages.

In implementing the Kerr Tar Hub, it is assumed that the Hub will focus its efforts upon one or more of the identified RTRP clusters. A primary goal of this effort is to examine the Kerr Tar region's competitive position in relation to the array of prospective industry clusters to identify and prioritize those clusters upon which to focus the Kerr Tar Hub economic development strategy.

Goal Two: Kerr Tar Hub Facility Features Specification

Initially, the Kerr Tar Hub was broadly envisioned as a tech-intensive, locally driven regional park potentially providing a wide variety of infrastructure and service offering intended to attract and support the location of emergent firms from within the targeted industries. However, implementation of the Hub required a specification and prioritization of appropriate infrastructure and services from among numerous possible offerings. Therefore, a second primary goal of this project was to achieve an articulated market-driven specification of Hub facility and service offerings that support its targeted clusters.

Goal Three: Identifying Prospects from Targeted Clusters

During the course of the research it became clear that the success of the Hub would require an informed, proactive identification of prospective tenants from within the targeted industry clusters. Therefore, an additional goal was added to the original project design to not only identify the industrial clusters for Hub targeting but to also construct a method for identifying specific company prospects from each targeted cluster to solicit for location at the Hub.

This task was informed by the differentiation process used in the cluster targeting process and the corporate demographics and location characteristics derived in the key informant research. The Center also drew upon its own extensive research into growth companies and the value proposition offered by industrial cluster location. This data and the Center's prior research were combined to examine the national populations of firms in the industrial clusters targeted for the Hub to identify companies with characteristics suggestive of attraction to the proposed Hub.

Goal Four: Kerr Tar Hub Scenario Modeling

The enhanced market awareness and articulated demand for Hub facility features yielded through this project was compiled to provide guidance in on the scale of possible action in implementing the Hub. Therefore, a fourth primary goal of this project was the exploration and definition of multiple Hub development scenarios and models encompassing facility establishment and operations.

Implementation Research Objectives

The defined goals of this project were achieved through the performance of research toward multiple objectives. While some of the research was performed concurrently, in other cases tasks were performed consecutively in order that their outcomes would inform the actual definition and performance of subsequent tasks.

Objective: Targeted Industry Clusters Characterization

Through previous efforts the RTRP had identified ten industry clusters for which the region has delineated competitive advantages. However, the constituent firms comprising these clusters varied in ways significant to a determination of their appropriateness for the Kerr Tar Hub strategy. Therefore, selecting industry clusters for Hub targeting

required a fuller understanding of the population characteristics of the resident and non-resident firms within the ten RTRP clusters.

Numerous research activities were performed in the course of the project to achieve that understanding. Multiple public and proprietary corporate information sources were investigated to construct databases of companies constituting representative cross sections of each of the ten RTRP targeted industry clusters. That data was used to profile each of the ten RTRP targeted industry clusters to characterize the national population of firms within each cluster on factors such as ownership status, employment, revenues, company age, and geographic concentration.

Those cluster profiles were then compared to attributes of the Kerr Tar region and correlated with historic patterns of interstate corporate relocations to the RTRP region assumed to be indicative or suggestive of industry-recognized competitive advantages. On these bases the ten RTRP targeted industry clusters were differentiated in terms of their alignment or appropriateness to the Kerr Tar region and the Hub concept.

Objective: RTRP Clusters Development Pattern Assessment

Numerous companies from each of the ten RTRP industry clusters are already located in the RTRP region. The pattern of each RTRP clusters' historic development - whether such firms were established within the region or were attracted to locate there – provides insights into location and growth factors that may guide future development.

An assessment of those cluster development patterns was performed to enable the Kerr Tar Hub to exploit identified trends. This assessment required the compilation of detailed on the current RTRP area corporate population of each of the ten RTRP targeted industry clusters. The clusters were then analyzed to identify those clusters whose development patterns and requirements most strongly correlated with Kerr Tar Hub attributes.

Objective: Facility Features Delineation and Prioritization

Realization of the Kerr Tar Hub required that a multiplicity of possible infrastructure and services offerings be winnowed and prioritized prior to implementation. In the project the delineation and prioritization of Hub features drew upon the experiences of comparable facilities and articulated market preferences expressed by representative RTRP region companies within the Hub's targeted clusters.

The research performed to acquire this information involved the examination of three facilities comparable to the Kerr Tar Hub concept to identify the range of potential Kerr Tar Hub infrastructure and services offerings. Administrators of these comparable facilities were interviewed to learn from their experience the types of infrastructure and services which has proven most valuable to their tenants, as well as to gain insights into what they might have done differently based on their operating experience.

The understanding the development trends within RTRP clusters were enhanced through discussions with specific corporate leaders in regard to their individual establishment and

expansion decisions. Their perspectives and experiences provided insights on location, facility and services requirements potentially critical to the Hub's implementation.

Objective: Hub Scenario Financial Modeling

The C^3E Kerr Tar Hub Implementation Project concluded with the construction of multiple scenarios for Hub development that included examinations of development costs, revenue accrual, and cash flows. Scenarios were also identified for initial Hub development based on the information derived from comparable facilities and key informant articulated market preferences.

Goal One: Kerr Tar Hub Target Clusters Definition

The Nov 2003 "Targets of Opportunity" report had identified target clusters for the RTRP region and made preliminary inquiries into the most appropriate industry clusters to target for the RTRP's subregions. The ten industry clusters identified for the RTRP region included:

- Pharmaceutical & Medical Technology
- Information Technology & Instruments
- Chemicals & Plastics
- Metalworking & Industrial Machinery
- Vehicles Parts Assembly
- Food Products
- Transportation, Shipping & Logistics
- Apparel, Textiles & Leather Goods
- Wood Products & Furniture
- Business Support Services

These ten industry clusters had clearly delineated competitive advantages within the RTRP region. However, the constituent firms comprising these clusters were judged likely to vary in ways significant to a determination of their clusters' appropriateness for the Kerr Tar Hub strategy. Therefore, a primary goal of this project was to examine the Kerr Tar region's competitive position in relation to the array of prospective industry clusters to identify and prioritize those clusters upon which to focus the Kerr Tar Hub economic development strategy.

Selecting industry clusters for targeting entailed three major tasks to acquire a fuller understanding of the population characteristics of the firms within the ten RTRP clusters:

Task One: RTRP Targeted Industry Clusters - US Characterizations

The ten RTRP targeted clusters were examined to characterize the national population of firms within each cluster on a variety of factors - such as ownership status, employment scale, revenue scale, or geographic location – which might prove significant in establishing relevance for the Kerr Tar Hub. While this task paralleled prior research on RTRP's industry clusters, it differed significantly in that the analysis was based on the companies constituting the cluster, rather than employment levels within the industry cluster. This approach was taken to ensure the utility of the research findings for use by

local and regional economic developers, for whom the relevant units are the firms – the employers – rather than the employees themselves.

To perform this analysis multiple public and proprietary corporate information sources were researched to construct national databases of companies constituting representative cross sections of each of the ten RTRP targeted industry clusters. These databases were used to profile each of the ten RTRP targeted industry clusters for comparison to attributes of the Kerr Tar region and the strategic intent of the Kerr Tar hub concept, as well as historic patterns of interstate corporate relocations to North Carolina.

Task Two: RTRP Targeted Industry Clusters – Regional Characterization and Development Pattern Assessment

Databases of information were compiled on the current RTRP area corporate population of each of the ten RTRP targeted industries. Those cluster populations were investigated to identify and describe corporate location behavior. Additionally, the RTRP cluster trend information was compared to their US cluster populations to identify those clusters whose development patterns and requirements most strongly correlated with Kerr Tar Hub attributes.

Task Three: Kerr Tar Hub Cluster Targeting Selection

The ten RTRP targeted clusters identified in previous research were assessed in this project using a combination of quantitative and qualitative measures to identify those industry clusters – or cluster sub-sectors – most appropriate as targets for the Kerr Tar Hub. Numerous criteria drawn from prior research were examined for relevance and currency and additional new criteria were developed specifically to incorporate findings from the US and RTRP cluster population characterizations.

The criteria selected for use in targeting clusters for the Kerr Tar Hub included:

Cluster Traded Status
A strong selection preference for traded industry clusters was used to maximize the economic benefit of a successful Kerr Tar Hub. **Traded clusters** are those that bring new income into the regional economy from outside. Such is clearly the case for manufacturing firms that produce goods for export, thus importing new income to the local economy. While perhaps less obvious, the same is also true for service and retail businesses whose primary markets are non-local.

Cluster Location Quotient Trend
A selection preference was used for industry clusters exhibiting high or strengthening Location Quotients (LQs) for the total RTRP region and the region's rural counties. LQs are an indicator of relative cluster strength by measuring the share of local employment in a given industry cluster relative to a national average employment share in that same cluster.

Cluster Density
A selection preference was used for industry clusters exhibiting high levels of "Cluster Density", a measure of the extent to which the cluster possesses broad presence across its constituent sub-sectors. Clusters for which RTRP has pronounced competitive advantage would exhibit high LQs and a large population of firms throughout the cluster's constituent subcategories.

Cluster Rural Location Proclivity
A selection preference was used for industry clusters demonstrating significant level of rural location by constituent companies, measured as a percent of total firms of the cluster located outside of Metropolitan Statistical Areas (MSAs).

Cluster Locally-based/Headquartered Population
A selection preference was used for industry clusters with substantial populations of RTRP based headquarters (HQs). Local HQs are considered preferable for general economic development goals and specific KTH strategic objectives.

Cluster Medium and Small Enterprises (MSE) Population
A selection preference was used for industry clusters with significant populations of Medium and Small Enterprises (MSEs), mid-scale firms with facility, workforce (20-250) and resource requirements more appropriate to the KTH

Cluster Mean Wages
A selection preference was used for industry clusters with higher average wage rates to enhance the Hub's economic impact in the Kerr Tar area.

Cluster RTP Relevance
A selection preference was used for industry clusters with qualitatively assessed utilization value for RTP area research and development (R&D) resources and workforce. Firms within such clusters were assumed to exhibit stronger location preference for the RTRP region.

Figure 1: Cluster/Selection Criteria	**Traded Cluster**	**RTRP 2002 LQ**	**96-02 LQ Chng.**	**Rural 2002 LQ**	**Cluster Density**	**% Rural**	**% HQ**	**% MSE**	**2002 Wages**	**RTP Rel.**
Pharmaceutical & Medical Technology	Y	2.5	140%	1.6	4.43	23%	75%	28%	$172,979	High
Information Technology & Instruments	Y	1.7	2%	0.5	2.46	12%	73%	25%	$ 69,132	High
Chemicals & Plastics	Y	0.7	-27%	1.9	1.56	37%	66%	30%	$ 42,370	Med
Metalworking & Industrial Machinery	Y	0.5	-7%	0.9	3.97	33%	88%	24%	$ 37,446	Low
Vehicles Parts Assembly	Y	0.6	9%	1.6	0.57	41%	89%	15%	$ 37,799	Low
Food Products	Y	0.8	13%	1.4	0.53	33%	74%	22%	$ 27,644	Low
Transportation, Shipping & Logistics	Y	0.7	-14%	0.8	8.78	19%	82%	41%	$ 31,313	Med
Apparel, Textiles & Leather Goods	Y	1.7	-28%	3.8	0.67	42%	86%	35%	$ 30,247	Low
Wood Products & Furniture	Y	0.3	-79%	0.8	8.53	30%	87%	29%	$ 33,427	Med
Business Support Services	N	NA	NA	NA	NA	NA	NA	NA	NA	NA

Cluster Evaluation Findings

These targeting selection criteria (summarized in Figure 1) were used to differentiate the ten RTRP targeted industry clusters to assess their potential alignment or "fit" to the Kerr Tar region and the Hub concept. On this basis the ten industry clusters targeted by the broader RTRP region were either "selected" or "non-selected" as appropriate targets for the Kerr Tar Hub.

Clusters Not Selected for KTH Targeting

After applying the selection criteria to the ten RTRP targeted industry clusters, several of those clusters were assessed as inappropriate targets for the Kerr Tar Hub. Such an assessment does not exclude consideration of industrial development prospects from among the non-selected clusters, but does serve to narrow Hub development efforts.

1. **Business Support Services (BSS)**: The BSS cluster was non-selected by its distinctive status as the only "non-traded" of the ten RTRP targeted clusters. The selection criteria employed had a very strong preference for "traded clusters" that import income into an economy. In contrast, **non-traded clusters** principally re-circulate revenues and spending within the resident population, therefore, the net change in economic well being is minimal as existing income and wealth is effectively being recycled.

2. **Wood Products & Furniture (WPF):** The WPF cluster was eliminated as a Kerr Tar Hub target despite its historic role in the regional economy. That role is still exhibited in the high percentage of cluster firms (86%) based or headquartered in the RTRP region, its high Cluster Density rating (8.53), and a strong presence in the region's rural counties (42% of firms). However, these positive were offset by the cluster's strongly trending decline as a significant employer in the region as evidenced by the cluster's declining LQ, which has fallen 79% between 1996 and 2002, and stands at an anemic 0.8 for rural RTRP.

3. **Apparel, Textiles & Leather Goods (ATL):** A similar set of circumstances led to the non-selection of the ATL cluster. The cluster's decline has been less precipitous than the Wood Product & Furniture cluster and the cluster's 2002 LQ remained a significant 1.7. Nonetheless, that figure fell 28% between 1996 and 2002, indicating a lessening competitive advantage in the region. Moreover, the cluster exhibits mediocre average wages ($30,247) and a low rating on RTP relevance.

4. **Transportation, Shipping and Logistics (TSL):** The decision to non-select the TSL cluster was less clear-cut given the mixed picture presented by the selection criteria for the cluster. The cluster has not attained a significant competitive advantage position for the either the RTRP region (LQ=0.7) or for rural RTRP (LQ=0.8). This position even appears to weakening, with the RTRP LQ declining 14% between 1996-2002. In its favor, the TSL cluster does exhibit a strong local based presence (HQ = 82%) and appropriate company scale for the Kerr Tar Hub, with an MSE of

41%. However, the non-selection decision was clinched by the cluster's modest average wages ($31,313) and low rural presence factor of only 19%.

Clusters Selected for KTH Targeting

From among the ten RTRP targeted industry clusters, evaluation of the selection criteria findings led to the selection of six clusters, in whole or in part, as appropriate targets for the Kerr Tar Hub. In order of priority, the industry clusters selected for Kerr Tar Hub targeting are:

7. **Pharmaceutical & Medical Technology**
8. **Information Technology & Instruments**
9. **Chemicals & Plastics**
10. **Metalworking & Industrial Machinery**
11. **Vehicle Parts Assembly**
12. **Food Products**

Each of the identified clusters offered some compelling targeting motivation, as well as specific sub-sectors of particular interest. The bases for each cluster selection are described below.

Pharmaceutical & Medical Technology (PMT) Cluster

The Pharmaceutical & Medical Technology (PMT) cluster stands out as the exceptional opportunity for the entire RTRP region, including the Kerr Tar sub-region to be served by the Hub.

