



# Facilities Condition Index

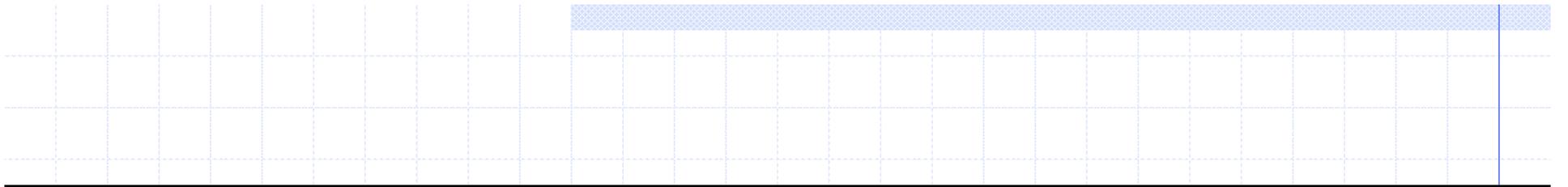
## A Comparison of Facility Condition Indices

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# Abstract

- ◆ The Facilities Condition Index is a useful measure to help management formulate long-term planning for multi-year funding, maintenance workload (by discipline), and successful maintenance and repair work plans. It can also help determine which facilities in their portfolio have effective maintenance management programs. This presentation looks at Federal and Tribal facilities within the Oklahoma City Area Indian Health Service and compares them to Indian Health Service facilities nationwide.

# Outline

## ◆ Facilities Condition Index

- What, why, how

## ◆ Facilities

- Agency-wide
- OK

## ◆ Comparison

## ◆ Problems

## ◆ Solutions

# Benchmarks Are Needed

- ◆ How do we assess the condition of a building?
  - What is good? Fair? Poor?
- ◆ Where are we now?
- ◆ How did we get here?
- ◆ Where are we going?
- ◆ What will it take?

# Facilities Condition Index -

- ◆ Why to use it
- ◆ What FCI is
- ◆ How it is developed
- ◆ How it is used

# Facilities Condition Index – (FCI)

$$\text{FCI} = \frac{\text{Backlog of Repairs}}{\text{Current Replacement Value}}$$

# BEMAR<sup>1</sup> Categories

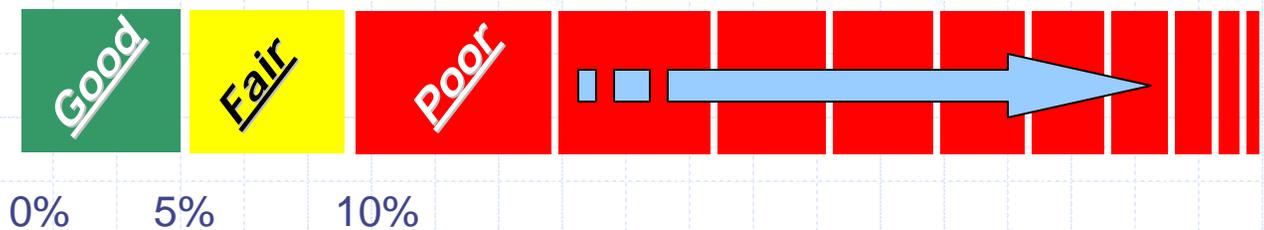
Patient Care Improvements	Architectural
Life Safety	Structural
General Safety	Mechanical
Environmental Compliance	Electrical
Program Deficiencies	Utilities
Handicapped Compliance	Grounds
Energy Conservation	Painting
Seismic	Roof
Plant Management <sup>2</sup>	Unmet Space Needs <sup>2</sup>

<sup>1</sup>Backlog of Essential Maintenance and Repair

<sup>2</sup>Not included in FCI calculation

# FCI – Condition Ratings

FCI Range	Condition
Under 5%	Good
Between 5% and 10%	Fair
Over 10%	Poor



From *Managing the Facilities Portfolio*, published by The National Association of College and University Business Officers (NACUBO).

