Summary Report on Location for Facilities Buildings Expansion

Campus Master Planning Committee- Subcommittee on Land Use, Building Siting and Environment

The Subcommittee on Land Use, Environment and Building Siting was asked by vice president, John Finan, to provide input on the location for the needed expansion of Facilities building(s). A number of locational options are considered and assessed in this report. These options are general locations with significant flexibility and not to be interpreted as exact building locations or configurations.

This report evaluates each of four general locational options against the appropriate Rowan Master Plan Guiding Principles as well as a survey evaluation of facilities personnel. This report is only one aspect for consideration for new facilities buildings pertaining to land use and environmental concern. Many other factors including financial considerations and logistics are not evaluated in this analysis and must be fully considered as plans move forward.

WHY EXPAND?

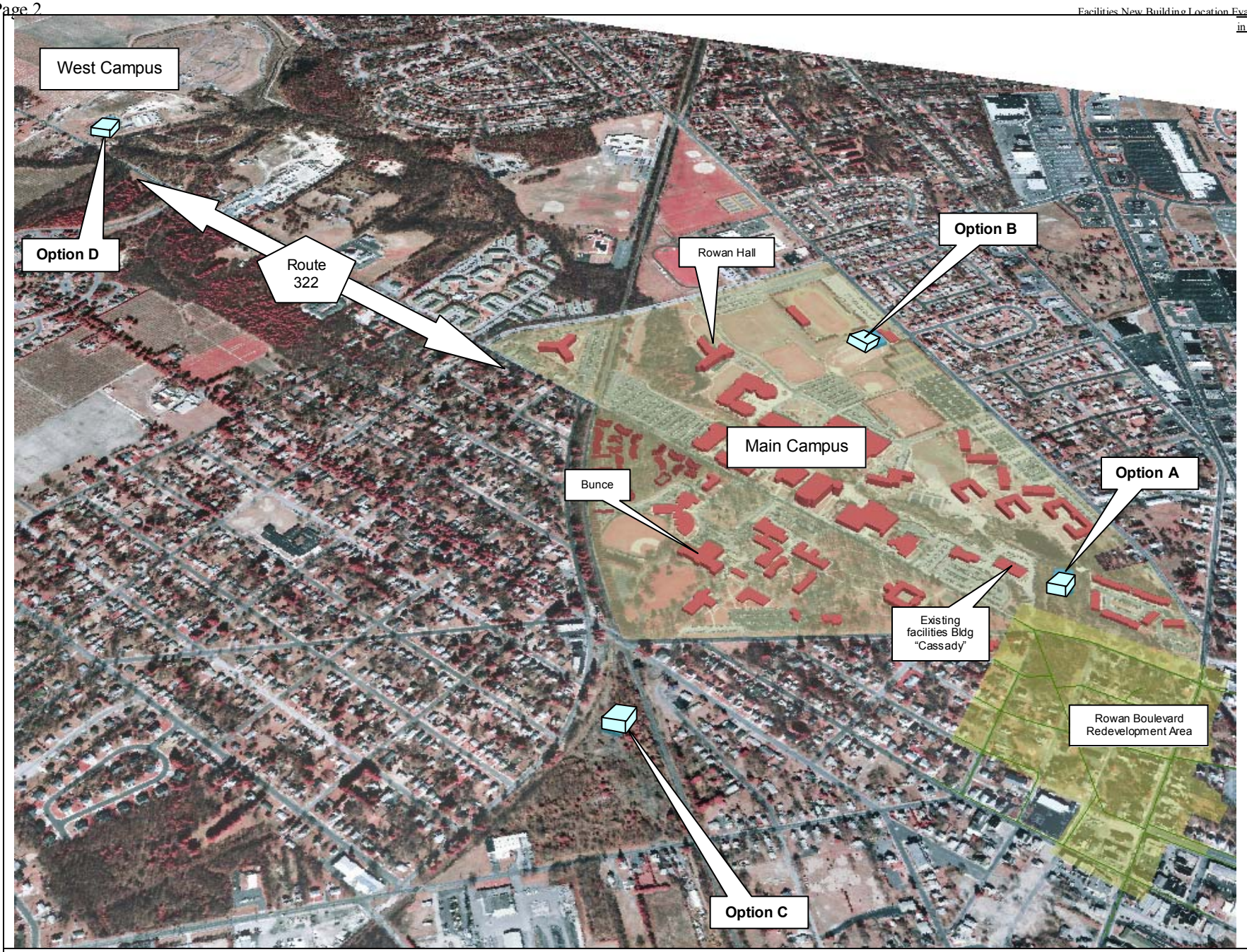
Facilities is in urgent need of additional space.