- The cluster exhibits a clear competitive advantage for the RTRP region, possesses the highest LQ (2.5) of the examined clusters an that competitive advantage appears to be increasing, as the PMT LQ value increased 140% between 1996 and 2002
- The cluster also shows strong activity in the region's rural areas, with a non-metro LQ of 1.6 and with 23% of the cluster's firms located in the region's rural counties
- Of the ten RTRP targeted clusters, the PMT cluster draws the strongest on the Research Triangle Park area's R&D resources
- PMT also leads all clusters in averages, more than doubling the next closest with an mean wage of $172,979 in 2002

Targeted Cluster Sub-sectors	NAICS Code	Description
Pharmaceuticals & Medical Technology	3256	Soaps, cleaning compounds, and toilet preparations
	3254	Pharmaceuticals and medicines
	3259	Other chemical products and preparations
	3391	Medical equipment and supplies

Sub-sector "Targets of Opportunity"

The strength of the cluster is further demonstrated through PMT's high "cluster density" score (4.43), indicating that most of the cluster's sub-sectors are well populated. A locational analysis of PMT firms in the RTRP showed that several of those sub-sectors exhibited a greater affinity for non-metro locations like the Kerr Tar Hub region. These sub-sectors can represent specific "Targets of Opportunity" for focusing Kerr Tar Hub development and marketing strategies.

Recruitment Prospect Pools

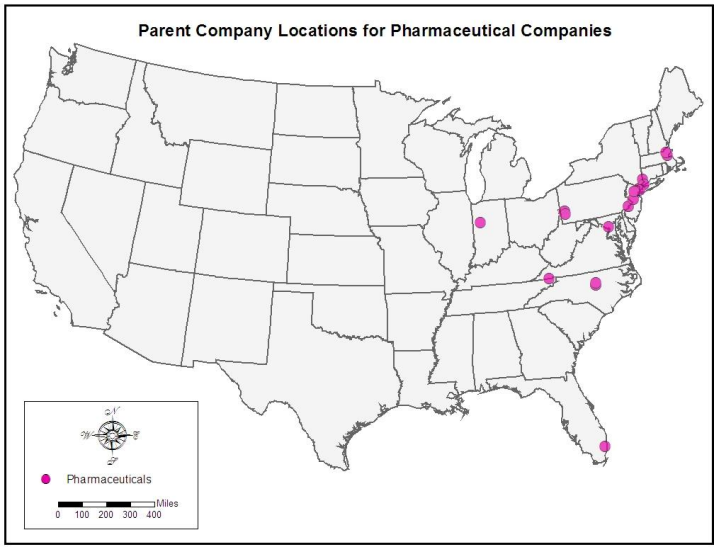
Branch plants and subsidiaries represent 25% of the PMT cluster company population in the RTRP region. The geographic location of those firms' parent companies were investigated and plotted to identify areas of the United States from which the RTRP region has attracted PMT corporate relocations or expansion.

Areas from which the cluster has drawn new firms suggest market recognition of the cluster's competitive advantage. Such areas may prove fruitful for targeted cluster-based industrial recruitment efforts.

As shown, the PMT cluster has attracted corporate subsidiaries locations primarily from the northeast US, especially from the Delaware Valley region spanning Philadelphia, New Jersey, and New York. There have also been concentrations of locations drawn from the Boston, Maryland and Pittsburgh areas.

Information Technology & Instruments (ITI) Cluster

While not as strong as the Pharmaceutical & Medical Technology cluster, the Information Technology and Instruments (ITI) cluster is also a high value target that is strong in the RTRP region for which specific strategies could enhance the attractiveness of the Kerr Tar sub-region to be served by the Hub.



- The cluster exhibits a competitive advantage for the RTRP region, with a LQ of 1.7
- Despite the nation wide retrenchment of the information technology industry, the ITI has recovered in the region, achieving a modest 2% gain in LQ value between 1996 and 2002

- However, the cluster has historically not been a strong factor in rural RTRP counties. With a non-metro LQ of only 0.5 and with only 12% of the cluster's firms located in the region's rural counties, the ITI cluster remains more potential than reality in areas such as Kerr Tar's
- Nonetheless, the ITI cluster is a high wage employer that draws strongly on the Research Triangle Park area's R&D resources. As younger companies in the cluster mature, they will likely become more attracted to the production economy advantages of Kerr Tar

ITI Sub-sector "Targets of Opportunity"

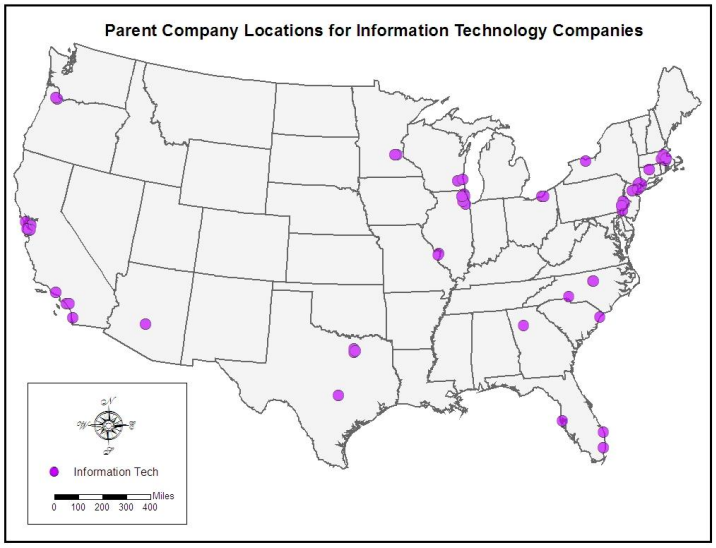
The density rating of the cluster (2.46) suggests a strong core of companies in some in some but not all of the cluster sub-sectors. The industrial diversity of the cluster suggests a wider variety of industrial development targeting opportunities exist.

Targeted Cluster Sub-sector	NAICS Sector	Description
Information Technology & Instruments	3333	Commercial and service industry machinery
	3341	Computer equipment
	3342	Communications equipment
	3344	Semiconductors and other electronic components
	3345	Navigational, measuring, electromedical, and control instruments
	3359	Electrical equipment and components
	3391	Medical equipment and supplies

This finding was evidenced by the ITI locational analysis, which identified seven different sub-sectors for which recent corporate location behavior suggests a potential Kerr Tar affinity. These sub-sectors can represent specific "Targets of Opportunity" for focusing Kerr Tar Hub development and marketing strategies.

Recruitment Prospect Pools

Branch plants and subsidiaries represent 27% of the ITI cluster company population in the RTRP region. The geographic location of those firms' parent companies were investigated and plotted to identify areas of the United States from which the RTRP region has attracted corporate relocations or expansion.



Areas from which the cluster has drawn new firms suggest market

recognition of the cluster's competitive advantage. Such areas may prove fruitful for targeted cluster-based industrial recruitment efforts.

As shown, the ITI map makes an interesting contrast to that of the PMT cluster, While the PMT cluster had attracted corporate subsidiaries locations from a few eastern US areas, the ITI map is shows a much broader appeal with prospect regions across the country. In addition to the northeast US, the region has drawn ITI firms particularly well from the Chicago, Silicon Valley and Southern California areas well.

Chemicals & Plastics (CP) Cluster

The Chemical & Plastics (CP) cluster presents an interesting contrast to most of the ten targeted RTRP clusters in that it exhibits a greater competitive advantage in the region's non-metro areas than the region as a whole. This affinity for rural areas such as Kerr Tar's helped overcome some lesser aspects of the cluster in the targeting selection process.

- With a LQ of only 0.7, the CP cluster exhibits a marginal competitive position for the total RTRP region; but for the non-metro areas of the region it registers a strong LQ of 1.9.
- This "rural advantage" is further evidenced by the high percentage (37%) of cluster firms in non-metro counties; at the same time, the CP cluster has a significant population (30%) of Medium and Small Enterprises (MSE), the scale of firm best suited to the Kerr Tar Hub
- The CP cluster was the strongest of the ten RTRP cluster in terms of share of firms that had relocated to the region, with 44% of the firms being either subsidiaries or branch plants.
- The CP cluster also had the third highest average wages among the RTRP cluster

CP Sub-sector "Targets of Opportunity"

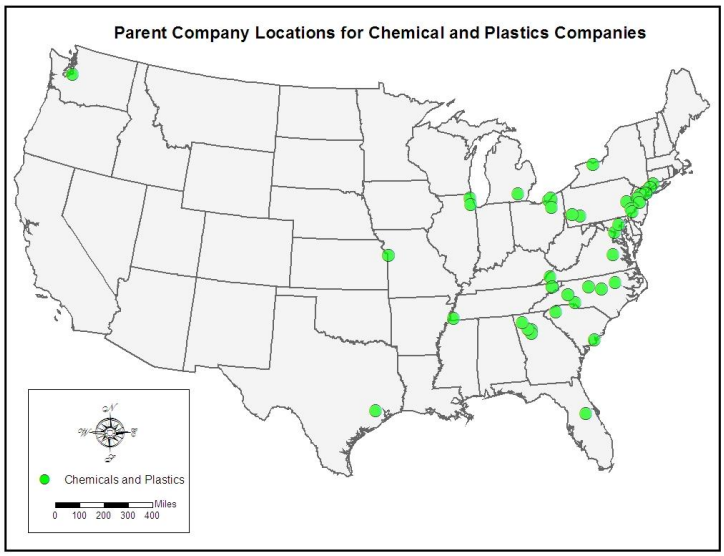
The density rating of the cluster (1.56) suggests a strong core of companies in some in some but not all of the cluster sub-sectors. Given the slow rate of growth for the cluster, this indicates a mediated risk strategy of limited development investment in a highly

Targeted Cluster Sub-Sector	NAICS Sector	Description
Chemicals & Plastics	3251	Basic chemicals
	3252	Resin, synthetic rubber, & artificial & synthetic fibers filament
	3259	Other chemical products and preparations
	3261	Plastics products
	3359	Electrical equipment and components

selective strategy. Five sub-sectors were highly representative of the types of CP companies located in RTRP areas comparable to the Kerr Tar Hub location.

Recruitment Prospect Pools

The CP cluster is the most subsidiary/branch plant intensive of the RTRP clusters. This suggests a historic pattern of successful industrial development efforts to capitalize on for the KTH. Geographic plotting of parent companies shows that the majority of relocations and non-NC expansions were attracted from traditional "rust belt" regions in the Northeast and Midwest, especially in the upper Ohio and Pittsburgh region, as well as from New Jersey.



However, the strengths of North Carolina's own resident chemical and plastics industry are in evidence. Many of the RTRP firms are subsidiaries of North Carolina-based corporate parents.

Metalworking & Industrial Machinery (MIM) Cluster

The Metalworking & Industrial Machinery (MIM) cluster parallels the Chemical & Plastic cluster in that the measurable competitive advantage in the region for this cluster is moderate and relatively stagnant. However, as with the CP, the MIM cluster's affinity for non-metro locations makes it appropriate for Kerr Tar targeting on a selective basis. The challenge will be to identify prospects from among the limited growth sub-sectors.

- The RTRP regional LQ for the MIM cluster is only 0.5, and improves to a still modest 0.9 for the region's non-metro areas.
- The MIM cluster experiences a declining LQ for the 1996-2002 period, but the decline was slight (-7%), and could represent increasing productive in a more capital intensive industry
- The MIM cluster, while modest, measures an impressive Cluster Density of 3.97, indicating that its corporate presence in the region is more significant than its employment impact
- The cluster is very strongly a local phenomenon, with 88% of firms being base in the region. This may be accounted for by the large share of firms in the quite small range, suggesting a large specialty or "job shop" presence.

- Wages for the cluster also registered on the low end of the scale for RTRP clusters, averaging only $37,446 in 2002

MIM Sub-sector "Targets of Opportunity"

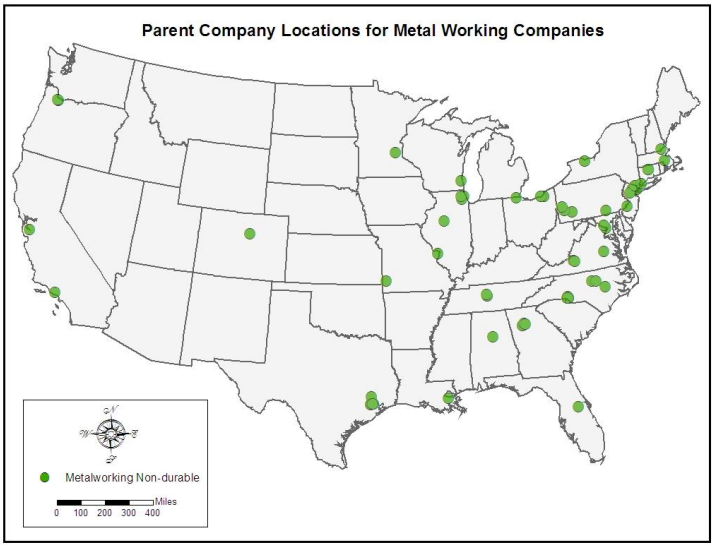
The sub-sectors identified as "Targets of Opportunity" within the MIM cluster encompass a wide range of applications. This is result of the diversity of other industry groups for which the MIM cluster firms provide inputs as suppliers and service providers. In this role, the cluster can be considered a foundation group for the other RTRP clusters and for the cluster targeted for the Kerr Tar region and Hub.

Nine sub-sectors were highly representative of the types of MIM companies located in RTRP areas comparable to the Kerr Tar Hub location.

Targeted Cluster Sub-sector	NAICS Sector	Description
Metalworking & Industrial Machinery	3323	Architectural and structural metals
	3329	Other fabricated metal products
	3331	Agriculture and construction machinery
	3332	Industrial machinery
	3333	Commercial and service industry machinery
	3334	Ventilation, heating, air-conditioning, and commercial refrigeration equipment
	3335	Metalworking machinery
	3339	Other general purpose machinery
	3353	Electrical equipment

Recruitment Prospect Pools

The MIM cluster is the least subsidiary/branch plant intensive of the RTRP clusters. Only 12% of the cluster firm population is classified as either subsidiaries or branch plants. Nonetheless, the large population of firms in the cluster for the region means that a significant number of relocations do occur.



The diverse nature of the cluster is reflected in the dispersed pattern of corporate parent locations mapped. There is a strong draw from tradition recruitment grounds

in the Northeast and Midwest, but there are also a significant number of parent companies based in the US Southeast.

Vehicles Parts Assembly (VPA) Cluster

The Vehicles Parts Assembly (VPA) Cluster, as well as the Food Products cluster to follow, was selected not on the basis of the cluster as a whole but on the potential of a few narrowly defined sub-sectors. The VPA cluster is not a strong one for the region, though it is a strong non-metro one, but its indicators suggest some areas of potential worthy of targeting consideration.