# FCI – Illustrated



Backlog	Cost
Roof	4,000
Heat Pump	5,000
Windows	4,000
Painting	3,000
<b>Total</b>	<b>16,000</b>

<b>CRV</b>	<b>100,000</b>
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$$\text{FCI} = \frac{\text{Backlog of Repairs}}{\text{Current Replacement Value}} = \frac{\$16,000}{\$100,000} = 0.16$$

# FCI – Condition Ratings

FCI Range	Condition
Under 5%	Good
Between 5% and 10%	Fair
Over 10%	Poor



# IHS Facilities Agency-wide

# IHS Health Care Facilities

Building Type	Federal	Tribal
Hospitals	45	2
Health Centers	55	170
Health Stations	39	47
Other Institutional	108	159
Office Building	157	411
Other Building	275	89
Residential	1395	2

# IHS Health Care Facilities

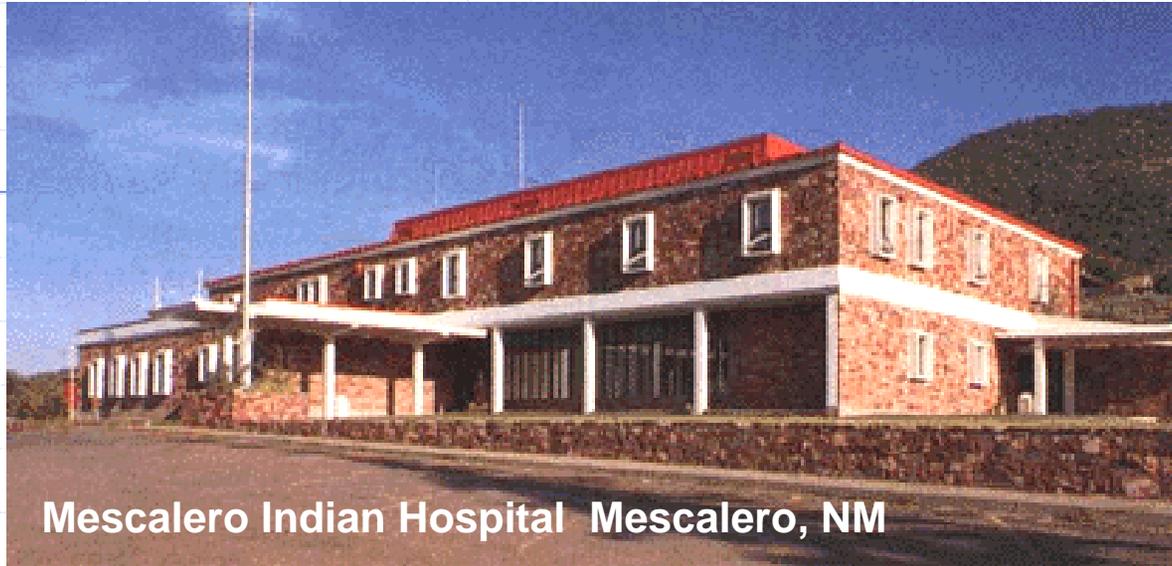
Building Type	Federal	Tribal
Number of Buildings	2074	942
Total Area (gsm)	844,433	460,791
Backlog of Maintenance	\$367M	\$46M
Replacement Cost	\$1.7B	\$981M
FCI	0.22	0.05