WHY CONSIDER MOVING FROM CASSADY & BUILDING FROM SCRATCH (options B, C & D bellow)?

1) New buildings can be designed to adequately serve needs better than renovating existing buildings.
2) A new building will facilitate better coordination/consolidation of all facilities functions.
3) Moving out of the existing building frees up the center of campus for better connection/integration with Rowan Boulevard.

The following 4 options have been suggested: (see map on p.2)

rating	***Option***	***Description***
	Option #A	– Stay in existing building (Cassady) and build new building adjacent to it in the woods towards Mansion Park.
	Option #B	– Move out of Cassady and build new facilities complex in the area near the current team house (after sports complex is created on West Campus).
	Option #C	– Move out of Cassady and build new facilities complex on CONRAIL parcel (adjacent to the Bunce Green near the old train station) or other similar vacant parcel south of campus.
	Option #D	– Move out of Cassady and build new facilities complex on Route 322 between Main Campus and West Campus (possibly the Peach Country Tractor Bldg.)



Possible location options for a new facilities building.

Evaluation for Building Siting, Land Use, Environment Guiding Principles:

Environment:

	Option A Renovate Cassidy & build adjacent	**Option B Team house area**	**Option C Conrail or vicinity**	**Option D West Campus or 322 corridor**
5.1 to minimize adverse impacts to the natural environment and to enhance environmental conditions whenever possible.	Suggested grade = **F** *Comments: the existing location is highly impacting to stream. Large new building would also be impacting in this location*	Suggested grade = **A** *Comments: no known biological or water resources in this location.*	Suggested grade = **B** *Comments: contaminants may be a problem but also an opportunity for brownfields redevelopment*	Suggested grade = **D – B** (depending on exact location) *Comments: potential ecological and water impacts depending on the exact location*
5.2 consistent with New Jersey Higher Education Partnership for Sustainability (NJHEPS) to lower greenhouse gases and protect limited natural resources on college campuses.	Suggested grade = **C** *Comments: renovation will not likely be as efficient as a new building. However, central location is beneficial for minimizing travel and promoting pedestrianism.*	Suggested grade = **- A** *Comments: new buildings could be very energy efficient. Location is in close proximity to a majority of buildings minimizing travel and promoting pedestrianism.*	Suggested grade = **-B** *Comments: new building could be very energy efficient.* *Location is not ideal and would require substantial travel the distance and road barriers would discourage pedestrianism.*	Suggested grade = **F - D** (depending on exact location) *Comments: new building could be very energy efficient.* *Location would require excessive travel and pedestrian travel would be impossible.*
5.3 example of sustainable development and long-term sustainability. In this effort, future development will strive to meet the highest attainable green design, (LEED).	Suggested grade = **C** *Comments: renovation of existing building would be more difficult to achieve LEED certification.*	Suggested grade = **A** *Comments: new building could be LEED certified.*	Suggested grade = **A** *Comments: new building could be LEED certified.*	Suggested grade = **C** *Comments: existing building could be renovated. new building could be LEED certified. Other aspects of LEED criteria would vary.*
5.4 Environmental priorities				
o Watershed Protection –	Suggested grade = **F** *Comments: this building location encroaches on and impacts the headwaters of Chestnut branch stream. Moving the building and related facilities activities will benefit the watershed.*	Suggested grade = **A** *Comments: this location is more than 1000 feet from the stream. Buffering and other BMP's could negate most watershed impacts.*	Suggested grade = **A** *Comments: this location is a substantial distance from the stream. Buffering and other BMP's could negate most watershed impacts*	Suggested grade = **D – B** (depending on exact location) *Comments: Some of the possible locations could be impacting to the stream and wooded areas.*
o Energy Conservation –	Suggested grade = **B** *Comments: two buildings would be less energy efficient than one new building*	Suggested grade = **A** *Comments: good potential for energy conservation and tying into existing heating/cooling system.*	Suggested grade = **A** *Comments: location makes it difficult to tie into existing heating/cooling system*	Suggested grade = **F – C** (depending on exact location) *Comments: distance to main campus would require excessive travel for personnel.*
o Pollution Prevention –	Suggested grade = **D** *Comments: existing location*	Suggested grade = **A** *Comments:*	Suggested grade = **A** *Comments:*	Suggested grade = **D – B** (depending on exact location) *Comments:*
o Natural Resource Protection –	Suggested grade = **D** *Comments: wetlands and wooded area would be impacted*	Suggested grade = **A** *Comments: no forest, wetland or habitat resources known to be in this area*	Suggested grade = **A** *Comments: although this is a wooded site, little biological resources are expected due to the previous land use as a train yard.*	Suggested grade = **D – B** (depending on exact location) *Comments: wetlands and wooded areas would need to be assessed.*