- The RTRP regional LQ for the VPA cluster is only 0.6, but it improves to a robust 1.6 for the region's non-metro areas.
- On the positive side, the VPA cluster experienced a growth in LQ for the 1996-2002 period of 9%; on the negative side, the cluster has a miniscule Cluster Density rating of 0.57
- These factors may indicate the slow growth of a new market entry cluster, meaning that the VPA cluster is young and still developing cluster that has yet to become fully populated
- That emergence is occurring to a significant extent in rural counties of the region (41%) by firms based in region (HQ=88%);
- Wages for the cluster also registered on the medium low end of the scale for RTRP clusters, averaging only $37,799 in 2002

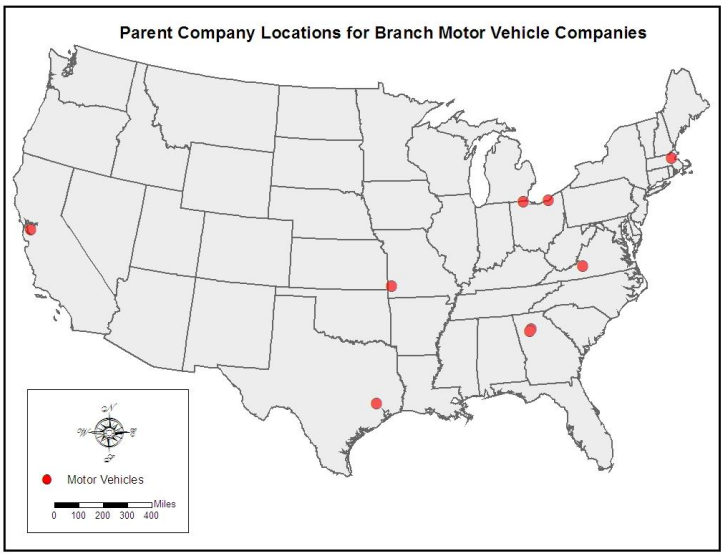
VPA Sub-sector "Targets of Opportunity"

Targeting opportunities in the VPA cluster would be within its sub-sectors rather than throughout the cluster itself. In particular, the region is home to VPA cluster firms that produce specialty high value added components, particularly in navigational instrument, electrical assemblies and some aerospace inputs.

Targeted Cluster	NAICS Sector	Description
Vehicle Parts Assembly	3345	Navigational, measuring, electromedical, and control instruments
	3362	Motor vehicle bodies and trailers
	3364	Aerospace products and parts

Recruitment Prospect Pools

Because the VPA cluster is primarily a locally based set of small firms, the experience of the region is limited in successful industrial development outcomes.



Mapping the parent company locations of those instances shows that the recruitment success has been very concentrated in just a few locales closely associated with either the aerospace industry (St. Louis), the automotive industry (Detroit) or specialty high technology/instrumentation firms in Silicon Valley and Boston.

Packaged Food Products (PFP) Cluster

The most narrowly defined targeting opportunity identified for the Kerr Tar Hub is the Packaged Food Products cluster. The glimmer of opportunity espied in the PFP cluster may prove illusory, but there is a glint or two in the region for one of its most traditional industries. In large part this optimism is fueled by the region's research and development prominence in the food industry, primarily as a result of the work of the North Carolina State University Food Institute.

- The RTRP regional LQ for the PFP cluster is only 0.8, but it is one of the clusters that is stronger in non-metro areas, where it improves to a respectable 1.4
- On the positive side, the PFP cluster LQ grew more than 13% for the 1996-2002 period, though its density is a small 0.53, basically meaning its firm population is very thin across the cluster
- Average ages for the cluster were the lowest of the ten RTRP targeted clusters also registered on the medium low end of the scale for RTRP clusters, averaging only $37,799 in 2002

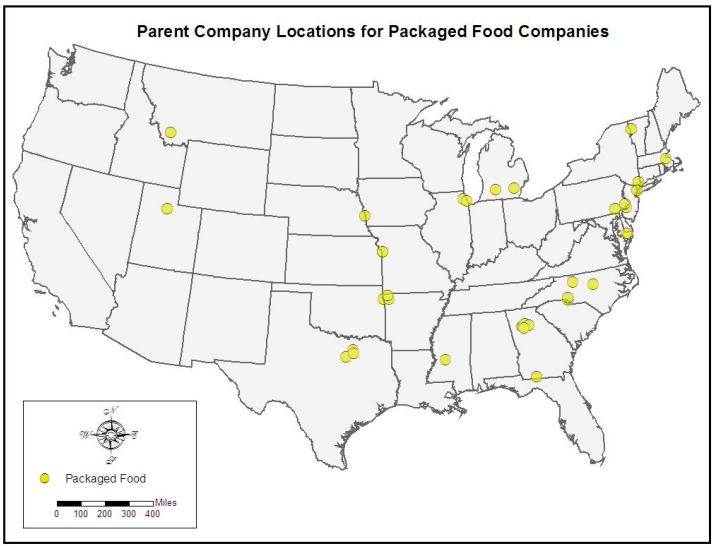
PFP Sub-sector "Targets of Opportunity"

Targeting opportunities in the PFP cluster would be within its sub-sectors rather than throughout the cluster itself. This cluster in particular would benefit from a very focused strategy on R&D/industry collaborations and spin-offs, especially as such ventures approach commercialization. Additional growth is occurring among specialty, especially ethnic, food products.

Targeted Cluster Sub-sectors	NAICS Sector	Description
Packaged Food Products	3118	Bakery and tortilla products
	3119	Other food products

Recruitment Prospect Pools

Companies establishing subsidiaries or branch plants in the RTRP region for the PFP cluster tend to come from the New Jersey/New York metro area or the Midwest. However, there has been a concentration of recruitment successes from Atlanta and Texas, as well as several from the Mississippi River region.



Goal Two: Kerr Tar Hub Facility Features Specification

The Kerr-Tar Hub project grew out of a study conducted by the UNC Center for Competitive Economies for the Research Triangle Regional Partnership (RTRP), to determine the feasibility of creating a series of "mini-hubs" to stimulate investment in rural areas of the 13-county Research Triangle Region. That study, completed in March 2003, recommended the creation of two or three "mid-tech parks" in the region to encourage spin-off development from the Research Triangle Region's most successful industrial clusters.

Positioned between traditional industrial parks and research parks, these "mid-tech parks" would accommodate businesses that use skilled labor to make advanced products. They would target companies, in particular industrial clusters that employ skilled labor to make or deliver advanced products or services. They might include processing, manufacturing and back-office activities and attract spin-off businesses from research parks, such as Research Triangle Park and Centennial Campus, seeking less expensive space and appropriate labor.

The Hubs would offer land at reasonable costs, traditional park infrastructure (such as access roads, utilities and shell buildings) plus special enhancements for their clusters, such as meeting and conference facilities; advanced information technology; laboratories, incubators or testing facilities; training, marketing, regulatory and technical services; or special location incentives.

Kerr-Tar Hub Realization

The Kerr Tar Hub is being developed consistent with this vision. Broadly defined, the Kerr Tar Hub is envisioned as tech-intensive, locally driven regional park potentially providing a wide variety of infrastructure and service offering intended to attract and support the location of emergent firms from within the targeted industries. The provision of appropriate infrastructure and services has been established as essential to the feasibility of the Hub.

However, with implementation comes a requirement for specification and prioritization from among possible offerings. Realization of the Kerr Tar Hub required that the multiplicity of possible infrastructure and services offerings be winnowed and prioritized prior to implementation.

Therefore, a second primary goal of this project is to achieve an articulated market-driven specification and prioritization of Hub facility and service offerings that support its targeted clusters. In the project the delineation and prioritization of Hub features drew upon the experiences of comparable facilities informed by articulated market preferences expressed specifically from representative RTRP region companies within the Hub's targeted clusters.

Assessment of Comparative Facilities

The research performed to acquire this information involved the examination of three facilities comparable to the Kerr Tar Hub concept to identify the range of potential Kerr Tar Hub infrastructure and services offerings. Performing this examination first required establishing criteria upon which to define comparability to the Kerr Tar Hub. Those criteria were then used to identify a broad population of candidate facilities from which the comparable examples would be derived.

1. Location within fifty miles of a concentrated area of research performance.
2. Rural location with moderate-to-high unemployment; potentially in an area that has suffered significant job losses because of plant closures.
3. Location within forty miles of a major urban area.
4. Location close to good transportation arteries, including an Interstate highway, an industrial rail line, and a major airport.
5. Location within thirty miles of a recognized university.
6. Location within twenty miles of a community college or similar educational program.
7. Adequate job training available.
8. Focus on the attraction of new technology businesses, their manufacturing, marketing, or other support divisions.
9. Mixture of technologies represented, with at least three of those industry clusters identified as targets for the Kerr Tar project.
10. Availability of state/local financial support; public-private partnerships.

Using the stated criteria, C3E researchers identified 27 similar industrial parks in 9 different states. Additional analysis led to the selection of three facilities as comparable to the Kerr Tar Hub concept. Those facilities were examined to identify the range of potential Kerr Tar Hub infrastructure and services offerings.

Identified Comparable Facilities

Three parks were selected because they were located in the most comparable geographic situations to that facing the Kerr Tar Hub. The selected parks also represented a spectrum of capital and infrastructure commitment strategies, which would provide a broad range of experience to inform management of the Kerr Tar Hub implementation effort.

The three parks selected as comparables included:

Park: **Mid-Shore Regional Business and Technology Park**
Location: **Caroline County, Maryland**

The Mid-Shore Regional Business and Technology Park State is a 70 acre industrial park targeting technology-based and entrepreneurial companies drawn to rural Caroline County, Maryland from neighboring Annapolis, Washington,

Newark and Philadelphia metro areas. It is one of a three park system under collaborative development by a multi-county consortium.

Caroline County, on Maryland's Eastern Shore, is located midway between Maryland's northern and southern borders. It shares its eastern border with Delaware. Like the Kerr Tar area, the county is rural and its economy is in transition form its traditional agricultural and labor-intensive manufacturing base.

Park: Dan River Business Development Center
Location: Danville, Virginia

Located in an industrial park immediately outside the city limits of Danville, Virginia, the Dan River Business Development Center is a 30,000 square foot facility offering a variety of services and facilities primarily for early growth-stage technology firms starting, expanding, or relocating to the area.

The Dan River Center is positioned as "More than a traditional (business) incubator" facility with professional offices, warehouse space and manufacturing facilities, as well as a comprehensive selection of businesses support services. Those services include "state of the art" conference rooms, high-speed Internet access through a dedicated T1 line, shared support services, a dedicated resource library, and central digital phone service with voicemail. Nearly all service costs are bundled in the monthly lease rates.

The Dan River Center itself is a component of a 330-acre technology park – "CyberPark" created by the City of Danville. In addition to the Dan River Center, Cyber Park is home to the Institute for Advanced Learning and Research and the Regional Center for Applied Technology & Training.

Park: Cool Springs Life Sciences Center
Location: Franklin, Tennessee

The Cool Springs Life Sciences Center is a 10-acre, life sciences focused research and development "campus" located in Franklin, approximately thirty miles south of Nashville. The Cool Springs Center is specifically designed for life science companies, providing dedicated space for laboratory research, product development and manufacturing facilities for medical device, biotechnology, pharmaceutical and other life science-oriented companies and their support services.

The Cool Springs Center campus is planned to eventually include three buildings, encompassing approximately 140,000 square feet, which may be custom configured to meet tenant needs. The first of three buildings at the Center is a 32,000 square feet facility occupied by bioscience companies and affiliated research and service operations, including Vanderbilt University's life sciences incubator, the Williamson County Office of Economic Development; and a nonprofit workforce training and career enhancement center. Plans are underway for Buildings Two and Three that will provide "flexible manufacturing" space.

Comparable Facilities Characteristics/Stratagems

Interviews were conducted with administrators of these comparable facilities to learn from their experience as to the types of infrastructure and services which has proven most valuable to their tenants, as well as insights into what they might have done differently based on their operating experience.

While roughly similar in location and setting, the three comparable facilities examined provided differing levels of immediately available infrastructure and service offerings. The differences primarily resulted from differing strategies and constraints imposed by the amounts and sources of available funding (Figure 2).

Figure 2: Comparable Facilities Characteristics/Stratagems			
Comparable Industrial Park	**Cool Springs Life Sciences Center**	**Mid-Shore Regional Business And Technology Park**	**Dan River Business Development Center**
Location	**Franklin, TN**	**Carolina Co., MD**	**Danville, VA**
Organizational Structure			
Public	**Yes**	**Yes**	**Yes**
Private	**Yes**	**No**	**No**
Multi-Government Initiative	**No**	**Yes**	**No**
Initial Funding Source			
Federal	**No**	**Limited**	**Yes**
State	**Limited**	**Limited**	**Limited**
Counties/Local	**Limited**	**Yes**	**Yes**
Private	**Yes**	**No**	**No**
Anchor Tenancy			
Industry	**Yes**	**No**	**No**
Econ. Development Agency	**No**	**Yes**	**Yes**
Comm. College/Training	**Yes**	**No**	**No**
University	**Yes**	**No**	**Yes**
Industry Targeting			
Specialized	**Yes**	**No**	**Yes**
Multi-tenant Flex	**Yes**	**Yes**	**Yes**
Incubator Facilities/Services	**Yes**	**Yes**	**Yes**

Organizational Structure

Each of the comparable facilities has significant public and governmental involvement. Only one, the Mid-Shore Regional Business and Technology Park, involves a multi-governmental dedicated organization. Like the Kerr Tar Hub, the Mid-Shore Park was developed by a multi-county collaboration. The Cool Springs Life Sciences Center is distinct in the extent to which it was primarily initiated, supported, and managed by private sector agents. The Dan River Business Development Center is principally an undertaking of the City of Danville.

Initial Funding Sources

The comparable facilities differ significantly in the primary sources of funding, especially in the early stages of their development. The Dan River Business Development Center, while primary a City of Danville endeavor, was initially supported predominantly by federal monies secured by area Congressional delegation members. The Mid-Shore Regional Business and Technology Park has also been underwritten by public funding, but from the participating counties, with federal funding being pursued as secondary and expansion support. The Cool Springs Life Sciences Center was initiated primarily with private funding, but has targeted public support in expansion planning.

Anchor Tenancy

The comparable facilities demonstrated the value of anchor tenancy in the launch of their parks. The Cool Springs Life Sciences Center was initiated by a private company that is acting as the anchor tenant for the facility. In addition to the company, the Cool Springs Center has also secured university offices and laboratories as additional anchors. Similarly the Dan River Center has significant presence of university research laboratories and governmental business and economic development agency presence as anchors.

Targeting by Industry

The comparable facilities demonstrated a range of intensity of industry-specific and business stage/scale strategic focus. The Mid-Shore Regional Business and Technology Park has taken a more general industry approach deemed the most appropriate for their area as it encompasses the broadest industrial range of prospective tenants. Their location is not within any particular industry cluster but instead anticipates drawing out-migrating firms of surrounding metropolitan areas. The Dan River Center has adopted a non-industry-specific focus on technological firms. Thus they have developed a facility with generic laboratory space adaptable to a range of technological activities. By contrast, the Cool Springs Life Sciences Center – as it name indicates – has a very specific technological focus on the life sciences or "biotech" companies. Such strategic focus is deemed appropriate given their proximity to the healthcare and medical technology cluster of the Nashville area.