**Hu Hu Kam Indian Hospital Sacaton AZ**



**Acoma-Canoncito-Laguna Acomita, NM**



**Mescalero Indian Hospital Mescalero, NM**



**Owyhee Tribal Hospital, Owyhee, NV**



**Alaska Native Medical Center Anchorage, AK**



Rosebud Indian Hospital Rosebud, SD



Pine Ridge Indian Hospital Pine Ridge, SD



Cass Lake Indian Hospital Cass Lake, MN



Lapwai Health Center Lapwai, ID



Lower Elwha Port Angeles, WA



Stillaguamish Health Center Arlington, WA



Administration Building Tuba City, AZ



Tuba City Indian Hospital Tuba City, AZ



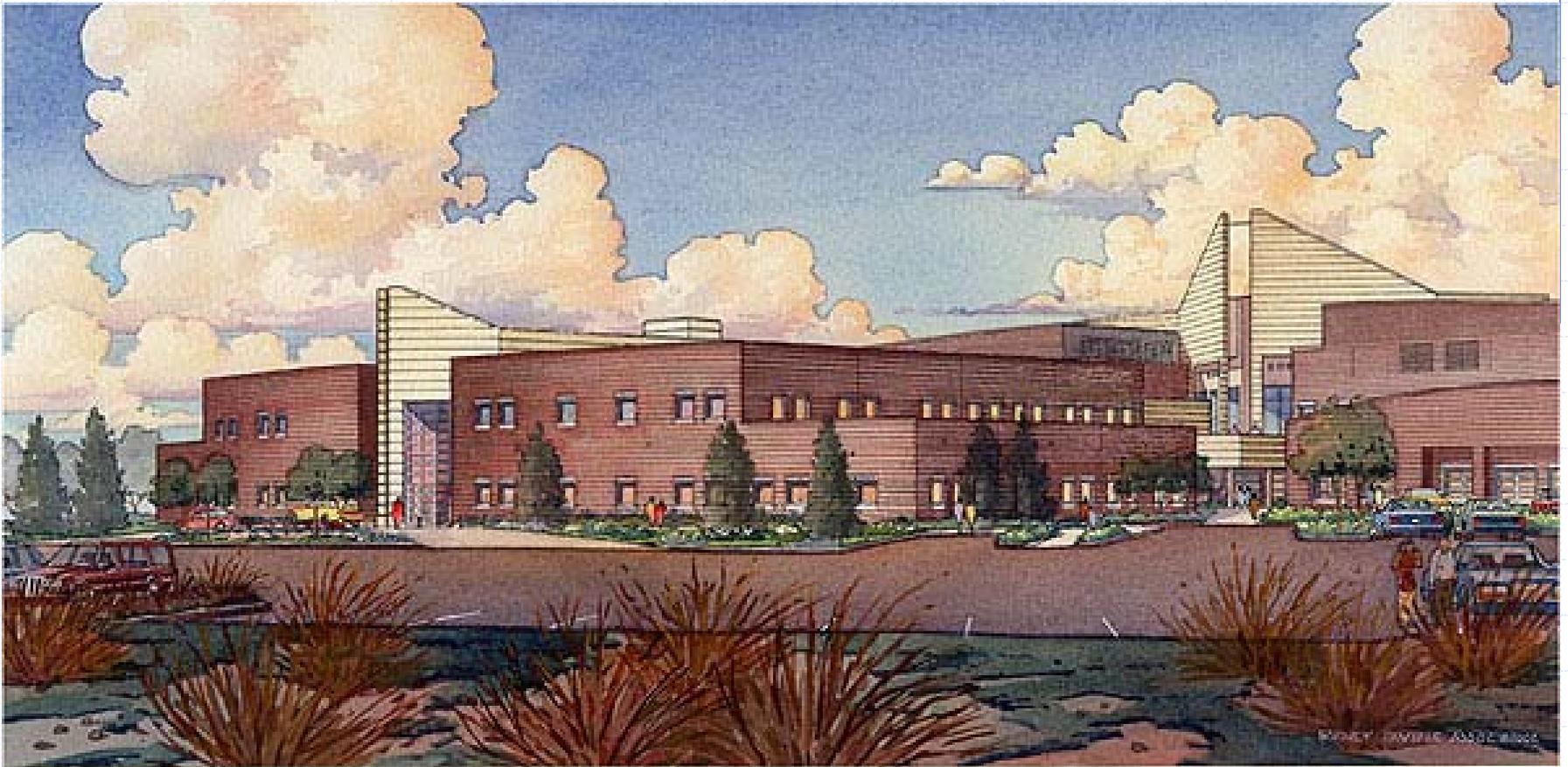
Not-tsoo Gah-nee Indian Health Center Fort Hall, ID



Fort Defiance Indian Hospital Fort Defiance, AZ







Northern Navajo Indian Medical Center Shiprock, NM



Outpatient Clinic Gallup, NM



# Oklahoma IHS Facilities

# Oklahoma Health Care Facilities

Building Type	Federal	Tribal
Hospitals	4	1
Health Centers	4	9
Health Stations	1	5
Other Institutional	9	12
Office Building	10	25
Other Building	22	4
Residential	18	0

# Oklahoma Health Care Facilities

Building Type	Federal	Tribal
Number of Buildings	68	55
Total Area (gsm)	52,361	32,249
Backlog of Maintenance	\$14.6M	\$2.4M
Replacement Cost	\$103M	\$52M
FCI	0.14	0.05



Lawton Indian Hospital Lawton, OK



Redbird Smith Indian Health Center Sallisaw, OK



Claremore Indian Hospital Claremore, OK



Clinton Indian Hospital Clinton, OK



Wellness Center Anadarko, OK



Pawnee Indian Health Center Pawnee, OK



Pawnee Indian Health Center Pawnee, OK

# Claremore



Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
11528	00409	Hospital, 51 - 100 beds	1977	\$2,665,746	\$21,199,225	0.13
11528	00410	Environmental Health & Engineering	1978	\$10,306	\$78,159	0.13
11528	00411	Outpatient Clinic, Limited Staff	1990	\$6,896	\$498,304	0.01
11528	00412	Equipment	1977	\$67,319	\$58,619	1.15
11528	00413	General	1980	\$1,088	\$9,379	0.12
11528	00414	Equipment	1997	\$34,928	\$293,075	0.12
<b>Totals</b>				<b>\$2,786,283</b>	<b>\$22,136,761</b>	<b>0.13</b>