Land Use:

	Option A Renovate Cassidy & build adjacent	**Option B Team house area**	**Option C Conrail or vicinity**	**Option D West Campus or 322 corridor**
5.5 Integrated Planning –	Suggested grade = **D** *Comments: this location is good in that it is central to the entire campus for facilities personnel to easily access many buildings. However, the site greatly impedes the integration of the campus with Rowan Boulevard.*	Suggested grade = **A** *Comments: this location has the potential to integrate well with the main campus. A majority of buildings would be within the 1500 ft pedestrian distance allowing meetings and maintenance activities to occur by foot.*	Suggested grade = **C** *Comments: integration with campus is reasonable however the majority of buildings are beyond the 1500 ft pedestrian distance and across two roadways. Far less pedestrian travel is likely to occur than options A or B.*	Suggested grade = **D** (depending on exact location) *Comments: poorly integrated with the existing land use. Reasonable integration can occur with west campus.*
5.6 Responsible and Integrated Community Design (smart growth)– .	Suggested grade = **C** *Comments:*	Suggested grade = **A** *Comments:*	Suggested grade = **A** *Comments:*	Suggested grade = **D** *Comments: does not promote smart growth principles for the university or community*
5.7 Anti-Sprawl –	Suggested grade = **C** *Comments:*	Suggested grade = **A** *Comments:*	Suggested grade = **B** *Comments:*	Suggested grade = **F** *Comments: highly sprawling due to the distance from main campus which will be the center of most activity for many years to come.*
5.8 Redevelopment of Existing Areas Before Development of Open Space –	Suggested grade = **- C** *Comments: Cassady would be redeveloped (a positive) but a new building would need to be built on the wooded open space adjacent to Cassady.*	Suggested grade = **-B** *Comments: open space would be developed. However this area is planned to be a growth area for the university and the open space that is displaced is slated to move to west campus.*	Suggested grade = **A** *Comments: This is a classic example of the redevelopment of a brownfields site.*	Suggested grade = **D – B** (depending on exact location) *Comments: development of an existing building such are the Peach Country Tractor would be beneficial. Development of other open space would be less ideal.*
5.9 Open Space Coordination–	Suggested grade = **D** *Comments: redevelopment of Cassady blocks a potential open space cooridor along Chestnut branch from connecting the mediation walk with Rowan Boulevard.*	Suggested grade = **B** *Comments: would not impede coordination of open space.*	Suggested grade = **B** *Comments: would not impede coordination of open space.*	Suggested grade = **D – B** (depending on exact location) *Comments: care should be taken for creating a facility in this location that does not impede integration of a greenway along Chestnut Branch stream.*

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Building Siting:

	Option A Renovate Cassidy & build adjacent	**Option B Team house area**	**Option C Conrail or vicinity**	**Option D West Campus or 322 corridor**
5.10 Safety –	Suggested grade = **A** *Comments: safe for location facilities personnel. Proximity to the majority of buildings which are on the north side of 322 minimizes crossing of RT 322.*	Suggested grade = **A** *Comments: safe for location facilities personnel. Proximity to the majority of buildings which are on the north side of 322 minimizes crossing of RT 322.*	Suggested grade = **- C** *Comments: crossing of the rail-road tracks, whitney avenue and Rt 322 makes the safety of this location less than ideal.*	Suggested grade = **D** *Comments: the location requires substantial travel on Rt 322. This would increase risks for all modes of travel.*
5.11 Locational Context –	Suggested grade = **+B** *Comments: very good proximity to the entire campus but interferes with integration with Rowan Boulevard.*	Suggested grade = **B – A** (depending on exact location) *Comments: very good proximity to the entire campus but can be designed to minimize its presence to non-facilities people.*	Suggested grade = **C** *Comments: mediocre locational context*	Suggested grade = **F** *Comments: poor locational context that will improve with the development of west campus.*
5.12 Pedestrian Scale –	Suggested grade = **A** *Comments: Excellent pedestrian accessibility to the rest of campus*	Suggested grade = **A** *Comments: Excellent pedestrian accessibility to the rest of campus*	Suggested grade = **C** *Comments: mediocre pedestrian accessibility to the rest of campus*	Suggested grade = **D – B** (depending on exact location) *Comments:*
5.13 Balance Clustering of Functions While also Encouraging Mix of Land Uses –	Suggested grade = **B** *Comments: a new building would help to consolidate facilities function with Cassady. However, this location interferes with the integration of Campus and Rowan Bouldevard.*	Suggested grade = **A** *Comments: consolidation of facilities at this location would benefit consolidation but also allow a close mix with other campus land uses.*	Suggested grade = **B** *Comments: consolidation of facilities at this location would benefit consolidation but also allow a close mix with other campus land uses.*	Suggested grade = **F** *Comments: poor mix of landuse*
5.14 Community Focus –	Suggested grade = **B** *Comments: location is good for facilities personnel to be coordinated with the community but less than ideal for other campus members because it is a barrier.*	Suggested grade = **A** *Comments: location can help to foster campus community. The facilities complex would be out of the immediate way of campus users but still be within close enough proximity for facilities personnel.*	Suggested grade = **B** *Comments: reasonable potential for integration with the Rowan and Glassboro communities.*	Suggested grade = **F** *Comments: poor integration with the Rowan and Glassboro communities.*
5.15 Aesthetic/Inspirational –	Suggested grade = **D** *Comments: prevents the enhancement of the Rowan pond area.*	Suggested grade = **A** *Comments: allows the opening up of a corridor by the Rowan pond as a pedestrian connection with Rowan Boulevard. This has the potential to greatly enhance the campus atmosphere. The location is substantially out of the way of other campus activities thus less aesthetically impacting.*	Suggested grade = **A** *Comments: allows the opening up of a corridor by the Rowan pond as a pedestrian connection with Rowan Boulevard. This has the potential to greatly enhance the campus atmosphere. The location is substantially out of the way of other campus activities thus less aesthetically impacting.*	Suggested grade = **D – B** (depending on exact location) *Comments:*
5.16 Social Gathering –	Suggested grade = **D** *Comments: interferes with pedestrian connection with Rowan Boulevard.*	Suggested grade = **A** *Comments: building in this location allows a more integrative plan with Rowan Boulevard increasing the social atmosphere.*	Suggested grade = **A** *Comments: building in this location allows a more integrative plan with Rowan Boulevard increasing the social atmosphere.*	Suggested grade = **D – B** (depending on exact location) *Comments:*

Evaluation of Survey Results.

The sample size is quite small (N=21) and appears to represent mostly facilities people.

But a couple of trends are apparent:

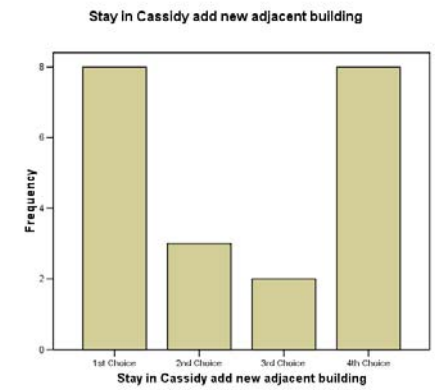
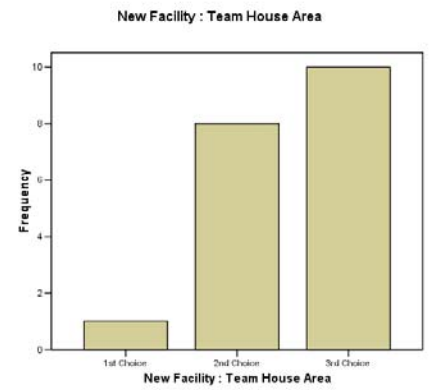
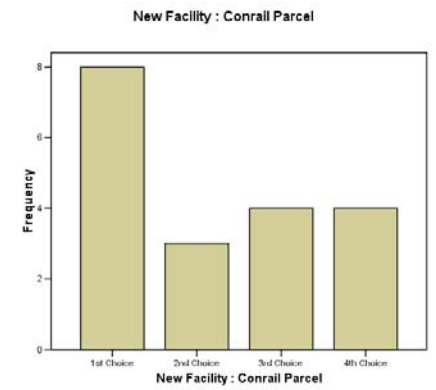
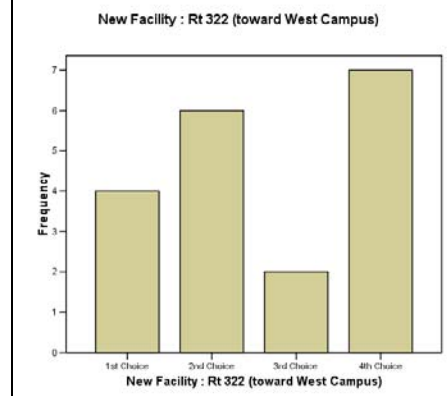
The survey respondents either heavily favor or dislike Options A and D. The overriding consideration is that the facilities complex should remain close to the main campus.

1. Option A supports this idea, but most people express concern over rehabbing an old building and attempting to continue working from that facility during renovation and construction activities. There was also a suggestion that Option A did not provide enough space.

2. The majority of the respondents fell that Option D is just too far from campus to effectively serve the University community. Potential Traffic problems and travel distance do not off set advantage of a new facility and more space.

3. Option C was many peoples 1st, 2nd or 3rd choice. A new facility on the Conrail Parcel would provide for expansion and be centrally located to the main campus.