Targeting by Stage

While they differ in industry focus, each of the comparable facilities has included smaller or earlier stage firms in their strategies. All three include either business incubator or multi-tenant flexible use space in their facilities, while also accommodating more conventional industrial development and expansion prospects.

The Dan River Business Development Center was specifically undertaken initially as a technology entrepreneur business incubator and developed dedicated facilities toward that end. Several years of operating experience has evolved that strategy to a more inclusive policy complementing the incubator role with a "beachhead" tactic of providing initial location for larger firms anticipating expansion into the surround CyberPark industrial park. The Mid-Shore Regional Business and Technology Park was initiated

with a similar mixed scale strategy. In addition to multi-tenant flex space within the Park, the Mid-Shore Center draws on a prospect stream from an existing business incubator. The Cool Springs Life Sciences Center is more specifically focused on entrepreneurial development prospects, with the first of three planned building consisting of a business incubation facility.

Common Infrastructure and Service Offerings

While the three comparable facilities differed in their degree of industry-specific focus, their shared emphasis to serve growth-stage prospect results in the provision of a common set of facilities and services offerings for that market. The managers judged the following features to be of primary important to their strategies:

- High speed internet connection
- Shared business support services
- Communal reception and conference room(s)
- Onsite training/classroom facilities
- Multi-tenant flex space and/or "incubator" mixed use space
- Flexible manufacturing speculative facilities
- Build ready industrial sites

Assessment of RTRP Cluster Firm Key Informants

Findings from the comparable facilities research were used as the basis for assessing market preference from among existing RTRP area companies within the six industry clusters targeted for the Kerr Tar Hub. Interviews were conducted with executives from companies representative of prospective Hub tenant to gauge preferences and priorities among prospective Hub infrastructure features and service offerings

Target Key Informant Companies

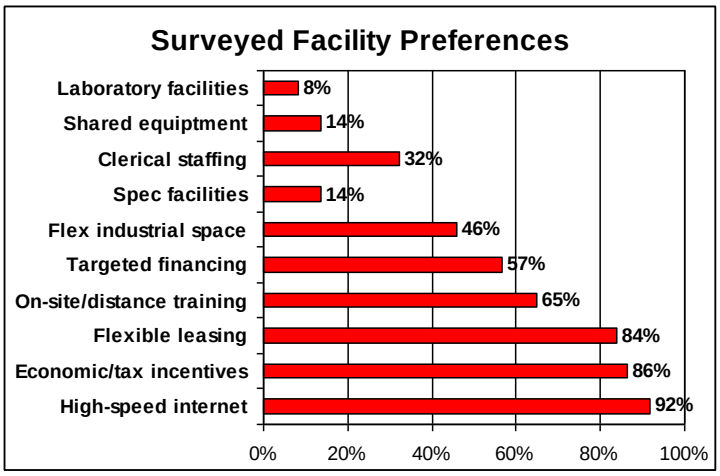
There are approximately 3,000 companies in the RTRP region in the six industry clusters targeted for the Kerr Tar Hub. From this population, 85 firms were selected as key informant prospects based on the comparability of their locations to the proposed Kerr Tar Hub region. Several firms in rural locations adjacent to the RTRP region were also included.

The characteristics of the key informant candidate population:

- 96% of the companies were either sole location or head quarters, meaning they were based in the region
- only 4% were a branch plant or subsidiary
- 76% of the firms had fewer than 50 employees, with 11% employing more than 100
- the largest share of firms – 55% - was in facilities between 10,000 to 40,000 S.F.

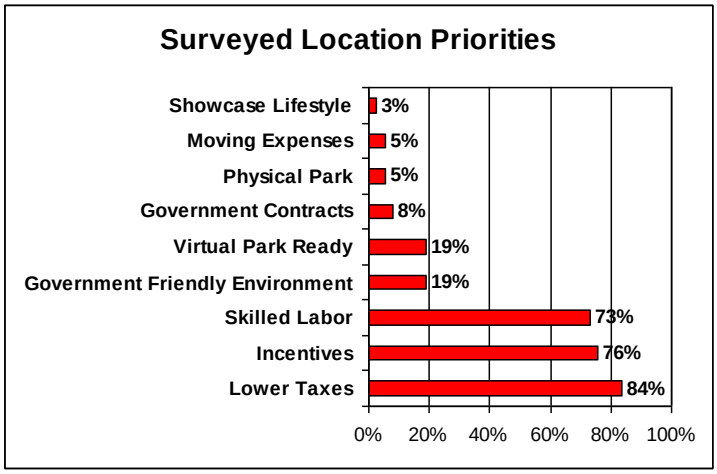
Informant Responses

Executives from a total of 37 companies participated in the key informant process. The process involved randomly administered telephone conversations based on prior distributed survey instruments which included a summary of the proposed Kerr Tar Hub. Informants responded to queries on the significance and priority of the prospective Hub infrastructure and service offering given their own experiences.



Location Preferences

Company executive were asked about the priorities that had influenced the location of their existing operations that might be addressed by the Hub. Informants generally minimized the role of physical infrastructure in influencing location, setting a much higher priority on intangible factors such as lower taxes (84%) and economic incentives (76%) or skilled labor availability (73%).



Those considering relocation or expansion expressed skepticism on the Hub's ability to successfully anticipate their facility requirements. Many more expressed preference (19%) for a "virtual park" readiness facilitating custom-built facilities over pre-built "spec" buildings (5%). Informants expressed a much higher preference (19%) for a "government friendly environment" driving Hub management, offering greatest flexibility and expediency to the companies' individual development activities.

Hub Facility Feature Priorities

Informants were also asked to identify the prospective features of the Kerr Tar Hub they deemed would be valuable to companies such as theirs. In most cases the preferences expressed mirrored the findings of the comparable facilities assessment.

The responses again emphasized the priority of the Hub's more generic or intangible aspects over specialized or predetermined infrastructure. The highest priority (92%) was

assigned to access to high speed Internet services, reflecting the ubiquitous nature of such assets regardless of industry type. Other priorities are suggestive of the needs of expansion stage companies, with high priorities assigned to economic incentives (86%), flexible leasing (84%), training (65%) and financing (57%). Infrastructure developments requiring anticipatory commitments – specific laboratory facilities, equipment or even speculative buildings – were deemed low priorities.

Goal Three: Identifying Prospects from Targeted Clusters

The assessment of Hub comparable facilities and key informant discussions with company executives of representative firms emphasized the criticality of proactive and targeted marketing to the Hub's success. Based on this finding an important additional task was added the project to not only identify the industrial clusters for Hub targeting but to also construct a method for identifying specific company prospects from each targeted cluster to solicit for location at the Hub.

This task was particularly informed by 1) the differentiation process used in the cluster targeting process and 2) the corporate demographics and location characteristics derived in the key informant research. The Center also drew upon its own extensive research into growth companies and the value proposition offered by industrial cluster location. This data and the Center's prior research were combined to examine the national populations of firms in the six industrial clusters targeted for the Hub to identify those with characteristics suggestive of attraction to the propose Hub.

Cluster-based Prospecting

Data on thousands of companies nationally was compiled through the course of assessing industry cluster targets for the Hubs. Separate corporate databases constructed for each of the six industry clusters selected for Hub targeting. The databases were then analyzed by screening each population for criteria intended to narrow the population of companies to identify those firms that:

1) correlated with the corporate demographics typifying the companies that have previously chosen to locate in Hub-comparable areas of the RTRP region, and
2) exhibit characteristics of firms positioned for substantial growth.

Numerous criteria were considered and researched leading to the development of eight limiting parameter layers:

Target Cluster Specificity

- Companies from NAICS codes sub-sectors identified in the target cluster analysis as specific "targets of opportunity",

Demonstrated Location Preference

- Companies in geographic regions of historic relocation preference,

Growth Stage

- Companies established since 1985
- Companies exhibiting positive employment growth over the past two years,

- Companies with annual sales of less than $100 million

Self Determining
- Companies that are either headquarters or sole locations,

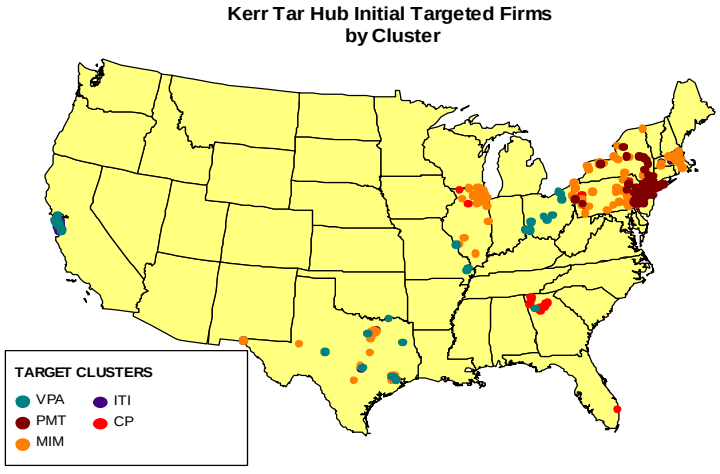
Credible Viability
- Companies with credit scores of 1, 2 or 3 (lower risks), and

High Value Added
- Companies' "revenues to employees" ratios (indicative of high-value-added business activity) in the top half of the remaining company population.

Each of these parameters was applied to the populations of firms for the Hub's six targeted industrial cluster. The result of this screening was focused subsets of firms for all but one (Packaged Foods) of the targeted cluster (Figure 3). A listing of the individual companies with summary information is included in an appendix.

Figure 3: Kerr Tar Hub Targeted Cluster Prospects

Target Cluster	Geographic Focus	Prospects
Pharmaceuticals & Medical Technologies	Pennsylvania, New Jersey, New York	**63**
Information Technology & Instruments	Chicago area, Texas, Silicon Valley, New Jersey, Massachusetts	**49**
Chemicals and Plastics	Chicago, New Jersey, New York, Pittsburgh, Georgia, Ohio	**35**
Metalworking & Industrial Machinery	Illinois, Pennsylvania, New York, Massachusetts, Texas	**137**
Vehicle Parts Assembly	Ohio, Georgia, Texas, St Louis, Silicon Valley	**39**
Packaged Food Products	Philadelphia, Michigan, Chicago, Texas, Georgia	**0**
Total		**323**



Goal Four: Kerr Tar Hub Scenario Modeling

The C^3E Kerr Tar Hub Implementation Project concluded with the construction and examination of multiple scenarios for Hub development. The scenarios examined included:

1. **Development Costs** – the incursion of costs based differing land acquisition and development mechanisms
2. **Revenue Accrual** – the flow of revenues based on differing land and building lease and sales strategies
3. **Hub Cash Flow Model** – example of the financial outcome of the development costs and revenue accrual scenarios
4. **Market Response Based Strategic Implementation Options** – initial implementation options information derived from comparable facilities and key informant articulated market preferences

Base Assumptions for Scenarios Development

The various scenarios developed and examined involved many different variables; however, each was based on certain core assumptions. These assumptions were not intended as recommendations. Instead, they provide a consistent basis for multiple scenario development and as such enable examination of outcomes resulting from differing strategic and management decisions.

1. Joint Vance/Granville Hub site

All scenarios examined were based on the joint Granville and Vance counties site as recommended by the site selection process. That process, as guided by the Sanford Holshouser Business Development Group, recommended that the Kerr-Tar Region develop as its first multi-jurisdictional Hub park the sites proposed by Vance and Granville Counties. As the Vance and Granville sites are almost adjacent, the consulting team had recommended that the sites be phase developed as a single Hub park.

2. Granville/Vance Hub Site Land Acquisition Estimate

Collectively, the joint Granville-Vance Hub site encompasses approximately 1,001 acres. Land acquisition costs (Figure 4) are estimates based on the average value of the land currently under option. These values are subject to change based on the outcome of negotiations with landowners.

Figure 4: Total Land Acquisition Costs

County	Land Cost	Acres	Total Cost
Granville	$12,525/acre	496	6,212,400
Vance	$30,000/acre	505	15,150,000
TOTAL		**1,011**	**$21,362,400**

3. Granville/Vance Hub Site Development Estimate

A preliminary site plan developed by O'Brien/Atkins Associates for the site included up to 46 buildings for a total square footage of 3,200,184. Total eventual development cost for the site, with land price added to development cost, are estimated at $77,234,821 (Figure 5) as of May 2006 (based on inflation adjusted multiple of O'Brien/Atkins 2004 estimate of $71,345,975).

Figure 5: Total Site Development Costs - Granville and Vance Counties

Category	Units		Cost/Unit	Total
CLEARING	438	AC	6,000	2,956,500
Total				2,956,500
EARTHWORK	3,533,200	CY	5	17,886,825
Rock allowance	9,000	CY	30	33,750
Total				17,920,575
INFRASTRUCTURE				
Bridges	6	EA	500,000	3,375,000
Roadways	140,600	SY	15	2,372,625
Storm drainage	50,900	LF	25	1,431,563
Water	42,700	LF	50	2,401,875
Sewer	33,450	LF	60	2,257,875
Lighting	363	EA	3,000	1,225,125
Telecom	42,800	LF	15	722,250
Total				13,786,313
AMENITIES	-			
Water Features/Lakes	-			-
Paths	23,600	LF	25	663,750
Signs	5	EA	10,000	56,250
Landscaping	2,109	EA	600	1,423,575
Total				2,143,575
BUILDINGS				
Parking	308,289	SY	15	5,202,377
Total				5,202,377
	Sub-Total			42,009,339
	Contingency		0.15	6,301,401
	General Conditions		0.1	4,200,934
	Overhead and Profit		0.08	3,360,747
	Total			55,872,421
	Plus: Land			21,362,400
	TOTAL			**77,234,821**

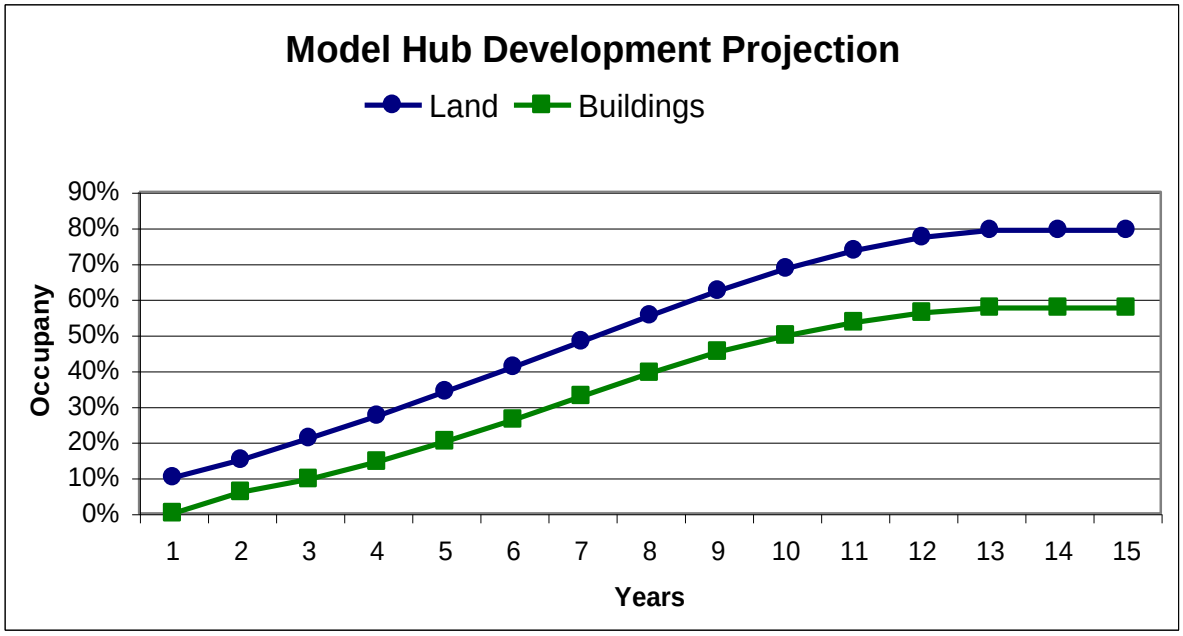
The total development cost is not required to initiate development. It is very likely that grants could be obtained for a significant portion of development costs. Also, sites will be

developed in phases, supported in part through revenue generated by the location of new business.