$\mu_{Age} = 21$  years  $Max_{Age} = 27$

$$FCI = \frac{\text{Backlog of Repairs}}{\text{Current Replacement Value}}$$

FCI Range	Condition
Under 5%	Good
Between 5% and 10%	Fair
Over 10%	Poor

# Clinton



Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
11529	00201	Hospital, 5 - 50 beds	1933	\$1,344,470	\$2,287,578	0.59
11529	00202	Outpatient Clinic, Dental Clinic	1933	\$61,572	\$478,749	0.13
11529	00203	General, Institutional Support	1933	\$18,208	\$203,002	0.09
11529	00204	Audiology	1931	\$45,456	\$323,827	0.14
11529	00205	Hospital Supplies	1972	\$5,609	\$189,934	0.03
11529	00206	Maintenance Shop	1972	\$3,693	\$111,726	0.03
11529	00208	Hospital Support	1973	\$37,883	\$79,804	0.47
11529	00213	Outpatient Clinic, Limited Staff	1990	\$76,785	\$459,982	0.17
11529	00215	Electric, General	1994	\$897	\$65,340	0.01
11529	00216	Health Care Supplies	1994	\$3,124	\$8,080	0.39
11529	P0217	General, Institutional Support	1933	\$14,866	\$305,777	0.05
<b>Total</b>				<b>\$1,612,563</b>	<b>\$4,513,799</b>	<b>0.36</b>

$\mu_{\text{Age}} = 44$  years  $\text{Max}_{\text{Age}} = 73$

# Watonga



Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
03045	None	Health Center, Full Serv, 40 hrs or more	1981	\$40,738	\$1,057,512	0.04

# El Reno



Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
03263	None	Health Center, Full Serv, 40 hrs or more	1991	\$84,184	\$1,706,313	0.05

# Haskell



Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
11493	00101	Health Station, School Related	1979	\$92,472	\$2,811,105	0.03
11493	00102	Hazardous Storage	1979	\$709	\$38,259	0.02
11493	ADD	Supply/Maintenance Shop	1999	\$1,129	\$0	0.00
<b>Total</b>				<b>\$94,310</b>	<b>\$2,849,364</b>	<b>0.03</b>

# Lawton



Location Code	Asset Number	Asset Name	Year Built	M & R Backlog Cost	Current Replacement Value	FCI
03349	410T	Diabetes Clinic	2000	\$5,585	\$0	0.00
03349	411L	Optometry Clinic	2000	\$6,607	\$0	0.00
11533	00000	Land used for institutional purposes	1867	\$7,063	\$0	0.00
11533	00412	Outpatient Clinic, Limited Staff	1917	\$47,652	\$279,426	0.17
11533	00413	Hospital Support	1931	\$52,273	\$251,951	0.21
11533	00414	General, Institutional Support	1940	\$23,271	\$196,836	0.12
11533	00415	Canteen	1940	\$31,792	\$196,836	0.16
11533	00421	Hospital, 5 - 50 beds	1967	\$875,284	\$12,462,100	0.07
11533	00422	Hospital Supplies	1974	\$23,558	\$331,228	0.07
11533	00423	General	1977	\$62,633	\$1,018,119	0.06
OK65A	0001	General, Institutional Support	1996	\$13,265	\$0	0.00
<b>Total</b>				<b>\$1,148,983</b>	<b>\$14,736,496</b>	<b>0.08</b>

$\mu_{\text{Age}} = 49 \text{ years}$     $\text{Max}_{\text{Age}} = 87$

# Anadarko



Location Code	Asset Number	Asset Name	Year Built	M & R Backlog Cost	Current Replacement Value	FCI
37552	00001	Health Center, Full Serv, 40 hrs or more	1984	\$368,373	\$3,528,108	0.10
37552	NONE	Anadarko Wellness Center	2001	\$3,878	\$0	0.00
<b>Totals</b>				<b>\$372,251</b>	<b>\$3,528,108</b>	<b>0.11</b>

# Carnegie



Location Code	Asset Number	Asset Name	Year Built	M & R Backlog Cost	Current Replacement Value	FCI
GSA01	00001	Health Station, Full Serv, 40 hrs or less	1984	\$25,862	\$270,432	0.10

# Creek Nation



## Okemah

Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
03332	00001	Health Center, Full Serv, 40 hrs or more	1968	\$1,503,333	\$5,610,357	0.27
03332	00002	General Medical Clinic	1949	\$50,431	\$1,649,956	0.03
03332	00003	Offices	1992	\$11,704	\$429,814	0.03
03332	00004	Emergency Medical Services	1987	\$63,395	\$401,016	0.16
03332	00005	Business Office	1949	\$15,340	\$114,730	0.13
03332	00006	Eye Clinic	1988	\$22,422	\$429,814	0.05
03332	00007	Maintenance Shop	1979	\$7,690	\$142,142	0.05
03332	00008	Property Trailer	1997	\$52,749	\$161,700	0.33
03332	00009	Doctor's Offices	2002	\$7,813	\$221,760	0.04
<b>Total</b>				<b>\$1,734,877</b>	<b>\$9,161,289</b>	<b>0.19</b>