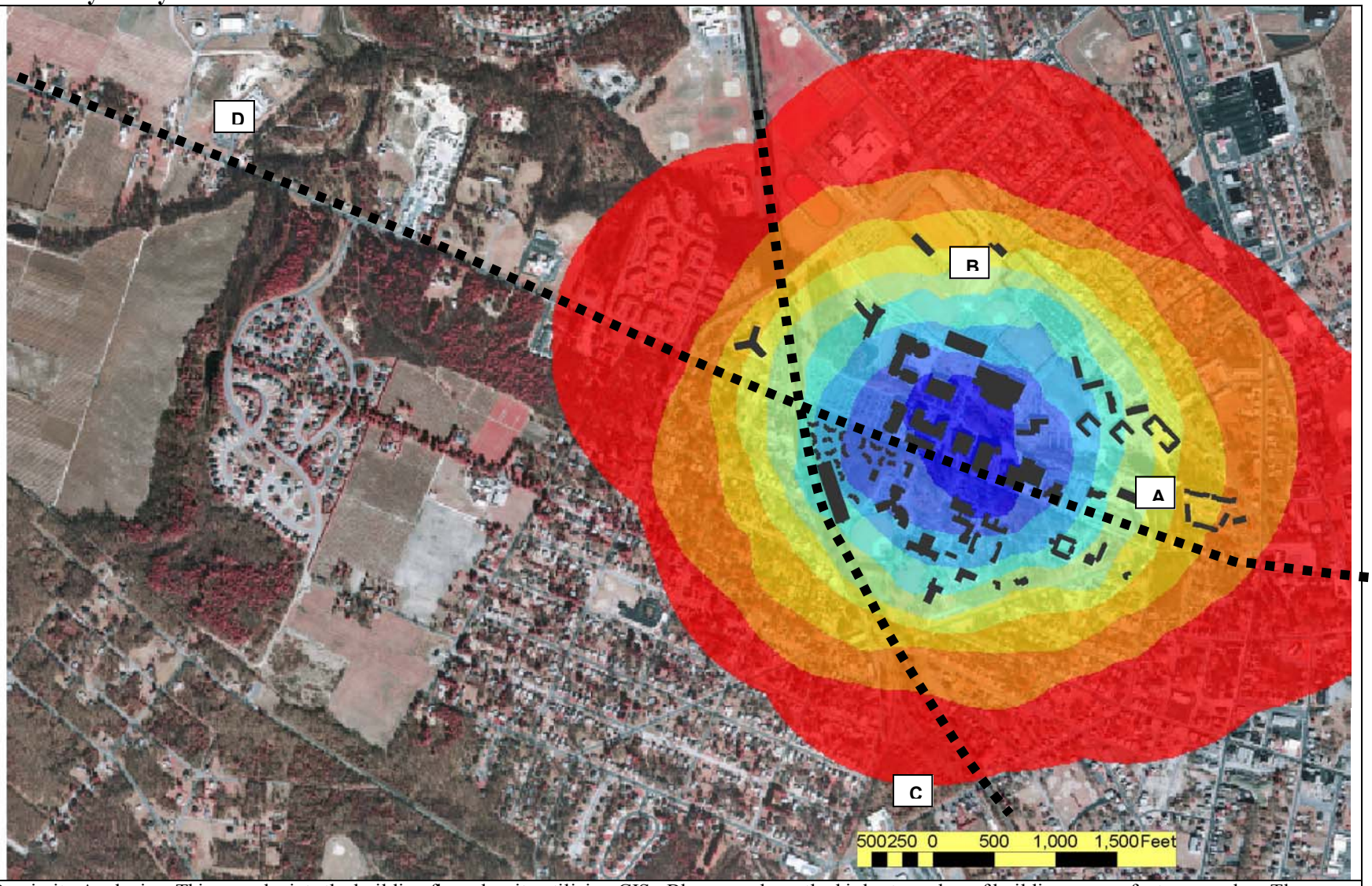
4. Option B was everyone 2nd or 3rd choice for similar reasons.