4. Hub Development Projection

Scenario development was based on an assumed 15-year build out Hub development time frame (Figure 6) of land and buildings. Development was assumed to involve a gradual rate of Hub occupancy, starting at a rate of 10% occupancy in Year One, and increasing at an average 5% annual rate over 15 years. The end occupancy rate of 80% is consistent with the experience of successful comparable development projects.

Figure 6



Development Costs Scenarios

Three development costs scenarios were developed from the base assumptions to explore the incursion of costs based on the effect of three differing land acquisition strategies. These scenarios assumed that the Hub has three primary options available for land acquisition:

Up-Front Purchase:

- Up-front purchases of property from seller with or without the use of 3rd-party financing will require the most up front capital to facilitate and place the greatest burden on future cash flows due to substantial debt service obligations.

Seller Installment Purchase:

- Installment financing involving seller financing spreads payment for the land with interest over time generally provides lower interest rates, less up front capital

requirements, and ultimately a lesser strain on cash flows (due to a longer amortization factor) than does traditional up-front financing

Land Banking:

- Land banking is the least capital intensive financing option, as no capital is required up front under this structure. Sellers are remunerated in one or a combination of two ways: 1) equity participation in future cash flows and 2) payment when the land is sold

- Under this structure the payment for land closely tracks demand, reducing the lag between payment and revenues generated from the sale or lease of the asset. This significantly reduces risk by requiring no up-front capital and placing little strain on cash flows.

Scenario Outcomes

The construction of development cost scenarios involved different allocations of the three land acquisition options (Figure 7), and then calculating the annual financial effects of those scenarios over the first 10 years of Hub development in terms of annual (Figure 8) and cumulative (Figure 9) costs.

Figure 7: Development Costs Scenarios

	Up-Front	Installment Purchase	Land Banking
Scenario One	**65%**	**33%**	**10%**
Scenario Two	**25%**	**33%**	**25%**
Scenario Three	**10%**	**33%**	**65%**

Scenario One – the "Up front" scenario – is based on predominant use of up-front purchases for land acquisition (65%) and installment purchases (35%) with little land banking (10%). This scenario was the most capital intensive both in the Hub's early years ($45 million over the first three years) and for the full ten year period ($62 million).

Scenario Two – the "middle" option – is based on equal use of up-front purchases (33%), installment purchases (33%), and land banking (33%). This scenario reduced the capital required in the Hub's early years significantly ($29 million over the first three years) but only slightly over the full ten year period ($59 million) as compared to the "Up Front" Scenario One.

Scenario Three – the "Land Bank" option – is based on predominant use of land banking for land acquisition (65%) and installment purchases (35%) with little up-front purchases (10%). This scenario was the least capital intensive both in the Hub's early years ($22 million over the first three years) and for the full ten year period ($57 million).

Scenario Findings

If it is critical to identify develop the Hub with the least up front capital requirements, a strategy of deferred costs, such as the installment purchasing and land banking

mechanisms, is preferable. However, such options have little effect on the long-term costs of the Hub.

Moreover, both options entail uncertainties due to their less conventional nature. If land banking is not available, the costs/benefits of installment versus up-front financing should be weighed, with particular attention to interest rates, and the best method chosen.

Figure 8

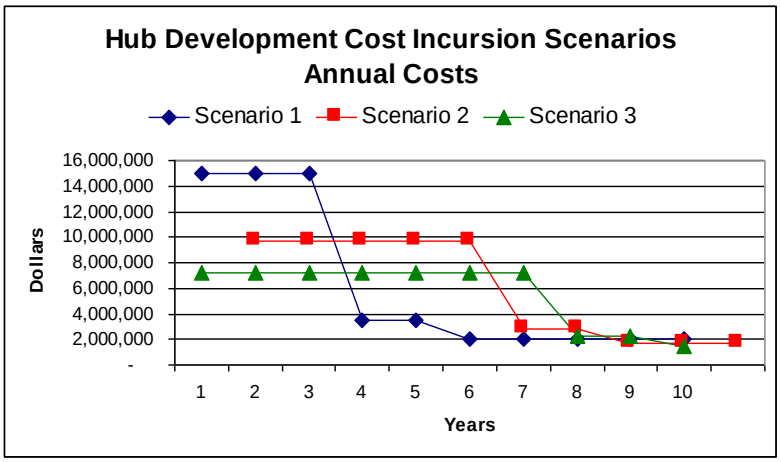
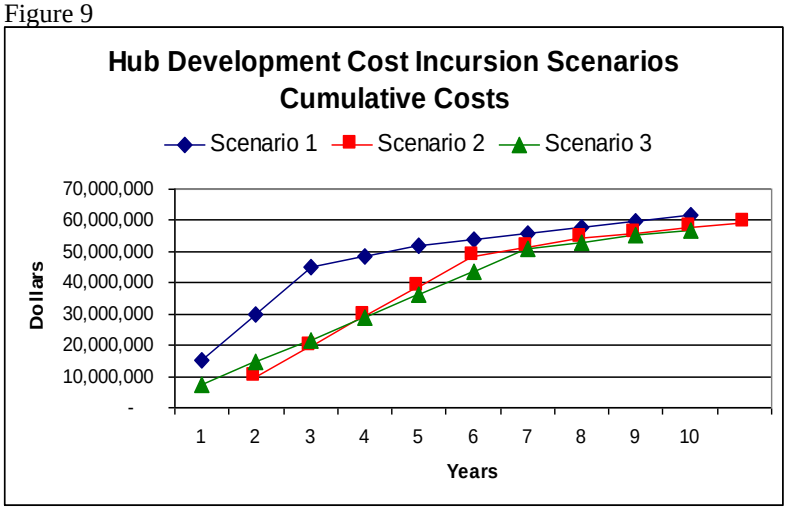


Figure 9



Revenue Accrual Scenarios

Three revenue accrual costs scenarios were developed from the base assumptions to explore the stream of revenues to the Hub based on the effect of three differing Hub property leasing/sales strategies.

Revenue Scenario Assumptions

In addition to the base assumption on Hub development timeline, these scenarios were developed the following assumptions:

1. Building pricing and leasing rates for three types of facility space (Warehouse/distribution, office and manufacturing) as described in Figure 10
2. Utilization rates of 33.3% for each type of space, yielding revenue receipts at the average value of the three
3. Management option to use either leasing or sales as desired for buildings and land

Figure 10: Revenue Accrual Scenarios Pricing Basis

Building Sale Price				
Type	**Share**	**Sq. Ft.**	**Total**	**Per Sq Ft**
Warehouse/Distribution	**33%**	**2,760,157**	**$ 19,321,096**	**$ 7.00**
Office	**33%**	**2,760,157**	**$ 220,812,530**	**$ 80.00**
Manufacturing Plant	**33%**	**2,760,157**	**$ 41,402,349**	**$ 15.00**
Total		**8,280,470**	**$ 281,535,976**	**Avg. = $34.00**
Building Annual Lease Price				
Type	**Share**	**Sq Ft**	**Total**	**Per Sq Ft**
Warehouse/Distribution	**33%**	**2,760,157**	**$ 9,660,548**	**$ 3.50**
Office	**33%**	**2,760,157**	**$ 24,841,410**	**$ 9.00**
Manufacturing Plant	**33%**	**2,760,157**	**$ 13,800,783**	**$ 5.00**
Total		**8,280,470**	**$ 48,302,741**	**Avg. = $5.83**
Land Pricing				
Type	**Share**	**Sq. Ft.**	**Total**	**Per Acre**
Sales Price	**33%**	**2,760,157**	**$ 19,321,096**	**$13,555**
Annual Lease Price	**33%**	**2,760,157**	**$ 220,812,530**	**$1,355**

Scenario Outcomes

The three scenarios constructed varied upon the Hub management's decisions as to leasing, sales or combination of both (Figure 11).

Scenario One – the "Leasing" scenario – relies entirely on land (100%) and building (100%) leasing to Hub tenants. Such a strategy increases the Hub's capital requirement for building construction and land development but would

realize the greatest revenues to the Hub, producing $28 million over the first five years and $281 million over 15 years (Figure 12).

Scenario Two – the "Mixed" option – uses an equal blend of land/building leasing and sales to Hub tenants. As such it reduces capital requirements but also revenues due to the amount of lesser-developed property transactions. The result is revenues of nearly $13 million over the first five years and less than $83 million over 15 years.

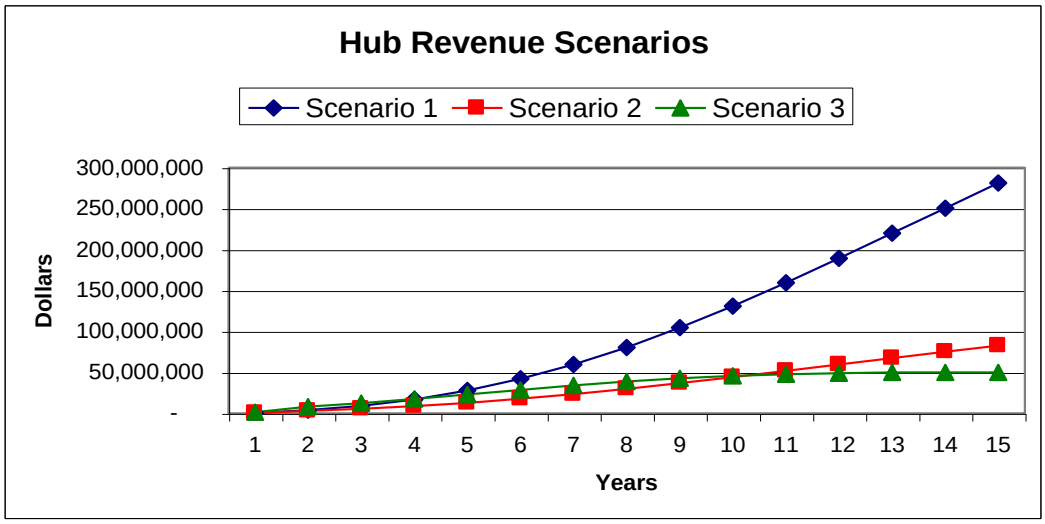
Scenario Three – the "Sales" option scenario – relies entirely on land (100%) and building (100%) sales to Hub tenants. Such a strategy greatly reduces the Hub's capital requirement for building construction and land development and has a corresponding effect on revenues, producing only $23 million over the first five years and less than $50 million over 15 years.

Figure 11: Revenue Accrual Scenarios

	Land Sales	Land Leases	Building Sales	Building Leases
Scenario 1: Leasing	**0%**	**100%**	**0%**	**100%**
Scenario 2: Mixed	**100%**	**50%**	**50%**	**50%**
Scenario 3: Sales	**0%**	**100%**	**100%**	**0%**

The financial effect of each scenario is calculated on the base projection of land and building occupancy over a 15-year period. Revenue projections for each scenario were calculated over the same 15-year period (Figure 12).

Figure 12



Scenario Findings

Examination of the revenue accrual scenarios (Figure 13) quickly demonstrates the superior revenue outcomes of a leasing strategy over sales, at least in the long term. Over the first five years the projected revenues of the sales scenario approximate those of the leasing option, and at considerably less cost as Hub tenants would incur building construction expense. Choice between the options – or at the flexibility to choose - will

depend on the Hub's ability to finance improvements above those the base level development requirement.

Figure 13: Revenue Accrual Scenarios Period Outcomes		
	Five Year Revenues	**15 Year Revenues**
Scenario 1 "Leasing"	**$27,915,673**	**$281,142,209**
Scenario 2 "Mixed"	**$12,768,916**	**$82,730,151**
Scenario 3 "Sales"	**$23,159,992**	**$49,778,394**

Market Response Based Strategic Implementation Options

The Hub's total development cost is not required to initiate development. Sites can be developed in phases, supported in part through revenue generated by the location of new business. Nonetheless, a substantial initial capital investment is required to implement the Hub. The amount required will include certain base level or "Phase One" investments, as well as additional sums depending on varying development strategic options. Therefore, in addition to constructing Hub cost and revenues scenarios, the project also incorporated the findings the comparable facilities and key informant assessments to design market-based strategic implement options.

Phase One Requirements

Hub management has several options that can defer substantial amounts of eventual Hub development costs. Nonetheless, substantial initial capital investment is required to implement the Hub. Such investment, referred to as the "Phase One" requirement, include land acquisition and fundamental site preparation investments recommended in the site selection process.

Land Acquisition - $21.3 million

Collectively, the joint Granville-Vance Hub site is approximately 1,001 acres that have been optioned by their respective counties at amounts varying from $10,000 to $36,900 per acre. Securing all the land encompassed in this site will require an exercising of those options. In the aggregate, land acquisition for the entire Granville/Vance Hub site will cost an estimated $21.3 million.

Clearing and Earthwork - $3.8 million

Clearing and earthwork costs for the entire Vance/Granville Hub site are estimated at $17.9 million. Clearing and grading can drastically change how a client views a site. Grading a variety of sized building pads will capture interest from a variety of companies.

The site selection process found that while the Vance County site shows well from the Triangle North site, grading other pads in that part of the park would increase the marketability of the property. It was also recommended to clear and grade a small pad near the Granville County park entrance from I-85 Exit 206.

Phase One development clearing and earthwork encompassing multiple sites of varying pad sizes initial investment costs are estimated at $3.8 million.