$\mu_{\text{Age}} = 25 \text{ years}$     $\text{Max}_{\text{Age}} = 55$

# Creek Nation



## Okmulgee

Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
03333	00001	Health Center, Full Serv, 40 hrs or more	1977	\$101,053	\$2,484,997	0.04

# Creek Nation



## Eufaula

Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
03329	None	Health Center, Full Serv, 40 hrs or more	1978	\$109,401	\$1,151,219	0.10

# Pawnee



Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
11534	00002	Health Center, Full Serv, 40 hrs or more	1900	\$1,113,834	\$3,456,487	0.32
11534	00003	General, Institutional Support	1936	\$96,086	\$353,532	0.27
11534	00004	General, Institutional Support	1959	\$34,249	\$133,472	0.26
11534	00005	Outpatient Clinic, Dental Clinic	1959	\$32,118	\$280,589	0.11
11534	00006	Hospital Support	1970	\$2,458	\$167,589	0.01
11534	00007	Maintenance Shop	1970	\$1,210	\$111,726	0.01
11534	00008	Computer Services	1974	\$252	\$14,365	0.02
<b>Total</b>				<b>\$1,280,207</b>	<b>\$4,517,760</b>	<b>0.28</b>

$\mu_{\text{Age}} = 51$  years  $\text{Max}_{\text{Age}} = 104$

# Tahlequah



Location Code	Facility Number	Facility Name	Year Built	M & R Backlog	Current Replacement Value	FCI
37553	00317	Hospital, 51 - 100 beds	1984	\$5,355,930	\$28,121,200	0.19
37553	00318	Electric, Prim Elect Power Plant	1984	\$21,754	\$513,379	0.04
37553	00319A	Hospital Support	1997	\$11,317	\$1,266,762	0.01
<b>Total</b>				<b>\$5,389,001</b>	<b>\$29,901,341</b>	<b>0.18</b>

$\mu_{\text{Age}} = 16 \text{ years}$   $\text{Max}_{\text{Age}} = 20$

# Industry Standards

## ◆ Two Budget Items Needed

- Maintenance

- ◆ Simple Repairs
- ◆ General Upkeep
- ◆ 2% to 4%

- Backlog Reduction

## ◆ Improvements

# IHS-Wide

Backlog	\$367M
CRV	\$1.7B
FCI	0.22
Annual Maintenance Budget	\$25M (1.4%)
Annual Backlog Budget	\$20M

# FCI – Indian Health Service

Building Type	Federal	Tribal
Hospitals	0.23	0.55
Health Centers	0.18	0.03
Health Stations	0.49	0.04
Other Institutional	0.14	0.03
Office Building	0.33	0.05
Other Building	0.17	0.05
Overall	<b>0.22</b>	<b>0.05</b>

# FCI – Oklahoma City Area

Building Type	Federal	Tribal
Hospitals	0.15	0.27
Health Centers	0.09	0.05
Health Stations	0.03	0.01
Other Institutional	0.09	0.02
Office Building	0.09	0.00
Other Building	0.11	0.00
Overall	<b>0.14</b>	<b>0.05</b>

# FCI – Comparison

Building Type	IHS-Wide		OCAO	
	Federal	Tribal	Federal	Tribal
Hospitals	0.23	0.55	0.15	0.27
Health Centers	0.18	0.03	0.09	0.05
Health Stations	0.49	0.04	0.03	0.01
Other Institutional	0.14	0.03	0.09	0.02
Office Building	0.33	0.05	0.09	0.00
Other Building	0.17	0.05	0.11	0.00
Overall	<b>0.22</b>	<b>0.05</b>	<b>0.14</b>	<b>0.05</b>

# Problems

- ◆ Comprehensive Surveys
- ◆ Current Replacement Values
- ◆ Different Methodologies

# How We Got Here

- ◆ Lack of funding
- ◆ Diverted funding
- ◆ Lack of planning
- ◆ Lack of stewardship

# Where We Are Going

- ◆ BEMAR on the rise
- ◆ Time lag through Congress

# What It Will Take

- ◆ Strategic planning
- ◆ Effective management
- ◆ Better stewardship
- ◆ Education

# Questions?