			
Option A	**Options B**	**Option C**	**Option D**

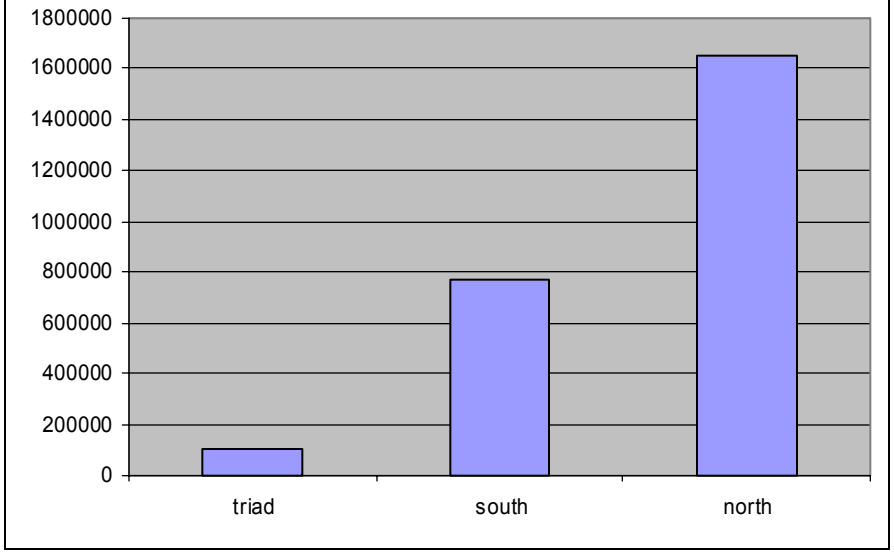
Summation of Written Comments

			POSITIVES		NEGATIVES
OPTIONS					
A	Stay in Cassady	6	All operations are there	6	No space
			Keeps everything centrally located		Can't work while renovating same bldg.
			Location (close to campus)		Old bldg.- renovating same bldg.
			On main campus		Out-dated bldg.
			Close to main campus		No space/no parking
			Close to main campus		Not big enough
B	New/Team House	3	New facility/Close to Campus	0	
			Close to Campus		
			New facility/Close to Campus		
C	New/Conrail	6	New facility/Nice setting	1	Less secure
			Good location		
			Close to Campus		
			Close to Campus		
			New facility		
			Poor location		
D	New/West Campus	3	More room/more secure	8	Too far from Campus
			Plenty of space		Too far from Campus
			New facility/More room		Too far from Campus/traffic problems
					Too far from Campus/traffic problems
					Too far from Campus
					Too far from Campus
					Travel distance
					Travel distance
	Other:		Rt 322 east side of campus (between Landmark & Whitney House)		
			Small garage on West campus		
			Option B or C, frees space near Rowan Blvd. - could be developed as hub for Univ./Town activity.		

Proximity Analysis



Proximity Analysis – This map depicts the building floor density utilizing GIS. Blue areas have the highest number of building square footage nearby. The dashed line represents major barriers including Route 322 and the Conrail train tracks. This analysis provides an indication of how far and over what barriers facilities personnel would need to travel in order to reach buildings. The amount of building floor area per sector is provided on the following graph.



Estimated floor area for each sector of campus - This chart depicts the amount of building floor area on the 1) Triad side of the tracks, 2) south side of 322, and 3) north side of 322.

Discussion and Recommendations:

From a land use, building siting and environmental perspective, the four options present a number of benefits as well as disadvantages. Option "A," remaining in the existing Cassady building, has the advantage of a central location for facilities activities but the disadvantage of a confined space that is difficult to expand. The existing location also embodies some very substantial planning and environmental disadvantages. The existing Cassady location is a barrier to an effective integration of the campus with the proposed Rowan Boulevard. If the Cassady facilities yard and related activities could be moved to different location, the potential exists for creating a pedestrian link of Rowan Boulevard with the Meditation Walk. This would open up a pedestrian spine connecting Rowan Boulevard with the heart of the Rowan Campus. The functional, aesthetic and environmental potential of such a pedestrian spine warrant serious consideration for the movement of facilities. The fact that facilities has currently out-grown Cassady and has various offices scattered in different buildings, also makes good planning sense to consolidate all facilities functions into an appropriately-sized new facility. Staying put (Option A) makes little long term sense for the campus.

Of the three options for moving, Option "D," to be located on 322 in the corridor between West Campus and the main campus, is the least optimal from the perspective of our committee. This location will require all facility functions, meetings, activities etc. to be conducted via vehicular travel on 322. This performs poorly from many functional, planning and environmental perspectives as reflected in the Guiding Principles evaluation. In spite of the fact that West Campus may grow in importance and thus make such a location more advantageous, the majority of facilities functions will continue to be located on the main campus for the foreseeable future. Building in this corridor would be substantially problematic and would miss the benefits of other locations.

Options B and C are the most beneficial locations for a number of planning and environmental rationales. Both allow the opening up of campus to Rowan Boulevard by moving the existing Cassady location. The advantage of option "B" (team house area) is that it is directly adjacent to the majority of campus building space without requiring the crossing of major roads such as Rt 322. The Conrail site location (Option "C") would require the crossing of the rail road tracks and Whitney Avenue as well as Rt 322 for most activities. Facilities activities will be less likely to occur via pedestrian or cart transportation especially if they must cross Rt 322. The advantage of option "C" is that it is contiguous property with Rowan (better than an off-site location) and would be an example of brownfields redevelopment. The disadvantage is that the land is not owned by Rowan and may not be for sale in the near future.

Although Option "B" was not seen as the number 1 choice be many in facilities, it was not seen as the last choice either and may prove to be the most feasible because of the significant planning and environmental advantages as well as the fact that it is already owned by the university. Of course the disadvantage of Option "B" is that it requires the movement of the athletic facilities which may still be years away from occurring.