Infrastructure - $2.45 million

Infrastructure development costs for the entire Vance/Granville Hub site are estimated at $13.8 million. For Phase One development the site selection process recommended the construction of a road following the site development plan from Triangle North Property into the park going to the east, and a road following the development plan from the exit 206 entrance going to the east. Additional base level development of associated storm drainage, water, sewer, lighting and telecom infrastructure would be required for a total Phase One estimate of $2.45 million.

Amenities - $335,000

The site selection process recommended that Vance and Granville Counties should establish and maintain landscaped entrances to the park, as well as keep graded pads and areas near the entrance mowed and maintained. Phase One costs for such investments are estimated at $285,000.

The site selection process also recognized that signage is an important external and internal marketing tool and recommended investment in signage for both overall marketing appeal of the park and as an important internal marketing tool that informs the community of the county's efforts to attract new and expanding industry. It was recommended that full advantage should be taken of signage opportunities placed along I-85 marketing the Hub site, as well as placement of signs at the main entrances. Phase One costs for such investments are estimated at $50,000.

The estimated Phase One requirements total $30 million or approximate 20% of the estimated total Vance/Granville Hub site development. The great majority of the Phase One estimate is $21.4 million in land acquisition with the balance for site development in Phase One totaling $8.8 million.

Hub Strategic Development Options

The Phase One investment identified in the site selection process were augmented with the comparable facilities experiences and market priority articulations compiled by C^3E. The following three scenarios describe development strategies entailing costs in addition to the base-level requirements and are cumulative in progression (Figure 18). The cost of implementing Phase One investments and all three scenarios is estimated at $17.3 million, exclusive of land acquisition costs.

Scenario One: Building the "Virtual Hub"
Three Year Commitment: $1 million

In this scenario, modest initial investment is focused on administrative capacity that augments existing economic development capacity by supporting additional Hub-focused personnel while minimizing infrastructure development. Estimated total requirements for the Scenario One option are $1,000,000 total for a three-year commitment and encompass the following costs:

Hub Administrative Capacity - $950,000

Interviews with managers of comparable facilities and key informant discussions with corporate offices of representative target cluster firms in the RTRP region emphasized a high priority on the "software" aspect of the Hub – the personnel who provide value added economic development services to prospective Hub tenants. The experience of comparable facilities repeatedly demonstrated the critical nature of the facility staff as both marketers of the facility and service providers to tenant and prospective tenant firms.

This role was viewed as especially important given the regional industry cluster basis of the Kerr Tar Hub strategy, which requires coordination and facilitation function to achieve linkage efficiency benefits of cluster integration. Industry key informant discussion highlighted the need to capitalize on the Kerr Tar Hub's proximity to the Research Triangle Park's technological and human assets as a competitive advantage through effective resource identification and access mediation.

Establishing a minimal administrative capacity consisting of a Hub lead executive, a secondary executive, and an administrative support position, plus operating expenses requires an estimated three-year commitment of $950,000.

Virtual Hub Buildings - $50,000

The experience of comparable facilities suggests minimizing investments in industry specific or inflexible infrastructure. Many managers believed their efforts would have been better served by postponing facilities development until they had achieved more clearly defined market positions. Business key informants offered similar guidance, expressing skepticism that their facility requirements could be accurately anticipated.

Nonetheless, the common belief that economic developers "cannot sell from an empty wagon" is not an unfounded one. As reported in the Hub site selection report, 80% of all

relocating and expanding companies prefer an existing building. The challenge then is to minimize potentially inappropriate facility development investments while conveying the competitive advantage and identity of the Kerr Tar Hub.

A means to achieve this balance, the Virtual Hub, was described by the Sanford Holshouser Business Development Group in the site selection report. Virtual buildings can be an important economic development tool to offset the lack of available industrial buildings. A virtual shell building is a certified or qualified site on which tailored building plans and a computer generated tour of the site/park and building layout have been developed. Developing a virtual shell building will offer a greater variety of product to prospective companies. Also, the virtual building will be in place when the current building sells.

A virtual shell building consists of all of the necessary steps a new or expanding company would need to go through in developing a building, just short of actual construction. The virtual shell building program includes:

- Site development plan
- Pre-approved permits
- Full set of building plans with architectural drawings
- Interactive CD presentation that gives a virtual tour of the building
- Marketing materials

The planning that goes into a virtual shell building can be used if the community decides in the future that the market has improved and moves forward with actually constructing a shell building. No resources will be wasted and no work duplicated by first moving forward with a virtual shell building. Unless the county has available funds for a shell building program, the virtual building is a cost-effective substitute.

Two such virtual buildings could be developed for sites in the Vance and Granville components of the Kerr Tar Hub. Vance County could move forward with a virtual building on one of the sites recommended for grading near the park entrance from I-85 exit 209 while Granville County could develop a virtual building on the small pad recommended for grading near exit 206.

Scenario Two: Establishing a "Beachhead" Facility Capacity
Three Year Commitment: $6 million

In this scenario, in addition to the investment commitments described in Scenario One, the Hub commits to develop dedicated facility providing flexible, small-scale initial business and industrial space enabling rapid establishment and relocation.

Establish Virtual Hub Administrative Capacity -$1 million, plus
Construct Hub "Beachhead" Facility - $5 million

The experience of facilities comparable to the Kerr Tar Hub suggests that the most immediately useful facility of the Hub would be a highly flexible mixed use business and industrial facility that would both house the Hub administrative offices and provide a

variety of smaller scale "flex space" business location options for companies establishing initial operations on the Hub area.

Based on a composite of comparable facilities, the Hub "beachhead" building would be a 50,000 square foot building including multiple 1,000 s.f. to 5,000 s.f. mixed used tenant spaces, as well as 4 to 6 heavier adjoining industrial spaces ranging from 5,000 to 10,000 s.f. The building would offer common areas for training purposed and limited shared administrative support services.

Numerous examples of such facilities operate in the Carolinas and Virginia under a variety of designations: enterprise centers, industrial incubators and "telecenters". They often are portrayed as having a specific technological target market, though most are realized as more general-purpose facilities. Nonetheless, demonstrated successes have been achieved when these facilities are conceived and implemented as feeder locations to strategically positioned industrial parks.

Development costs for comparable facilities have ranged from $2.5 million to $10 million depending on scale and comprehensiveness of pre-building. However, most of those developed through economic development efforts have benefited from a variety of currently available state and federal governmental funding sources.

Scenario Three: Hub Cluster Complex
Three Year Commitment: $8.5 million

In this scenario, in addition to the investment commitments described in Scenarios One and Two, the Hub also commits to develop larger scale multi-tenant or flex-space "shell" building(s) accommodating the primary targeted cluster firm demographic.

1. ***Establish Virtual Hub Administrative Capacity -$1 million, plus***
2. ***Construct Hub "Beachhead" Facility - $5 million, plus***
3. **Construct Hub Target Cluster Shell Building - $2.5 million**

Industrial shell buildings are among the most commonly used economic development tools. But for each one that has proved critical to a successful prospect location, another one or two or more have sat mockingly vacant for years. Nonetheless, such a facility could accelerate the launch of the Kerr Tar Hub if developed for the primary markets of the Hub's targeted clusters.

Most industrial shell buildings range from 70,000 s.f. to 120,000 s.f. and consist of partially fitted out generic industrial facilities readily finished to the requirements of an industrial location client. The size of such buildings is typically governed by construction economies of scale and expectations of market requirements based on historic precedents that may or may not remain relevant.

However, in the case of the Kerr Tar, there is substantial information on the scale of firms dominant in the population of companies constituting the Hub's targeted clusters. Of those, the most common facility requirements are in the 30,000 s.f. to 60,000 s.f. range, with many starting at the low end of that range and progressing rapidly to the upper end

of the range and beyond. Therefore, rather than constructing large generic shell building, it would be more appropriate to develop a 90,000 s.f. to 120,000 s.f. multi-tenant shell or near-spec building accommodating lower range prospects for grow-out to subsequent Hub or regional industrial locations.

Figure 18 Phase One Development Costs - Granville and Vance Counties		
	Incremental	**Cumulative**
Phase One Development (Less Land)	8,800,000	8,800,000
Scenario One: Virtual Hub	1,000,000	9, 800,000
Scenario Two: Hub "Beachhead" Facility	5,000,000	14, 800,000
Scenario Three: Hub Cluster Complex	2,500,000	17,300,000
Total	17,266,642	17,300,000

Conclusion: Words from the Wise

Ultimately, the mission of this project was to test the experiences and preferences of the marketplace for prospective features and services of the proposed Kerr Tar Hub. Several observations of the comparable facilities' managers were echoed by comments from company executive participating in the key informant discussions. These "words of wisdom" can guide the management of the Kerr Tar Hub in its implementation.

"Focus on software before hardware"

Facility managers often commented that in retrospect too much effort and emphasis had originally focused on the physical infrastructure aspects of their centers when much their success depended on the intangible aspects – marketing, client services, worker training, financial assistance, community engagement - of the facility. They emphasized that initial investments need to adequately address "core infrastructure" ahead of "sexy accessories" such as dedicated laboratories or nonessential, expensive specialty equipment like video-conferencing gear. "Coffee, copier and conference room" was the mantra of one manger.

Company executive expressed similar preferences, being far less concerned about the kinds of buildings the Hub might offer and much more interested in how it would help their company access the labor, permits and other resources to make them more successful faster. They were especially skeptical that the Hub's planners could accurately anticipate their facility needs. As one executive put it, "Don't over-invest. You're not as smart as the market."

"Offer high value, not low cost – but not high cost!"

Managers expressed that in implementing their strategies they had difficulty achieving equilibrium between value and cost in their centers' offerings. They had learned to err on the side of providing greater value to tenants rather than emphasizing undercutting the market. At the same, they saw danger in overestimating what the market will bear. "We don't want to be the cheapest alternative in the marketplace," summarized one manager, "But the economic development nature of our Center means we always give more than we get with a client".

Company executives tended to be more concise in their opinions. "There nothing special about cheap land and buildings in North Carolina" was a common comment, meaning that the Hub must position itself as a more profitable location, not just a cheaper location. Most executives recognized that they should gain more from their proximity to the Research Triangle Park and wondered how the Hub would help them engage with their industry cluster.

"Be lean, visible and alert"

A common experience of the comparable facilities was that they started with tightly focused strategies and adequate funding, but that their resources dwindled

while they awaiting the anticipated enthusiastic market response. "We really believed our own press clippings for a while and didn't correct mistaken assumptions soon enough" said one manager. "Then we didn't have the money to fix them". Each of the comparable facilities experienced growing pains, and managers recommended broadly directed and aggressive marketing for the Hub. "Make sure you market across target segments, rather than down one narrow segment" suggested a manager.

Company executives reiterated the importance of the Hub establishing a high profile in the right marketplaces. "If companies like mine are what you're after", said the President of a $50 million medical technology supplier, "but you're not going to reach me through an expensive ad campaign in the Wall Street Journal or Forbes. I do my own research." "Get into the market and listen to it," urged another executive urged, "and help the market find you."

"Go hard after prime targets to build critical mass."

While managers of comparable facilities often counseled cautious frugality, they were unanimous on a one point: the value of the right early tenants to establish Hub identify and credibility. "You have to be diligent about who you bring in at first, cause there's a lot of shaky companies auctioning themselves out there," said a manager who cited several examples from his own experience. "But when you find the right 'bell cow' prospect you have to get them."

Managers and company executives equally challenged the Hub to be proactive in seeking the right prospects. "I'm amazed at the failing companies in my industry that some town is giving millions of dollars to relocate", observed the President of a telecommunications network supplier. "But nobody goes after the rising stars because they've haven't heard of them yet." A facility manager made the same point when he noted, "Everyone says they want the next Dell, but who wanted Dell 20 years ago."

END

Kerr Tar Hub Prospect Targets					
Cluster	Company	Address	City	County	State
CP	Accurate Color & Compounding	1666 Dearborn Ave	Aurora	Kane	IL
CP	ADC Acquisition Co	407 Front St	Schenectady	Schenectady	NY
CP	Adkins Energy LLC	PO Box 227	Lena	Stephenson	IL
CP	Aries Chemical Inc	PO Box 519	Beaver Falls	Lewis	NY
CP	Coldwater Group Inc	1396 Chattahoochee Ave NW	Atlanta	Fulton	GA
CP	CONDEA Servo LLC	PO Box 700	Hightstown	Mercer	NJ
CP	Cycle-Tex Inc	2104 Fiber Park Dr B	Dalton	Whitfield	GA
CP	Enecon Corp	700 Hicksville Rd Ste 110	Bethpage	Nassau	NY
CP	Finish Line Technologies Inc	1545 5th Industrial Ct	Bay Shore	Suffolk	NY
CP	Fragrance Manufacturing Inc	200 Cascade Dr Ste D	Allentown	Lehigh	PA
CP	Genesis Technologies Inc	696 Winer Industrial Way	Lawrenceville	Gwinnett	GA
CP	Gulbrandsen Technologies Inc	PO Box 5523	Clinton	Hunterdon	NJ
CP	Innovative Chemical Techs	PO Box 72562	Marietta	Cobb	GA
CP	International Fireworks Mfg	PO Box 6	Douglassville	Berks	PA
CP	Iridium Industries Inc	1 Forge Rd	East Stroudsburg	Monroe	PA
CP	Kion Corp	1957 Pioneer Rd Bldg A	Huntingdon Valley	Montgomery	PA
CP	Kraiburg Corp	2625 N Berkeley Lake Rd NW	Duluth	Gwinnett	GA
CP	Magco Inc	120 N Abington Rd	Clarks Summit	Lackawanna	PA

CP	Muscle Products Corp	112 Fennell Dr	Butler	Butler	PA
CP	Norquay Technology Inc	PO Box 468	Chester	Delaware	PA
CP	Nyloplast USA Inc	3130 Verona Ave	Buford	Gwinnett	GA
CP	Old World Industries Inc	4065 Commercial Ave	Northbrook	Cook	IL
CP	Peach State Lab Inc	PO Box 5424	Rome	Floyd	GA
CP	Phoenix Chemical Co Inc	202 Gee Rd NE	Calhoun	Gordon	GA
CP	Ranbar Electrical Materials	PO Box 607	Manor	Westmoreland	PA
CP	Remacor Inc	PO Box 366	West Pittsburg	Lawrence	PA
CP	Resin Exchange Inc	851 S Westgate St	Addison	Du Page	IL
CP	Sirius Technology Inc	PO Box 751	Oriskany	Oneida	NY
CP	Sparks Technology Inc	1705 Hubbard Ave	Batavia	Kane	IL
CP	Specialty Chemical Systems Inc	400 1st Ave	Royersford	Montgomery	PA
CP	Star Holding Inc	PO Box 3753	Dalton	Whitfield	GA
CP	Sundance Products Inc	1425 Candler Rd	Gainesville	Hall	GA
CP	Sunoco Polymers Co	PO Box 432	Marcus Hook	Delaware	PA
CP	Superior Adsorbents Inc	PO Box 566	Emlenton	Venango	PA
CP	Tee Group Films Inc	PO Box 425	Ladd	Bureau	IL
CP	Toryon Technologies Inc	1115 Hilltop Dr Ste B2	Itasca	Du Page	IL
CP	Zyvax Inc	PO Box 825	Boca Raton	Palm Beach	FL
ITI	Addonics Technologies Inc	2466 Kruse Dr	San Jose	Santa Clara	CA
ITI	Advanced Analogic Technologies	830 E Arques Ave	Sunnyvale	Santa Clara	CA
ITI	APT	51 Whitney Pl	Fremont	Alameda	CA
ITI	Archtech Electronics Corp	117A Docks Corner Rd	Dayton	Middlesex	NJ

ITI	Arco Inc	300 State Rt 17 Unit K	Mahwah	Bergen	NJ
ITI	Arsys Innotech Corp	45535 Northport Loop E	Fremont	Alameda	CA
ITI	AV Dec LLC	1810 Mony St	Fort Worth	Tarrant	TX
ITI	BP Microsystems LP	1000 N Post Oak Rd 225	Houston	Harris	TX
ITI	Candela Instruments Inc	850 Auburn Ct	Fremont	Alameda	CA
ITI	Catalyst Semiconductor Inc	1250 Borregas Ave	Sunnyvale	Santa Clara	CA
ITI	Catapult Communications Corp	160 S Whisman Rd	Mountain View	Santa Clara	CA
ITI	Center For Tribology Inc	1715 Dell Ave	Campbell	Santa Clara	CA
ITI	Clear Cube Technology Inc	8834 N Capital Of Texas Hwy 14	Austin	Travis	TX
ITI	Cynosure Inc	5 Carlisle Rd	Westford	Middlesex	MA
ITI	Emeter Corp	1 Twin Dolphin Dr	Redwood City	San Mateo	CA
ITI	Hifn Inc	750 University Ave Ste 200	Los Gatos	Santa Clara	CA
ITI	Hittite Microwave Corp	20 Alpha Rd	Chelmsford	Middlesex	MA
ITI	Ikanos Communications Inc	47669 Fremont Blvd	Fremont	Alameda	CA
ITI	International Technology	6591 Sierra Ln C	Dublin	Alameda	CA
ITI	Isolink Inc	880 Yosemite Way	Milpitas	Santa Clara	CA
ITI	Luidia Inc	125 Shoreway Rd Ste D	San Carlos	San Mateo	CA
ITI	Memoryx Inc	2800 Bowers Ave	Santa Clara	Santa Clara	CA
ITI	Mercom Systems Inc	9 Polito Ave	Lyndhurst	Bergen	NJ
ITI	Micro Innovations Corp	400 Clearview Rd	Edison	Middlesex	NJ
ITI	MicroTune Inc	2201 10th St	Plano	Collin	TX
ITI	Millitech Inc	29 Industrial Dr E	Northampton	Hampshire	MA
ITI	N S Controls Inc	5601 W Sam Houston Pkwy N	Houston	Harris	TX

ITI	ND Systems Inc	16245 Vineyard Blvd	Morgan Hill	Santa Clara	CA
ITI	Netlogic Microsystems Inc	1875 Charleston Rd	Mountain View	Santa Clara	CA
ITI	Nextest Systems Corp	1901 Monterey Hwy	San Jose	Santa Clara	CA
ITI	Niksun Inc	1100 Cornwall Rd	Monmouth Junction	Middlesex	NJ
ITI	Optical Equipment Group LLC	PO Box 876	Bensenville	Du Page	IL
ITI	P J Systems Inc	25 Drydock Ave Fl 6	Boston	Suffolk	MA
ITI	Peripheral Devices & Products	47027 Benicia St	Fremont	Alameda	CA
ITI	Photoflex Products Inc	97 Hangar Way	Watsonville	Santa Cruz	CA
ITI	Quintum Technologies Inc	71 James Way	Eatontown	Monmouth	NJ
ITI	Raditek Inc	1702H Meridian Ave # 127	San Jose	Santa Clara	CA
ITI	RGB Spectrum	950 Marina Village Pkwy	Alameda	Alameda	CA
ITI	SatCon Technology Corp	27 Drydock Ave	Boston	Suffolk	MA
ITI	SIIG Inc	6078 Stewart Ave	Fremont	Alameda	CA
ITI	Silicon Valley World Trade	1474 Gladding Ct	Milpitas	Santa Clara	CA
ITI	Source Code Corp	PO Box 9108	Norwood	Norfolk	MA
ITI	Spectral Dynamics Inc	2730 Orchard Pkwy	San Jose	Santa Clara	CA
ITI	Telecast Fiber Systems Inc	102 Grove St	Worcester	Worcester	MA
ITI	Themis Computer	47200 Bayside Pkwy	Fremont	Alameda	CA
ITI	U S Technical Ceramics Inc	15500 Concord Cir	Morgan Hill	Santa Clara	CA
ITI	Vmetro Inc	1880 S Dairy Ashford St 400	Houston	Harris	TX
ITI	Volterra Semiconductor Corp	3839 Spinnaker Ct	Fremont	Alameda	CA
ITI	Wide Area Management Services	3226 Scott Blvd	Santa Clara	Santa Clara	CA

ITI	WIN Enterprise Inc	300 Willow St S	North Andover	Essex	MA
ITI	Wistron Infocomm Corp	12 Zane Grey St Ste A	El Paso	El Paso	TX
MFMP	2L Inc	PO Box 105	Hudson	Middlesex	MA
MFMP	A & D Metal Inc	PO Box 129	Westfield	Hampden	MA
MFMP	Accutech Packaging Inc	157 Green St	Foxboro	Norfolk	MA
MFMP	Advanced Containment Systems	8720 Lambright Rd	Houston	Harris	TX
MFMP	Advanced Modular Power Systems	13013 Jess Pirtle Blvd	Sugar Land	Fort Bend	TX
MFMP	AFCO Systems Inc	200 Finn Ct	Farmingdale	Suffolk	NY
MFMP	Air Crafters Inc	2085 5th Ave	Ronkonkoma	Suffolk	NY
MFMP	Allen Tool Phoenix Inc	6821 Ellicott Dr	East Syracuse	Onondaga	NY
MFMP	American Vault Corp	7911 Pantherway	Waco	McLennan	TX
MFMP	Ameritherm Inc	39 Main St	Scottsville	Monroe	NY
MFMP	Applied Mechanical Technology	PO Box 530	Momence	Kankakee	IL
MFMP	APX Enclosures Inc	200 Oregon St	Mercersburg	Franklin	PA
MFMP	Audion Automation Ltd	1533 Crescent Dr Ste 100	Carrollton	Dallas	TX
MFMP	Belden Manufacturing Inc	1813 US Route 11	Kirkwood	Broome	NY
MFM	Belt-Way Scales Inc	1 Beltway Rd	Rock Falls	Whiteside	IL

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MFMP	Bgs Industries, LP	11155 Windfern Rd	Houston	Harris	TX
MFMP	Biofab Products Inc	140 Eastbrook Ln	Butler	Butler	PA
MFMP	Brooklyn Installations Inc	2200 McDonald Ave	Brooklyn	Kings	NY
MFMP	C & C Metal Fabrications Inc	159 Hubbard St	Fulton	Oswego	NY
MFMP	Calvary Design Team Inc	45 Hendrix Rd	West Henrietta	Monroe	NY
MFMP	Central Mass Machine Inc	PO Box 223	Holyoke	Hampden	MA
MFMP	Charles A Rogers Enterprises	PO Box 627	Victor	Ontario	NY
MFMP	Chemguard Inc	204 S 6th Ave	Mansfield	Tarrant	TX
MFMP	ChipBLASTER Inc	13605 S Mosiertown Rd	Meadville	Crawford	PA
MFMP	Commercial Stainless Inc	900 Patterson Dr	Bloomsburg	Columbia	PA
MFMP	Compositech Inc	PO Box 2673	Pearland	Brazoria	TX
MFMP	Comprehensive Identification	PO Box 847363	Boston	Suffolk	MA
MFMP	Controlled Environment	137 High St	Mansfield	Bristol	MA
MFMP	Converting Technology Inc	1557 Carmen Dr	Elk Grove Village	Cook	IL
MFMP	Cornell Industrial Corp	RR 2 Box 2074	Laceyville	Bradford	PA

MFMP	Craftsman Custom Metals	3838 River Rd	Schiller Park	Cook	IL
MFMP	Critical Imaging LLC	2306 Bleecker St	Utica	Herkimer	NY
MFMP	Crown Concepts Corp	7080 Lisbon Rd	Morris	Grundy	IL
MFMP	CSI Industries Inc	6910 W Ridge Rd	Fairview	Erie	PA
MFMP	Custom Kitchen Fabricator	11225 County Road 506	Venus	Johnson	TX
MFMP	D & G Sheet Metal Co Inc	5400 Grand Ave	Maspeth	Queens	NY
MFMP	Dilling-Harris Inc	PO Box 550609	Dallas	Dallas	TX
MFMP	Diversified Machining Inc	PO Box 247	Leander	Williamson	TX
MFMP	Doralco Inc	11901 S Austin Ave	Alsip	Cook	IL
MFMP	Drilling Technique Ltd	PO Box 9535	Pittsburgh	Allegheny	PA
MFMP	Dynaco USA Inc	3175 Macarthur Blvd	Northbrook	Cook	IL
MFMP	East Coast Welding & Fabctn	104 Parker St	Newburyport	Essex	MA
MFMP	Electro Abrasives Corp	701 Willet Rd	Buffalo	Erie	NY
MFMP	Fabricating Specialities Inc	PO Box 91109	Houston	Harris	TX
MFMP	Faip North America Inc	1825 Greenleaf Ave	Elk Grove Village	Cook	IL
MFMP	Food Equipment Technologies Co	600 Rose Rd	Lake Zurich	Lake	IL

MFMP	General Aire Systems Inc	PO Box 110	Darby	Delaware	PA
MFMP	Genesis Machinery Products Inc	400 Eagleview Blvd # 100	Exton	Chester	PA
MFMP	Glenwood Tool & Mold Inc	410 Renner Dr	Elgin	Kane	IL
MFMP	Global Precision Products Inc	1011 Rush Henrietta Townlin Rd	Rush	Monroe	NY
MFMP	Goza Products Inc	405 S Kirby St	Garland	Dallas	TX
MFMP	Great Lakes Tool Manufacturing	501 Davis Rd	Elgin	Kane	IL
MFMP	Grimaldi's Heating & Sheet	808 3rd Ave	Utica	Oneida	NY
MFMP	Harbortown Industries Inc	28477 Ballard Dr	Lake Forest	Lake	IL
MFMP	Hatch Technology LLC	927 Currant Rd	Fall River	Bristol	MA
MFMP	Herr Industrial Inc	PO Box 5249	Lancaster	Lancaster	PA
MFMP	Hi-Lo Climbers LLC	930 N Shore Dr	Lake Bluff	Lake	IL
MFMP	HindlePower Inc	1075 Saint John St	Easton	Northampton	PA
MFMP	Horizon Die Co Inc	1801 Mitchell Blvd	Schaumburg	Cook	IL
MFMP	Hranec Sheet Metal Inc	763 Rt 21	Uniontown	Fayette	PA
MFMP	I L Machine Co Inc	421 Harvester Ct	Wheeling	Cook	IL
MFMP	Innovative Control Systems Inc	112 Meyer Rd	Nazareth	Northampton	PA

MFMP	Integrated Production Systems	2750 113th St # 300	Grand Prairie	Tarrant	TX
MFMP	Interior Metals	126 25th St	Brooklyn	Kings	NY
MFMP	JDI Mold & Tool LLC	2510 Hiller Rdg	McHenry	McHenry	IL
MFMP	JMS Fabricated Systems Inc	4730 State Route 982 # 104	Latrobe	Westmoreland	PA
MFMP	Jnj Industries Inc	290 Beaver St	Franklin	Norfolk	MA
MFMP	Joe Zsido Sales & Design Inc	PO Box 1267	Benton	Franklin	IL
MFMP	K & L Machining Inc	50 Trinity Dr	Leola	Lancaster	PA
MFMP	Karel Manufacturing Inc	PO Box 621	Schertz	Guadalupe	TX
MFMP	Keene Technology Inc	14357 Commercial Pkwy	South Beloit	Winnebago	IL
MFMP	Keystone Automation Inc	21 Industrial Dr	Pittston	Luzerne	PA
MFMP	Keystone Industries Window	105 Mahoning Ave	New Castle	Lawrence	PA
MFMP	L Myers Associates	825 S 26th St	Harrisburg	Dauphin	PA
MFMP	Lago Products Ltd	42 Butterfield Trail Blvd A	El Paso	El Paso	TX
MFMP	Laser Reproductions Inc	8228 McCormick Blvd	Skokie	Cook	IL
MFMP	LB Steel LLC	15700 Lathrop Ave	Harvey	Cook	IL
MFMP	LC Mold Inc	760 W Algonquin Rd	Arlington Heights	Cook	IL

MFMP	LMS-Walt Inc	400 Leonard Ave	Dekalb	De Kalb	IL
MFMP	M J Celco Inc	3900 Wesley Ter	Schiller Park	Cook	IL
MFMP	Machined Products Co	PO Box 10428	Lancaster	Lancaster	PA
MFMP	Major Metals Inc	PO Box 11194	Houston	Harris	TX
MFMP	Maloney Tool & Mold Inc	PO Box 379	Meadville	Crawford	PA
MFMP	Mechanical & Industrial Steel	24226 S Northern Ill Dr	Channahon	Will	IL
MFMP	Meier's Outdoor World Inc	155 Sayton Rd Unit B	Fox Lake	Lake	IL
MFMP	Milara Inc	4 Marc Rd	Medway	Norfolk	MA
MFMP	Modern Packaging Inc	505 Acorn St	Deer Park	Suffolk	NY
MFMP	Motion Technology Inc	257 Simarano Dr	Marlborough	Middlesex	MA
MFMP	Motivair Corp	25 John Glenn Dr # 104	Amherst	Erie	NY
MFMP	MRK Industries LLC	476 Diens Dr	Wheeling	Cook	IL
MFMP	Mullins, Max B Auto Parts Salv	5733 Old Route 66	Mount Olive	Macoupin	IL
MFMP	N S Controls Inc	5601 W Sam Houston Pkwy N	Houston	Harris	TX
MFMP	New England Ventilation Co Inc	514 Main St	Tewksbury	Middlesex	MA
MFMP	Northern Air Systems Inc	4 Pixley Industrial Pkwy	Rochester	Monroe	NY