Appendix A: Survey Results Statistical Analysis

Frequencies

Statistics

		Stay in Cassidy add new adjacent building	New Facility : Team House Area	New Facility : Conrail Parcel	New Facility : Rt 322 (toward West Campus)
N	Valid	20	18	18	18
	Missing	0	2	2	2

Frequency Table

Stay in Cassidy add new adjacent building

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1st Choice	8	40.0	40.0	40.0
	2nd Choice	3	15.0	15.0	55.0
	3rd Choice	1	5.0	5.0	60.0
	4th Choice	8	40.0	40.0	100.0
	Total	20	100.0	100.0	

New Facility : Team House Area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2nd Choice	8	40.0	44.4	44.4
	3rd Choice	10	50.0	55.6	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

New Facility : Conrail Parcel

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1st Choice	8	40.0	44.4	44.4
	2nd Choice	2	10.0	11.1	55.6
	3rd Choice	4	20.0	22.2	77.8
	4th Choice	4	20.0	22.2	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

New Facility : Rt 322 (toward West Campus)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1st Choice	4	20.0	22.2	22.2
	2nd Choice	6	30.0	33.3	55.6
	3rd Choice	2	10.0	11.1	66.7
	4th Choice	6	30.0	33.3	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Stay in Cassidy add new adjacent building * New Facility : Team House Area	18	90.0%	2	10.0%	20	100.0%
Stay in Cassidy add new adjacent building * New Facility : Conrail Parcel	18	90.0%	2	10.0%	20	100.0%
Stay in Cassidy add new adjacent building * New Facility : Rt 322 (toward West Campus)	18	90.0%	2	10.0%	20	100.0%

Stay in Cassidy add new adjacent building * New Facility : Team House Area Crosstabulation

Count

		New Facility : Team House Area		Total
		2nd Choice	3rd Choice	
Stay in Cassidy add new adjacent building	1st Choice	4	2	6
	2nd Choice	0	3	3
	3rd Choice	1	0	1
	4th Choice	3	5	8
Total		8	10	18

Stay in Cassidy add new adjacent building * New Facility : Conrail Parcel Crosstabulation

Count

		New Facility : Conrail Parcel				Total
		1st Choice	2nd Choice	3rd Choice	4th Choice	
Stay in Cassidy add new	1st Choice	0	2	2	2	6
	2nd Choice	1	0	0	2	3

adjacent building	3rd Choice	1	0	0	0	1
	4th Choice	6	0	2	0	8
Total		8	2	4	4	18

Stay in Cassidy add new adjacent building * New Facility : Rt 322 (toward West Campus) Crosstabulation

Count

		New Facility : Rt 322 (toward West Campus)				Total
		1st Choice	2nd Choice	3rd Choice	4th Choice	
Stay in Cassidy add new adjacent building	1st Choice	0	0	2	4	6
	2nd Choice	2	0	0	1	3
	3rd Choice	0	0	0	1	1
	4th Choice	2	6	0	0	8
Total		4	6	2	6	18

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
New Facility : Team House Area * New Facility : Conrail Parcel	18	90.0%	2	10.0%	20	100.0%
New Facility : Team House Area * New Facility : Rt 322 (toward West Campus)	18	90.0%	2	10.0%	20	100.0%
New Facility : Team House Area * Stay in Cassidy add new adjacent building	18	90.0%	2	10.0%	20	100.0%

New Facility : Team House Area * New Facility : Conrail Parcel Crosstabulation

Count

		New Facility : Conrail Parcel				
		1st Choice	2nd Choice	3rd Choice	4th Choice	Total
New Facility : Team House Area	2nd Choice	2	0	4	2	8
	3rd Choice	6	2	0	2	10
Total		8	2	4	4	18

New Facility : Team House Area * New Facility : Rt 322 (toward West Campus) Crosstabulation

Count

		New Facility : Rt 322 (toward West Campus)				
		1st Choice	2nd Choice	3rd Choice	4th Choice	Total
New Facility : Team House Area	2nd Choice	2	1	2	3	8
	3rd Choice	2	5	0	3	10
Total		4	6	2	6	18

New Facility : Team House Area * Stay in Cassidy add new adjacent building Crosstabulation

Count

		Stay in Cassidy add new adjacent building				
		1st Choice	2nd Choice	3rd Choice	4th Choice	Total
New Facility : Team House Area	2nd Choice	4	0	1	3	8
	3rd Choice	2	3	0	5	10
Total		6	3	1	8	18