MFMP	Nova Metals Inc	263 Commonwealth Dr	Carol Stream	Du Page	IL
MFMP	NQL Energy Services	15500 International Plaza Dr	Houston	Harris	TX
MFMP	Optimum Window Manufacturing	28 Canal St	Ellenville	Ulster	NY
MFMP	Orics Industries Inc	1801 130th St	College Point	Queens	NY
MFMP	P & M LLC	50 Ranick Dr E	Amityville	Suffolk	NY
MFMP	Penflex Inc	PO Box 4007	Malvern	Chester	PA
MFMP	Penn Graphics Equipment Inc	139 Mill Hill Rd	Hamburg	Berks	PA
MFMP	Penn-American Inc	PO Box 240	Muncy	Lycoming	PA
MFMP	Pik Rite Inc	60 Pik Rite Ln	Lewisburg	Union	PA
MFMP	Prim Hall Enterprises Inc	11 Spellman Rd	Plattsburgh	Clinton	NY
MFMP	Pro Chem Tech International	PO Box 214	Brockway	Jefferson	PA
MFMP	Production Tool Co's LLC	1229 E 74th St	Chicago	Cook	IL
MFMP	Pulse Technologies Inc	2000 A M Dr	Quakertown	Bucks	PA
MFMP	Quality Air & Metals Inc	283 Center St B	Holbrook	Norfolk	MA
MFMP	Quality Fabrication & Design	955 Freeport Pkwy Ste 400	Coppell	Dallas	TX
MFMP	RC Machine Inc	PO Box 1130	Libertyville	Lake	IL

MFMP	Rochester Automated Systems	25 Regency Oaks Blvd Ste 2	Rochester	Monroe	NY
MFMP	Rocon Manufacturing Corp	606 Hague St	Rochester	Monroe	NY
MFMP	S Q I	PO Box 12262	Odessa	Ector	TX
MFMP	Senox Corp	15409 Long Vista Dr	Austin	Travis	TX
MFMP	Sharon Custom Metal Forming	250 Broadway Ave	Farrell	Mercer	PA
MFMP	Shetron Wldg & Fabrication Inc	85 Kutz Rd	Carlisle	Cumberland	PA
MFMP	Sigma Metals Inc	45 W Jefryn Blvd	Deer Park	Suffolk	NY
MFMP	Steel Systems Installations	PO Box 307	Quarryville	Lancaster	PA
MFMP	Swing Limited	152 Commonwealth Ave	Concord	Middlesex	MA
MFMP	Taiyo America Inc	800 N York Rd	Bensenville	Du Page	IL
MFMP	Tescor Inc	341 Ivyland Rd	Ivyland	Bucks	PA
MFMP	Tox-Pressotechnik LLC	4250 Weaver Pkwy	Warrenville	Du Page	IL
MFMP	Traffic Control & Protection	31W351 North Ave	West Chicago	Du Page	IL
MFMP	Tri-Core Mould & Die	7897 Burden Rd	Machesney Park	Winnebago	IL
MFMP	Troxel Industries	580 N J St	Tilton	Vermilion	IL
MFMP	US Nonwovens Corp	100 Emjay Blvd	Brentwood	Suffolk	NY

MFMP	Vanguard Indentifications	1210 American Blvd	West Chester	Chester	PA
MFMP	Vistalab Technologies Inc	27 Radio Circle Dr	Mount Kisco	Westchester	NY
MFMP	Vortex Inc	4 Dearborn Rd	Peabody	Essex	MA
MFMP	Vytek Inc	195 Industrial Rd	Fitchburg	Worcester	MA
MFMP	Wagner Plate Works, LLP	PO Box 40606	Houston	Harris	TX
MFMP	Walt Ltd	400 Leonard Ave	Dekalb	De Kalb	IL
MFMP	Walters Metal Fabrications Inc	PO Box 1245	Granite City	Madison	IL
MFMP	Weatherly Casting & Machine Co	PO Box 21	Weatherly	Carbon	PA
MFMP	Western Sheet Metal Inc	2406 Hinton Dr	Irving	Dallas	TX
MFMP	Westport Environmental Systems	251 Forge Rd	Westport	Bristol	MA
MFMP	Windy City Metal Fabricators	3920 W Armitage Ave	Chicago	Cook	IL
MFMP	X-Cel Technologies Inc	7800 Graphic Dr	Tinley Park	Will	IL
MFMP	X-Cell Tool & Mold Inc	2002 Evanston Ave	Erie	Erie	PA
MFMP	Z Corp	32 2nd Ave Ste 1	Burlington	Middlesex	MA
MFMP	Z-Star Inc	22620 Fisher Rd	Watertown	Jefferson	NY
PMT	A Walsh Imaging Inc	PO Box 290	Pompton Lakes	Passaic	NJ

PMT	Abh Nature's Products Inc	1885 New Hwy	Farmingdale	Suffolk	NY
PMT	Adolor Corp	700 Pennsylvania Dr	Exton	Chester	PA
PMT	Alfa Wassermann Inc	4 Henderson Dr	Caldwell	Essex	NJ
PMT	American Bio Medica Corp	122 Smith Rd	Kinderhook	Columbia	NY
PMT	Animas Corp	200 Lawrence Dr	West Chester	Chester	PA
PMT	Aries Chemical Inc	PO Box 519	Beaver Falls	Lewis	NY
PMT	Aromachem Inc	599 Johnson Ave	Brooklyn	Kings	NY
PMT	Bactolac Pharmaceutical Inc	7 Oser Ave	Hauppauge	Suffolk	NY
PMT	Bass Oil Co Inc	136 Morgan Ave	Brooklyn	Kings	NY
PMT	BioSpectra Inc	RR 2 Box 2129G	Stroudsburg	Monroe	PA
PMT	Bronson Nutritionals LLC	70 Commerce Dr	Hauppauge	Suffolk	NY
PMT	Clinical Trial Services Inc	2661 Audubon Rd	Audubon	Montgomery	PA
PMT	Corepharma LLC	215 Wood Ave	Middlesex	Middlesex	NJ
PMT	Denali Co LLC	43 W Front St	Red Bank	Monmouth	NJ
PMT	Depravel International Inc	PO Box 51	Tuxedo Park	Orange	NY
PMT	E P Medsystems Inc	575 N Route 73 Bldg D	West Berlin	Camden	NJ
PMT	Elite Parfums Ltd	551 5th Ave Rm 1500	New York	New York	NY
PMT	Epimed International Inc	141 Sal Landrio Dr	Johnstown	Fulton	NY
PMT	Evans Chimetics LP	33 Wood Ave S Ste 600	Iselin	Middlesex	NJ
PMT	Fortitech Inc	2105 Technology Dr	Schenectady	Schenectady	NY
PMT	Fragrance Manufacturing Inc	200 Cascade Dr Ste D	Allentown	Lehigh	PA
PMT	Global Protection Acquisition	PO Box 1399	Marlton	Burlington	NJ
PMT	Glowspek Industries Inc	2010 Route 9W Ste 2	Milton	Ulster	NY

PMT	Hct Packaging Inc	745 Rte 202/206 Ste 302	Bridgewater	Somerset	NJ
PMT	Horizon Peo Services Inc	PO Box 215	Valley Stream	Nassau	NY
PMT	Integrated Liner Technologies	460 S Pearl St	Albany	Albany	NY
PMT	Inter Parfums Inc	551 5th Ave	New York	New York	NY
PMT	Intermax Pharmecutical Inc	228 Sherwood Ave 11735	Farmingdale	Suffolk	NY
PMT	International S Splendor Corp	316 Westchester Ave	Port Chester	Westchester	NY
PMT	Jeam Group	200 Middlesex Ave	Carteret	Middlesex	NJ
PMT	JRS Pharma LP	2981 Rte 22	Patterson	Putnam	NY
PMT	K M X Chemical Corp	998c Old Country Rd 177	Plainview	Nassau	NY
PMT	Krohn Technical Products Inc	PO Box 98	Carlstadt	Bergen	NJ
PMT	Labchem Inc	200 William Pitt Way	Pittsburgh	Allegheny	PA
PMT	Lanelabs USA Inc	25 Commerce Dr	Allendale	Bergen	NJ
PMT	LifeCell Corp	1 Millennium Way	Somerville	Somerset	NJ
PMT	Lifelink Monitoring Corp	3201 Route 212	Bearsville	Ulster	NY
PMT	Locus Pharmaceuticals Inc	512 Township Line Rd	Blue Bell	Montgomery	PA
PMT	Milestone Scientific Inc	220 S Orange Ave	Livingston	Essex	NJ
PMT	Nature's Value Inc	54 Drexel Dr	Bay Shore	Suffolk	NY
PMT	Norquay Technology Inc	PO Box 468	Chester	Delaware	PA
PMT	Novus Fine Chemicals LLC	426 Orchard St	Carlstadt	Bergen	NJ
PMT	Nutri Sport Pharmacal Inc	200 N Church Rd	Franklin	Sussex	NJ
PMT	Nu-World Corp	PO Box 669	Carteret	Middlesex	NJ
PMT	Orthovita Inc	45 Great Valley Pkwy	Malvern	Chester	PA
PMT	Palatin Technologies Inc	4c Cedarbrook Dr	Cranbury	Middlesex	NJ
PMT	People's Choice Surgical Splys	67 Whitson St	Hempstead	Nassau	NY

PMT	Process Technologies & Pkg	160 Commerce Rd	Pittston	Luzerne	PA
PMT	Pulse Technologies Inc	2000 A M Dr	Quakertown	Bucks	PA
PMT	Pyrotechnique By Grucci Inc	1 Grucci Ln	Brookhaven	Suffolk	NY
PMT	Raritan Pharmaceuticals Inc	17A Cotters Ln	East Brunswick	Middlesex	NJ
PMT	Reliant Pharmaceuticals Inc	110 Allen Rd	Liberty Corner	Somerset	NJ
PMT	Remacor Inc	PO Box 366	West Pittsburg	Lawrence	PA
PMT	Sirius Technology Inc	PO Box 751	Oriskany	Oneida	NY
PMT	Specialty Chemical Systems Inc	400 1st Ave	Royersford	Montgomery	PA
PMT	SPS Medical Supply Corp	6789 W Henrietta Rd	Rush	Monroe	NY
PMT	Tangram Co LLC	125 Corporate Dr	Holtsville	Suffolk	NY
PMT	Taratape	250 Canal Rd	Fairless Hills	Bucks	PA
PMT	Tarte Inc	224 W 35th St Ste 1001	New York	New York	NY
PMT	Tetragenex Pharmaceuticals Inc	1 Maynard Dr # 205	Park Ridge	Bergen	NJ
PMT	Top Safety Products Co Inc	160 Meister Ave Ste 16	Branchburg	Somerset	NJ
PMT	Troy Manufacturing Inc	130 Lions Dr	Hazleton	Luzerne	PA
PMT	Universal Capsules LLC	400 Corporate CT Ste F	South Plainfield	Middlesex	NJ
PMT	Vistalab Technologies Inc	27 Radio Circle Dr	Mount Kisco	Westchester	NY
PMT	Warner Chilcott Inc	100 Enterprise Dr # 280	Rockaway	Morris	NJ
PMT	Zydus Pharmaceuticals USA Inc	508 Carnegie Ctr FL 1	Princeton	Mercer	NJ
VPA	Advanced Containment Systems	8720 Lambright Rd	Houston	Harris	TX
VPA	Aerospace Fabrications Of GA	305 Butler Industrial Dr	Dallas	Paulding	GA
VPA	Alpha Innotech Corp	2401 Merced St	San Leandro	Alameda	CA
VPA	American Innovations Ltd	12112 Tech Blvd 100	Austin	Travis	TX

VPA	American Technologies Network	20 S Linden Ave # 1B	South San Francisco	San Mateo	CA
VPA	Analytical Scientific Instrs	425 Appian Way	El Sobrante	Contra Costa	CA
VPA	Automation & Control Tech	PO Box 3667	Dublin	Franklin	OH
VPA	AV Dec LLC	1810 Mony St	Fort Worth	Tarrant	TX
VPA	BP Microsystems LP	1000 N Post Oak Rd 225	Houston	Harris	TX
VPA	Catapult Communications Corp	160 S Whisman Rd	Mountain View	Santa Clara	CA
VPA	Center For Tribology Inc	1715 Dell Ave	Campbell	Santa Clara	CA
VPA	Competition Trailers Inc	2000 Fm 3135 E	Henderson	Rusk	TX
VPA	Conner Steel Products Inc	PO Box 3287	San Angelo	Tom Green	TX
VPA	Conor Medsystems Inc	1003 Hamilton Ct	Menlo Park	San Mateo	CA
VPA	Construction Trailer	2535 Rose Pkwy	Sikeston	Scott	MO
VPA	Contour Acquisistion Co Inc	Oakwood & McKinley Ave	Newark	Licking	OH
VPA	Diamond Heavy Haul Inc	PO Box 146	Shandon	Butler	OH
VPA	Global Gauge Corp	PO Box 3040	Dayton	Montgomery	OH
VPA	Halbar Machine Co Inc	739 E 140th St	Cleveland	Cuyahoga	OH
VPA	Intercard Inc	1874 Lackland Hill Pkwy	Saint Louis	Saint Louis	MO
VPA	Intercontinental Microwave	2000 Wyatt Dr Ste 13	Santa Clara	Santa Clara	CA
VPA	Keri Systems Inc	1530 Old Oakland Rd Ste 100	San Jose	Santa Clara	CA
VPA	Load Trail Ltd	2097 Fm 2352	Sumner	Lamar	TX
VPA	Lucas Signatone Corp	393 Tomkins Ct # J	Gilroy	Santa Clara	CA
VPA	Martinek Manufacturing	42650 Osgood Rd	Fremont	Alameda	CA
VPA	N S Controls Inc	5601 W Sam Houston	Houston	Harris	TX

		Pkwy N			
VPA	Natus Medical Inc	1501 Industrial Rd	San Carlos	San Mateo	CA
VPA	Nextest Systems Corp	1901 Monterey Hwy	San Jose	Santa Clara	CA
VPA	Omega International Inc	2850 Needmore Rd	Dayton	Montgomery	OH
VPA	Quality Controls Inc	3411 Church St	Cincinnati	Hamilton	OH
VPA	Silicon Microstructures Inc	1701 McCarthy Blvd	Milpitas	Santa Clara	CA
VPA	Snow Aviation International	7201 Paul Tibbets St	Columbus	Franklin	OH
VPA	Spectral Dynamics Inc	2730 Orchard Pkwy	San Jose	Santa Clara	CA
VPA	Spinnaker Microwave Inc	3281 Kifer Rd	Santa Clara	Santa Clara	CA
VPA	Super Systems Inc	7205 Edington Dr	Cincinnati	Hamilton	OH
VPA	Tlz Inc	404 Villa St	Mountain View	Santa Clara	CA
VPA	Twin Source LLC	32333 Aurora Rd	Solon	Cuyahoga	OH
VPA	U S Technical Ceramics Inc	15500 Concord Cir	Morgan Hill	Santa Clara	CA
VPA	Velocity 11	3565 Haven Ave	Menlo Park	San Mateo	CA
VPA	Wheeler Truck Equipment Inc	PO Box 295	Morley	Scott	MO
VPA	Yxlon International Inc	3400 Gilchrist Rd	Mogadore	Summit	OH